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The Emotional Enviroments of Families and How They Influence the Development of Anxiety in Individuals

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THE EMOTIONAL ENVIRONMENTS OF FAMILIES AND HOW THEY INFLUENCE THE DEVELOPMENT OF ANXIETY IN INDIVIDUALS

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Abstract

The Emotional Environments of Families and How They Influence the Development of Anxiety in Individuals

The purpose of this study was to investigate the relationship between the socialization of emotions in childhood and heightened levels of anxiety in adults. Specifically, it was postulated that the inhibition of negative emotions as well as lower levels of overall expressiveness and lower degrees of conflict expression and the obstruction of independence within families-of-origin would result in increased levels of anxiety. The psychological roles of family environments and parental styles of emotion expression and socialization were explored. The suppression of negative emotions such as anger and sadness, learned within a family context, would be predictive of anxiety disorders. It was anticipated that families which inhibit and discourage specific feelings would cause individual family members to internalize the forbidden emotions. The inability, therefore, to freely express oneself would be related to the internalization of distinct emotions and would, ultimately, be related to heightened levels of anxiety. Additionally, this socialization of emotions was expected to be associated with an increased family history of anxiety and/or anxiety disorders. One hundred and three participants were recruited from psychology courses at a private university in the Northeast of the United States. The mean age was 18.86 with a standard deviation of 1.00. Forty-seven of the participants were male, and 56 were female. The statistical measures utilized in the present study were a demographics form, the Self Analysis Form (Cattell, 1957, 1963), the Family Environment Scale (Moos & Moos, 1994), and the Family Expressiveness Questionnaire (Halberstadt, 1986). Multiple regression analyses

were conducted to explore the relationship between the independent variables, expressiveness, conflict, and independence as well as negative dominant and negative submissive styles of emotion expression and the dependent variable – anxiety. Results revealed a significant relationship between overall levels of expressiveness, conflict, negative dominant styles of expressiveness and anxiety. Families-of-origin, thus, characterized by lower levels of expressiveness and higher levels of negative dominant expressiveness styles and conflict were related to heightened levels of anxiety in individuals. No other significant findings were discovered.

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DEDICATION

In Memory of
My Godmother – Aunt Dina
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I will always love you and remember you with a smile!
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TABLE OF CONTENTS

LIST OF TABLES

Table

CHAPTER I: INTRODUCTION

According to current statistics provided by the National Mental Health Association (2004), the most common mental-health problems in the United States are anxiety disorders. Over 19 million adults are impacted by these disorders each year.

In order to understand the development of anxiety disorders, it is important to gain a broader understanding of how emotions evolve. Emotions play a central role in the way that people communicate, think, and behave. Emotions, thus, guide and shape the social interactions people have with peers, family members, and other significant individuals associated with the community. The essence and true value of emotions was first explored by Darwin and the neo-Darwinians and can be fittingly applied to the socialization process involved in emotional development.

In Darwin's (1872/1955) functionalist perspective regarding emotions, human emotions served adaptive functions. Emotions guide the body's responses to stress and challenges in the environment and also channel social and interpersonal interactions. The neo-Darwinian functional, organizational approach was also focused on emotions as adaptive, but the relevance of emotions on behavior regulation was highlighted. Discrete emotions were thought to serve their own specific functions or possibly share a common function. An example of this would be how the discrete emotions of anger and fear each stimulates the stress-response system. This concept was further supported by the development of the differential emotion theory (DET; Izard, 1977; Izard & Malatesta, 1987). According to differential emotion theory, certain emotions serve specific functions and have distinct purposes, and some emotions also have shared functions. Emotion states such as sadness and fear generally suggest some association with

vulnerability. Functionally, sadness evokes nurturance, compassion, and support, while fear educes protection to fend off attack. Although these two emotions are distinctive, they do share commonalities in that they both provide the message that assistance is needed from others.

The basis for these functional, organizational approaches is biological in nature, yet, during the course of socialization, emotional expression can be methodically changed. Tomkins (1962) elaborated on the Darwinian and neo-Darwinian perspectives, when he hypothesized that modification of one's affective responses could occur through a learning process. Specifically, Tomkins believed that, even though innate factors were largely responsible for the initiation of affect, social environments could alter what triggers each discrete emotion and the actual affective response itself. In fact, various styles of emotional expression are thought to be governed by emotional communication rules determined not only by parents and family but also by society and culture (Malatesta & Haviland, 1982; Saarni, 1993).

Tomkins believed that parents were most influential in the development of affect regulation. In support of this, Garside and Klimes-Dougan (2002) found that parental responses, which seemed to inhibit the expression of negative emotions of children, were somewhat related to children's psychological distress. In addition, Gottman, Katz, and Hooven (1996) discovered that parents who dismiss their children's emotions might negatively affect their abilities to regulate emotions. Garside and Klimes-Dougan questioned whether a parent's attempts to inhibit the expression of certain negative emotions actually impacted the child's internal experience of those emotions. The child's internal experience of those emotions deemed negative by families and parents is the

chief premise for this investigation. It is proposed that the internalized inhibited emotion will cause individuals to have heightened feelings of anxiety, and in some cases, these individuals will have anxiety disorders. Gross and Levenson (1997) conducted a study in which adults were asked to hide their sad emotions. Though the adults successfully suppressed their outward expressions of sadness, the actual experience of sadness usually continued. It is the hypothesis of this author that the continued presence and experience of emotion that must be masked and hidden will inevitably lead to internalized psychopathology.

According to Ekman and Friesen (1975), unwritten codes or "display rules" (pp. 137-138) determine how emotions are expressed. They asserted that internalizations of rules might occur as a result of a person's cultural, gender, or family background. Individuals might acquire "personal display rules" (p. 139) or expression codes, in addition to group codes, which are characteristic of a person and assumed to be learned in the context of family and/or specific experiences. There is also evidence that the socialization of emotion expression commences in infancy, as early as 3 months, and becomes appropriate, based on the demands set forth by culture, gender, and family, before the infant's first birthday (Malatesta & Haviland, 1982).

Socialization determines whether emotions are freely communicated or inhibited, with parents being the most significant influences. Parents' reactions to children's emotional expressions, their own styles of expressing their emotions, and their communicated beliefs about emotional experience and expression all markedly impact how children learn what is considered acceptable emotion expression (Denham, Zoller, & Couchoud, 1994; Tomkins, 1991).

The encouragement and hindrance of emotional expression in children is delivered by parents in two ways, indirectly and directly (Garside & Klimes-Dougan, 2002). Most models of emotion socialization are comprised of both methods (Saarni, 1993). One direct method is referred to as *contingency learning,* which basically means that children become aware that parent behaviors are contingent upon children's expression of specific emotions. Garside and Klimes-Dougan suggested that the emotional repertoires of children are likely shaped by the parents' reactions to children's exhibited emotions, particularly to displays of negative affect. They referred to a heuristic model of factors synthesized by Eisenberg, Cumberland and Spinrad (1998) that focused on parents' emotion socialization styles in support of this belief.

Contingency learning is demonstrated in a well-known study by Malatesta and Haviland (1982) in which mother-infant interactions were observed for a few months to determine how mothers' expressive reactions influenced their babies. Contingency analyses indicated that mothers reacted in contingent ways to changes in their infants' expressions with their own expression changes. Mothers' positive emotional reactions were found to reinforce the display of positive facial expression and reduce the occurrence of negative expressions in their infants.

Other direct methods that parents employ to teach acceptable emotions and instances in which these emotions should be expressed include direct instruction, reinforcement, punishment (Saarni, 1985), and didactic teaching (Saarni, 1993). Indirect methods are likely to be more subtle in nature. For example, the way that parents express or inhibit their own emotions might offer children valuable information about acceptable affective expression. Saarni (1993) identified imitation, identification, and *social*

referencing as examples of indirect socialization. Social referencing refers to an infant's ability to attach the *correct* emotional meaning to an ambivalent circumstance by observing a caregiver's expressive response (Feinman & Lewis, 1983; Sorce, Emde, Campos, & Klinnert, 1985). The parents' acceptance of other people's emotional responses is also an implicit cue for children as to what emotions are permissible (Eisenberg et al., 1992). Children then indirectly become educated about how emotions are expressed in their families of origin.

The family, specifically parents and caregivers, therefore, influence the emotional expression of children. Children's emotional expressions are either encouraged or hindered as a result of their upbringing. This learned behavior is developed and honed throughout childhood and adolescence and is hardwired into one's emotional repertoire. It is, consequently, relevant to examine the influence of family factors on anxiety and anxiety disorders in young adulthood. It is proposed that the hindering of emotions deemed negative by a family will result in heightened anxiety in individual family members. It is this inability to freely express experienced emotions that is expected to negatively impact individuals' well-being, specifically their levels of experienced anxiety.

Statement of the Problem

This study involved exploring the emotional expressiveness of families, specifically the inhibition of distinct emotions deemed negative by families. Family emotional expressiveness was referred to as an index of the degree to which emotions are conveyed by family members during their everyday interactions by Boyum and Parke

(1995). Halberstadt (1991) postulated that emotional expressiveness might involve a combination of three variables: emotion states, awareness and understanding of display rules, and the motivation and skill to manage one's emotion expression.

The current study was conducted to determine if particular styles of communicating emotions within families and specific family environments result in the development of heightened anxiety. The researcher investigated the following research questions: Are lower levels of emotional expression, conflict, and independence in families of origin significantly related to higher levels of anxiety symptoms in individuals? Are lower levels of negative dominant and negative submissive styles of expression in families of origin significantly related to higher levels of anxiety symptoms in individuals?

Definition of Key Terms

Anxiety variables: (IPAT- Cattell, Self-Analysis Form)

Overt – This term refers to the 20 questions on the Self-Analysis Form that assess for a "symptomatic, conscious anxiety score" (Cattell & Scheier, 1963, p.10).

Covert – This term refers to the 20 questions on the Self-Analysis Form that disguise and evaluate "unrealized" (Cattell & Scheier, 1963, p.10) anxiety.

Total anxiety – This term refers to the score that is obtained by summing the overt and covert anxiety responses.

Emotion variables: (FEQ; Halberstadt, 1986)

Positivity – This term refers to the degree of pleasantness in family communications as measured by the Family Expressiveness Questionnaire.

Dominance – This term refers to the degree of dominance in family communications as defined by the Family Expressiveness Questionnaire.

Systemic variables: (Moos & Moos, 1994)

Expressiveness – This is a relationship dimension that indicates the degree to which the direct expression of feelings is promoted amongst family members (Moos & Moos, 1994).

Conflict – This is a relationship dimension and denotes the quantity of overt anger expression and conflict between family members (Moos & Moos, 1994).

Independence – This is a personal growth dimension which signifies the level of assertiveness, self-sufficiency, and the ability for independent decision-making amongst family members (Moos & Moos, 1994).

Definition of other Terms:

Young adult – For the purpose of this study, a young adult is defined as any male or female college student between the ages of 17 and 22.

Anxiety – For the purpose of the present study, the type of anxiety being measured by Cattell's Self Analysis Form is free-floating manifest anxiety (Cattell & Scheier, 1963). This refers to anxiety that is apparent and obvious to the participants as currently and/or typically present in themselves. According to Cattell's

description, this measure would primarily capture trait anxiety. Free-floating manifest anxiety depicts a more generalized anxiety consistent with trait anxiety. It is quite possible, however, that some occurrences of state anxiety will also be detected in the data, as trait and state anxiety are not completely discrete phenomena.

There is a vast amount of literature on anxiety and anxiety disorders, and this internalized disorder is frequently referred to in various ways. The language used in the studies cited varies and can sometimes be confusing for the reader. The research discussed in this study includes some terms defined earlier (see Definition of Terms section): overt and covert anxiety, and free-floating manifest anxiety. Other terms (i.e., *state* and *trait anxiety*, *chronic anxiety, anxiety attacks, anxiety disorders,* and *heightened anxiety)* also appear in this manuscript. *State anxiety* refers to a transient emotional condition which increases and fluctuates over time, whereas *trait anxiety* refers to a stable tendency to respond to various stimuli in threatening ways (Spielberger, 1972, 1980; Spielberger & Vagg, 1995).

In this study, the term *anxiety* is used generally and encompasses the broad array of terms listed above. Cattell's measure (Cattell & Scheier, 1963) will identify both trait and state anxiety in participants. Chronic anxiety and free-floating manifest anxiety will be categorized as trait anxiety while the experience of anxiety attacks, heightened anxiety, and transitory anxiety will be classified as state anxiety. The clinical term, *anxiety disorder*, is at times examined in the literature review. This disorder cannot be measured by the Self- Analysis Form due to the non-clinical nature of the measure and

sample. Some implications, however, will be drawn about anxiety disorders via the participants' responses to the demographics form.

Background of the Problem

Theoretical Models for Anxiety

Anxiety disorders have generally been researched and treated from a linear perspective. From this perspective, the disorder may be examined in terms of physiological causes or as a problem that exists solely in the individual. Recently, theorists have begun to place a greater emphasis on the family and social environment of the identified patient (Barrett, Rapee, Dadds, & Ryan, 1996; Chorpita, Brown, & Barlow, 1998; Dadds, Heard, & Rapee, 1992; Parker, 1983; Siqueland, L., Kendall, P. C., & Steinberg, L., 1996). Treatment for an individual's anxiety symptoms would, therefore, need to involve the participation of the spousal, sibling, parental, and extended subsystems. Focusing on the whole system enables therapists to observe the transactional patterns between the identified patient and family members (Minuchin, 1974) and to view the symptom in its context.

Anxiety Through the Lifespan

Anxiety manifests itself differently throughout the various stages of development (Bowlby, 1973; Sullivan, 1953). Anxiety has been observed in humans as early as infancy (Bowlby, 1973; May, 1977; Sullivan, 1953). For example, babies who are anxiously attached to their mothers typically sleep, withdraw, and become unavailable. Young children often exhibit signs of anxiety, but these are not considered pathological until school age when the symptoms interfere with their everyday functioning, as in

disorders of separation anxiety (Bowlby, 1973) and school phobias. Adolescents (Sullivan, 1953), adults, and the elderly also demonstrate varying levels of anxiety during different phases of their lives. For instance, leaving for college for the first time, the death of a parent, and the death of a spouse may all be life events that trigger anxiety and stress. In fact, happy events such as marriage, the birth of a first baby, and job promotions may also lead to anxiety in adults.

The exploration of development across the lifespan has revealed that anxiety is often present in various forms. According to Sullivan (1953), personality can be viewed as an energy system with the specific goal of tension reduction. Tensions often stem from basic need states such as the need for food, water, and sleep; but they also result from anxiety-provoking interpersonal situations (Muuss, 1996; Sullivan, 1953). Sullivan contended that alternating between increasing and decreasing tension states propels and ultimately drives development (Muuss, 1996; Sullivan, 1953). Bowen proposed that "*chronic anxiety* is a ... pervasive, natural systems phenomenon" (as cited in Friedman, 1991, p. 140) and is found in all life forms. Chronic anxiety, however, manifests itself differently in distinct families, cultures, and species. Anxiety can be transmitted from previous generations, and, depending on such variables as differentiation levels, families will vary in the intensity of anxiety that they exhibit. Differentiation from the *family emotional system* occurs when individual family members increase in autonomy, resulting in a decreased quantity of reactivity and anxiety (Bowen, 1978; Harris, 1996). The Bowenian term, family emotional system, refers to the emotional interdependencies that have developed within a family context and ultimately result in a system with its own beliefs and values of organization (as cited in Friedman, 1991).

Linear versus Systemic Perspectives on Anxiety

Bowenian therapists would examine the identified patient from both a linear perspective and a systemic perspective (as cited in Friedman, 1991). This is very effective in treating the identified patient, because it takes into consideration the past generation's experiences with anxiety as well as the individual's unique experiences. Genograms are quite useful because they visually portray the history of anxiety in a family. Therapists and family members are then able to begin to make hypotheses about the origins of the disorder. For example, patterns might suggest a biochemical predisposition to anxiety, or to a psychosocial factor, or to both. Similarly, Fristad and Clayton (1991) emphasized the importance of both family history and family functioning in the assessment and treatment of individuals with anxiety disorders.

Bowen's (1960) earlier work on the *undifferentiated ego mass* is a good example of how severe interconnectedness and lack of independence in a family can lead to psychopathology and/or dysfunction in individual family members. This undifferentiation refers to a person's inability to disregard the positions and reactivity of family members in order to define oneself (as cited in Friedman, 1991). Minuchin's (1974) observation of enmeshment is also an example of how extreme closeness can inhibit the appropriate developmental growth of each unique family member. Differentiation is often hindered when families are enmeshed, and the self-confidence and autonomy that are needed to make independent decisions are not adequately developed. The ability to make and grow from mistakes is, thus, prevented.

The importance of exploring one's environment independently with support and encouragement from parents in order to grow into a secure adult is a concept that has

been examined in early childhood by developmental psychologists and attachment theorists. The inability to do so might lead to and be evidence of insecure attachments, lack of confidence, and the inability to regulate feelings, such as anxiety (i.e., separation anxiety). Insecure attachment has been associated with anxiety disorders (Warren, Huston, Egeland, Sroufe, 1997).

Attachment and Anxiety

With regard to attachment theory, Bowlby (1973) asserted that a source of child anxiety was associated with the perception of "how accessible and responsive his attachment figures are likely to be should he turn to them for support" (p. 203). Based on their early interactions with caregivers, children create internal "representational or working models" (p. 203) for their relationships with others. It is through these interactions and experiences with others that they develop certain expectations. Bowlby contended that a child would learn to "forecast ... the probable availability of his attachment figures" (p. 203) and those who experience any threat or form of abandonment, ranging from physical desertion to more emotional rejection, such as a parent's withdrawal of love, might also be anxious in nature. Warren, Emde, and Sroufe (2000) learned that children's play narratives, indicative of internal representations, suggested that negative expectations did signify later anxiety.

Bowlby (1973) asserted that, in order to protect themselves and avoid threats of abandonment, anxious children would likely deny or inhibit their own feelings and views that contradicted those of their parents. In cases where the child recognized these discrepancies, Bowlby suggested two feasible outcomes: (1) the child would deny his or

her own feelings and views in order to conform to the parents' outlook of the child and the family, or (2) the child would credit both views by developing an uneasy negotiation between the two and vacillating between both. According to Bowlby, the inherent confusion in this negotiation of both views causes anxiety and anger.

Some early studies and case reports indicated that children with anxiety disorders or neuroses had parents who were overinvolved and who disregarded their children's physical and psychological privacy, thereby restricting their overall independence (Levy, 1943; Parker, 1983; Waldron, Shrier, Stone, & Tobin, 1975).

In the 1970s and 1980s, the systemic principles of family therapy were rarely studied empirically with regard to anxiety disorders. Siqueland et al. (1996) suggested, however, that studies on the family dynamics of children with psychosomatic illnesses could likely be related to children with anxiety problems. These studies suggested that psychosomatic illnesses in children were often associated with impaired marital functioning, triangulation, enmeshment, overprotection, inflexibility, and the avoidance of conflict in families (Minuchin, Rosman, & Baker, 1978; Wood, 1985; Wood et al., 1989). Anxiety often manifests itself psychosomatically; therefore, it seems likely that these associations could also be made to children with anxiety disorders.

Theoretical Models for Emotion Socialization

Studies focused on the emotional expression of families and how this then affects individuals' styles of expression are limited with regard to anxiety. Although many studies have been focused on the socialization of emotions in children and how this impacts emotional regulation, emotional competence, and behavior, there is a gap in this research with respect to relating emotionality to anxiety and anxiety disorders. The

following are models of emotion socialization that the researcher viewed as important in understanding the development of anxiety.

Potential Gender Differences

Chodorow's theory (1978) on attachment and gender differences may provide plausible reasons for the ways in which mothers socialize emotions in their children. Chodorow contended that mothers view their daughters as extensions of themselves, but perceive their sons as differentiated beings. As a result, sons would likely be encouraged to restrict their empathetic attachment with their mothers and to suppress their nurturing side with other people. Daughters, on the other hand, would be encouraged to be connected and attuned to their relationships with others.

Garside and Klimes-Dougan (2002) suggested that Chodorow's theory (1978) provides a plausible explanation for the differing reactions that mothers have in response to the various emotions displayed by their sons and daughters. In families, therefore, it is quite possible that certain emotions would be prohibited completely for both genders but that other emotions would be acceptable for one gender but not the other.

Personality Construction, Psychopathology, and Emotions

The significance of discrete emotions in personality development through a functionalist and discrete-emotions framework was stressed by Malatesta-Magai and her colleagues (Magai, 1996; Malatesta-Magai, 1991; Malatesta & Wilson, 1988). Emotion traits were thought to be composed of personality constructs that organize select features of human behavior. Magai and her colleagues further asserted that parental strategies of emotion socialization contribute to the advancement and consolidation of affective

organizations. Children's reactions to early interactions with their parents are clearly influential. These interactions appear to reinforce specific emotion states which eventually become part of the child's internalized self. Consistent patterns of emotion socialization are strengthened over time and ultimately guide the formation of personality constructs.

Malatesta and Wilson (1988) discussed a specific area of emotion socialization that takes into consideration the development of psychopathology. Malatesta and Wilson contended that ruptures in the socialization of emotions could cause both emotional and behavioral problems. Some effects might begin to dominate the personality which might cause moderate distortions that govern one's personality and ultimately define personality. These effects might also lead to severe distortions which are often found in psychopathology. The type of pathology that subsequently ensues is thought to be related to the degree to which parents selectively encourage or discourage the expression or suppression of various discrete emotions. Malatesta and Wilson, thus, thought that individuals might be at increased risk for developing a particular psychopathology if one experiences too much or too little of a specific emotion. The risk would, however, reveal itself in numerous ways, depending on the emotion that is either encouraged or discouraged. This theory is essential in considering the development of anxiety and the presence of heightened anxiety in individuals based on the ways that they were socialized emotionally.

Parental Meta-Emotion Philosophies

Gottman et al. (1996) identified two distinct meta-emotion philosophies utilized by parents to address the fostering or hindrance of emotion expression in children. The emotion-coaching philosophy is considered an approach that facilitates the expression of emotions. For instance, parents who subscribe to this type of philosophy would focus on emotions in both themselves and their children. They would regard negative emotion expression as a chance to reinforce the parent-child relationship, as an opportunity to teach their children, to validate emotions, and to problem solve with their children regarding appropriate ways to handle the circumstances that led to the negative emotion.

In contrast, the emotion-dismissing philosophy is a parenting style adopted by parents who do not consider emotion expression as advantageous or as an opportunity for intimacy or as a chance to educate their children. It would be likely that this dismissive style would foster the development of anxiety because the child would not feel that his or her emotions were valued and worthy of expression. The efforts to suppress these emotions in an attempt to gain parental acceptance are expected to result in anxiety development.

Eisenberg et al. (1998) have a similar perspective to Gottman and his colleagues on the ways in which parents socialize emotions. Eisenberg et al. have found that the ways parents discuss emotional issues within the family can convey support and acceptance to their children and also increase their awareness of various feeling states. They assert that children raised in families such as this will be better able to communicate their feelings and will be more likely to accept and understand other people's emotions. Parents, however, who discourage the discussion of emotions, particularly negative

emotions, might infer that emotions should not be expressed and, thus, have children with deficient knowledge in the area of emotion regulation. The children may also determine that certain expressions should not be displayed. It is this inhibition of emotions and lack of expression that was proposed in this study to lead to internalizing problems (i.e., heightened anxiety).

Summary

In summary, various models can be utilized as lenses to view the ever-increasing epidemic of anxiety and anxiety disorders. It has become clear that systemic family models provide a more comprehensive view of how these types of disorders may emerge. Bowen (1960) and Minuchin (1974), two primary pioneers in the family therapy field, offered insights as to how lack of independence can lead to the underdevelopment of necessary skills and ultimately to psychopathology. Bowlby (1973), too, presented views on attachment and how the overwhelming need for parental acceptance can cause children to adapt their emotional functioning to match their parents' at the expense of their own emotional well-being.

An understanding of socialization processes is essential in comprehending the etiology of increased anxiety. Chodorow (1978), Malatesta (1988; 1991), Gottman et al. (1996), and Eisenberg et al.(1998) provided thoughtful perspectives on emotion socialization that highlight some of the reasons this author believed that heightened anxiety may begin and develop. The role of socialization in the formation of personality constructs and the effects of ruptures in this socialization (Malatesta & Wilson, 1988; Malatesta-Magai, 1991) along with various parenting styles (Eisenberg et al.,1998;

Gottman et al.,1996) offer a lens with which to examine these debilitating disorders that often commence in childhood and are fostered into young adulthood.

Other models, focused solely on individuals, do not embody essential information and cues about how such psychopathology gathers enough impetus to first develop and later be sustained. Such models involve looking at individuals in a vacuum and failing to recognize the impact and influence of one's surroundings.

Significance of the Study

In 2004, the National Mental Health Association (NMHA) determined that approximately 19 million adults are impacted by anxiety disorders each year in the United States. With these figures in mind, it is difficult to believe that little is known about the origin of this debilitating disorder. The argument of nature versus nurture persists, with some evidence supporting a genetic link to anxiety disorders, and other findings pointing to environmental influences.

The need for further research on the causes and triggers of anxiety is necessary. Previous research has typically been focused on the biophysiological causes, learned behavior, familial and environmental problems, major life stressors across the lifespan, and various treatment modalities, and yet no definitive causal statements can be made.

Anxiety can often be found in various members of the same nuclear or extended family. Although the precise method of transmission of anxiety and anxiety disorders has not been clearly identified as of yet, various postulations have been made. The possibility of genetic predispositions, hereditary links, as well as socialization have been examined quite thoroughly. Children who are raised in families by parents with anxiety

problems are also likely to experience high levels of anxiety. In a study conducted by Turner, Beidel, and Costello (1987), children of parents diagnosed with anxiety disorders were found to be more anxious, fearful, and worrisome. They also reported more school problems as well as somatic complaints and often played alone rather than with other children. An increased frequency of anxiety and depressive disorders in both mothers and fathers was found in children with anxiety disorders (Martin, Cabrol, Bouvard, Lepine, Mouren-Simeoni, 1999). The specific diagnostic criteria of the parents determined whether these children developed anxious school refusal, as a result of separation anxiety, or phobic disorders. In contrast, another study indicated that only maternal anxiety disorders were predictive of anxiety disorders in children (McClure, Brennan, Hammen, & LeBrocque, 2001).

In a study conducted by Manassis and Hood (1998), impairment in childhood anxiety disorders, specifically phobic disorders, seemed to be linked to maternal phobic anxiety, mothers' ratings of childhood behavioral problems, childhood depression, and developmental difficulties. Manassis and Hood postulated that perhaps anxious and/or depressed mothers had difficulty setting limits and that this contributed to their inclination to overestimate behavioral problems in their children. Additionally, it was suggested that there may have been power struggles in the family when anxious/depressed children tried to avoid normal everyday activities, thus, resulting in more oppositional behaviors in children. Psychosocial adversity was found to strongly predict impairment in childhood generalized anxiety disorders. Manassis and Hood determined that this finding might be related to the likelihood that affected children, who

worry more of the time, might also be more susceptible to family breakdown and large family size.

Although these studies indicated a family relationship, causality cannot be determined. Though it can be argued that anxiety is learned behavior, there is also evidence of innate characteristics, such as chemical imbalances, that predispose people to be more anxious in nature. This is supported by the efficacy rates of anti-anxiety medication and antidepressants that alter brain activity. Studies on genetic variables have lent support for an innate predisposition to anxiety. For instance, according to the research of Warren, Schmitz, and Emde (1999), physiological and social anxiety symptoms in seven-year-old children appeared to be hereditary. It was suggested that these symptoms were possibly related to behavioral inhibition, a precursor of anxiety disorders (Biederman, Rosenbaum, Bolduc-Murphy, Faraone, & Hirshfeld, 1993), and, because behavioral inhibition demonstrated greater heritability in a study by Warren et al., this served as a possible indication that inhibition was innate.

Research focused on the temperament of individuals in early childhood and adolescence (Craske, Poulton, TSAO, & Plotkin, 2001; Hayward, Killen, Kraemer, & Taylor, 2000) also suggested a genetic basis for inherent traits. According to Craske et al. (2001), temperamental emotional reactivity at age three predicted panic and agoraphobia in males at age 18 or 21. This emotional reactivity could either be considered an aspect of behavioral inhibition or an indication of physiological lability. In contrast, there was also evidence that anxiety could be learned and/or triggered biologically. Children who either personally experienced respiratory health problems or

observed them in their parents were also more likely to develop panic and agoraphobia (Craske et al., 2001).

Hayward et al. (2000) found that *negative affectivity* was a nonspecific risk factor for panic attacks in adolescents while *anxiety sensitivity* was a specific risk factor. Negative affectivity was defined as a "temperamental sensitivity to negative stimuli" by Watson and Clark (1984), whereas anxiety sensitivity was defined as the tendency to react fearfully to symptoms of anxiety (Hayward et al., 2000).

There has also been a great deal of research about the biophysiological component of anxiety and anxiety disorders. The physiological responses and emotionality during an anxiety attack have been well researched. The notion of *fight or flight* has often been utilized to explain the body's responses during such experiences of heightened anxiety. These bodily responses are not dangerous and do not lead to heart attacks or death as most sufferers and their families fear. Patients' accounts and research indicate that fear often triggers experiences of anxiety. Are we to presume that fear precipitates all forms of anxiety? What are the precipitating thought(s) just prior to anxiety that lead to the feeling of fear? Is there a common thought process that causes a specific emotion (i.e., fear), or are there several thought processes that lead to numerous emotions (i.e., anger, feelings of incompetence)? Could families' styles of emotion communication impact which type of thought or emotion is experienced prior to the anxiety response? Definitive answers to these questions are needed in order to make conclusions with certainty.

One particular treatment that has proven to be effective with anxiety disorders is a cognitive-behavioral approach. Cognitive-behavioral therapy typically revolves around

the thoughts that guide behaviors. People cognitively interpret stimuli from both their environments and interpersonal interactions, and these experiences impact upon their emotions.

The origins of these thoughts and emotions begin within a family of origin where they are learned. Halberstadt (1986) viewed the family as the "primary agent" (p. 827) for teaching emotional expression because children first learn to express their wants and desires during family interactions. Young children interact primarily with family members before beginning school, and, thus, the investigation of families' emotional environments is warranted in order to understand the actual thoughts and emotions that lead to heightened anxiety and anxiety disorders.

In this investigation, the level of anxiety that one experiences in relation to the family-of-origin's belief system and ability to express emotions openly will be examined. Thus, it is expected that heightened anxiety will result from the inability to express feelings freely within the family. In 1970, Lanzetta and Kleck argued that the inhibition of emotional expression is caused by being punished by "socializing agents" (p. 18) for openly expressing various emotions. This thereby diminishes the likelihood of nonverbal emotions being expressed and, at the same time, increases sensitivity to others' displays of emotions and ultimately improves individuals' abilities to accurately read others' nonverbal cues. For the purpose of this study, the concept of *punishment* will range from overt acts of discipline to more discreet forms, such as verbal discouragement.

Halberstadt (1986) supported Lanzetta and Kleck's (1970) theory on family socialization in her study of emotional expression and nonverbal communication styles and skills with regard to family socialization. Halberstadt found evidence that

communication is, indeed, impacted by the emotional expression of families. Specifically, those individuals who were raised in highly expressive families were found to express their emotions more clearly and effectively than individuals from families who inhibited the expression of emotion.

Socialization theory includes the postulate that individuals from families with low-expressiveness styles need to become more sensitive to subtle emotional communications between family members in order to interact sufficiently within the family. Family inhibition of emotional expression, thus, was found to result in a decreased ability to express emotions, but an enhanced skill for accurately perceiving emotions (Halberstadt, 1986). This decreased ability for emotion expression will likely result in reduced expressions of conflict within families, and it was the author's hypothesis that the inability to work through conflicts in the family would result in heightened anxiety.

Whether anxiety problems are caused by genetic predispositions or are a result of learned behavior or a combination of the two, this study was aimed at discovering if the expressions of emotions and conflict as well as the hindrance of autonomy in families affect the development of anxiety and anxiety disorders in individuals.

Delimitations

Generalizations beyond the sample population, young adult, college students between the ages of 18 and 20 are not possible. Also, there are demographic variables in the sample, such as socioeconomic status, religious preference, and cultural background that limit the ability to generalize the findings to all populations.

Due to the quasi-experimental nature of the design, the study of anxiety is confounded by other variables, such as possible drug and alcohol use. These may affect the findings. However, analysis of these variables is beyond the scope of the current investigation. Due to this limitation, it is suggested that future research incorporate interactions of these other possible variables.

The sole use of self-report measures is a significant limitation of this study. The subjective nature of these measures provides only the perceptions of the participants. Cross-validation in this study with other family members and significant others would have provided a broader view of the family environment; however, Halberstadt (1986) found significant cross-agreement amongst family members during her construction of the FEQ measure which counter this limitation. Self-awareness and family-awareness is assumed when self-report measures are utilized, but lack of awareness and insight also needs to be considered (Halberstadt, 1986). Individuals may not be consciously aware of suppressed emotions that are unaccepted by their families-of-origin (Bronstein, Briones, Brooks, & Cowan, 1996).

The impact of social desirability (Dadds, Perrin, & Yule, 1998) and the Hawthorne Effect should also be considered when self-report measures are utilized. There are some childhood anxiety studies that have shown a significant desire for participants to respond in socially desirable ways.

Moreover, Nagy's (cited in Boszormenyi-Nagy, I., Grunebaum, J., & Ulrich, D., 1991) assertions about family loyalties should be examined when participants respond to family questionnaires. Contextual theorists, such as Nagy, refer to children's loyalty as a relational dynamic vital to their functioning from childhood through adulthood. Loyalty

was initially thought to be a valued "'allegiance' earned through due caring or generative contribution" (cited in Boszormenyi-Nagy et al., 1991, p. 207). Children's commitment to loyalty is based on their parents' abilities to balance the fairness of giving and receiving. A co-determinant of children's loyalties to their parents is the children's right to give as well. The balance of fairness between parent and child needs to be renegotiated during various life stages, leading to the redefinition of loyalties. Overall, this commitment to loyalty, particularly if the balance of fairness was recently renegotiated prior to the young adult's departure for college, may affect the participants' responses to some of the questionnaires.

This research does not have the capacity to test for causality. While the author theorizes that the suppression and inhibition of emotions in families-of-origin ultimately result in heightened anxiety, only associations can be made between the two. Causal statements about the relationship could not be made.

A final limitation in this study is the reliability of retrospective recall. It is impossible to determine the accuracy with which participants recall childhood upbringing in their families-of-origin. In fact, there are studies that have examined anxiety disordered individual's abilities to recall information. The findings indicated that these individuals recalled and interpreted information in a negative manner (Amin, Foa, & Coles, 1998; MacLeod, Tata, Kentish, & Jacobsen, 1997).

Summary

Research and literature to examine anxiety and anxiety disorders from a proactive, preventive approach is lacking. Examiners have been striving to find a biological cause

or predisposition to this disorder with hopes of eliminating or intervening in the earliest phases of this debilitating disease. There also exists an overwhelming amount of literature on the effectiveness of psychopharmacology. Although there are empirical family studies, these investigations are often centered on the prevalence of anxiety disorders among relatives to determine if there is a genetic basis or a learned aspect to this disorder. There is limited research on the direct influence of parenting on the development of anxiety. Furthermore, there is no specific research on the impact of the emotional environments of families on the development of anxiety symptoms and disorders in individuals.

This study focused on suppressed feelings that potentially lead to heightened anxiety. The goal of this study was to examine whether people who suffer from anxiety internalize their feelings rather than express them freely and outwardly. Suppression of various emotions (i.e., anger, guilt, jealousy, feelings of inadequacy, and the inability to assert oneself) are thought to precipitate the onset of anxiety. This study, however, could only test for associations between the suppression of emotions and heightened anxiety levels, causal statements about the relationship could not be made. Several researchers have found support for the psychological benefits of emotional release and have indicated that such release often increases recuperation from psychological distress (Greencavage & Norcross, 1990; Hoge & McLoughlin, 1991). In addition, Bronstein (1984) found that parents who encourage spontaneous expression of emotion might essentially promote their children's overall psychological well-being by assisting them in recovering from distress rapidly.

This research was not intended to dispute or minimize the numerous accounts of fear that have been reported to precede anxiety and anxiety attacks. Rather, this researcher believed that fear often results as a product of the aforementioned feelings, as well as from fear itself and from learned emotions. Anxiety sufferers usually describe their fear of the attacks, which often perpetuate the problem. This researcher contended that the fear so often reported actually masks the true feelings or suppressed feelings that lead to this experience of heightened anxiety.

The current study focused on the nurture aspect of this debate, specifically on behavior learned in families. There is a paucity of research with regard to the development of anxiety and emotional expressiveness as well as regarding emotional competence as learned in families. This study was geared to explore the relationship between the levels and types of emotional environments in families and the development of anxiety and anxiety disorders. An understanding of the role of family environment (possibly the source of anxiety development) would assist mental-health practitioners in the prevention and treatment of these debilitating disorders.

CHAPTER II: LITERATURE REVIEW

Introduction

In several studies, researchers have investigated the role that observation and modeling of anxiety symptoms plays in the development of anxiety. Anxiety observed in children can be ascribed to what they learn from their parents (Dadds et al., 1992). Early learning experiences occur in the contexts of parent and sibling interactions. When children exhibit anxiety problems at an early age, there is a strong possibility that the interactions within the family played a role in this development. Thus, these interactions could also be a factor in the amelioration of the problem. Barrett, Rapee, Dadds, and Ryan (1996) developed the concept of the FEAR effect, Family Enhancement of Avoidant Responses, to explain how anxious children were shaped to respond more avoidantly after interacting with their parents. Parents who influence their children to be more cautious and to avoid taking social risks often provide more information about taking precarious chances, model vigilance, express doubt about their child's competence, and reward their child for avoidance behaviors (Dadds et al., 1992). The anxious child's explorations are often undermined by the parent's skepticism.

This researcher examined three variables with regard to the development of anxiety disorders in families. It was expected that the level of independence and psychological autonomy permitted in the family environment would play a role in whether anxiety was fostered in individual family members. Furthermore, the degree to which conflict and anger is openly expressed in the family was also proposed as a potential contributor to anxiety development. Finally, the open expression of various styles of emotion in the family was expected to impact varying levels of anxiety in

individual family members. The following subsections review these three variables and explain the rationale for these propositions.

Independence and Psychological Autonomy

A key variable in this study was the ability for individuals to differentiate and become autonomous within the family system. This researcher believed that children who are able to explore their environments as infants and toddlers as well as adolescents would not be symptomatic with regard to anxiety. On the contrary, it was expected that children whose parents impede this psychological growth would experience self-doubt and, as a result, would lack confidence in their abilities. This insecurity and lack of self-assuredness would ultimately manifest into an anxiety-type disorder when the latter children are expected to make independent decisions, particularly in young adulthood and college.

Discouragement of independence, high degrees of protection, and poor communication, support, and cohesiveness in families may be related to anxiety disorders in their offspring later in life (Chorpita et al., 1998, Parker, 1983; Siqueland et al., 1996). In the study conducted by Siqueland et al. (1996), parents of children with anxiety disorders were observed to provide less psychological autonomy. The children in this study also rated their parents as less accepting. Levels of warmth in these families were the same as for controls, (i.e. moderate, not low as expected).

Parental overinvolvement and overprotection are thought to be linked with anxiety disorders. Siqueland et al. (1996) postulated that this association could be a product of parental infringement on children's privacy, restrictions of their activities, and

limitations on their expressions of emotions, as opposed to being related to parental expression of warmth or concern for the child. Other researchers also demonstrated a relationship between maternal control and anxiety in children (Dumas, La Freniere, & Serketich, 1995; Rapee, 1997).

McCarty, Lau, Valeri, and Weisz et al.'s (2004) study of children with internalizing and externalizing problems, however, indicated that emotionally overinvolved parenting did not negatively affect parent-child interactions as did highly critical parenting. Highly critical parents were found to be less responsive to their children. Furthermore, parents who scored high on critical expressed emotion were observed to interact with their children in a more anatagonistic, negative, harsh, and disgusted manner. The harsh composite was categorized by antagonism, negativity, disgust, as well as intrusive control, and authoritarian parenting. Overinvolved expressed emotion was comprised of the following behaviors: intrusive control, fostering independence, and affective punishment. Though the terms overinvolved and critical parenting were defined differently, there is some overlap with regard to intrusive control. It appears that McCarty et al.'s findings do actually support the hypothesis that overinvolvement and/or intrusive control affect the parent-child relationship and could result in the development of anxiety disorders in children.

Similarly, McClure et al. (2001) found that childhood anxiety disorders could be predicted by high maternal psychological control. Surprisingly, anxiety disorders in mothers were not predictive of ratings of psychological control in mothers. Parents of anxious children were unlikely to reward positive changes (i.e., less anxious behavior) in their children (Dadds et al., 1992). They were more likely to notice, attend to, and

reinforce anxious behavior or reports of anxiety. In a study conducted by Siqueland et al. (1996), children with anxiety disorders reported their parents as being less accepting, and observers of the parents rated them as being less granting of psychological autonomy. Additional studies to examine the interactions between parents and children with anxiety also implied that parents granted less autonomy and were more controlling (Dumas et al., 1995, Krohne & Hock, 1991). Whaley, Pinto, and Sigman's (1999) findings suggested that the over-control demonstrated by mothers of anxious children was connected to the mothers' own anxiety. These anxious mothers engaged in interactions with their children that were less positive and were characterized by less warmth and granting of autonomy, as well as increased criticism and catastrophizing than the control mothers.

According to Goodyer (1990), parents of anxious children are typically overprotective, rejecting, and socially anxious. Barrett, Shortt, & Healy (2002) referred to evidence that parents might protect their anxious children by encouraging them to evade possibly complicated circumstances in a study conducted by Dadds, Barrett, Rapee, and Ryan (1996). In this particular study, parents' interactions with their children were examined for the modeling, prompting, and rewarding of anxious behavior. Parents of anxious children responded with less pro-social solutions when ambiguous social situations were presented. These parents were also more likely to provide avoidant solutions than the parents of control and aggressive children.

King, Hamilton, and Ollendick (1988) contended that children often imitate the fears and anxieties of their parents. These parents tend to reward anxious behavior with comfort and reassurance, which thereby removes the aversive stimuli (i.e., threat, chores, and separation). This is another example of a direct method of encouraging or

discouraging emotional expression in children by parents. Goodyer (1990) discovered that anxiety in children was often related to high levels of emotional distress and lack of intimate social support in their mothers. Shortt, Barrett, Dadds, and Fox (2001) also found that maternal distress was related to avoidant behaviors in their anxious children.

Family environment is a fundamental factor when considering the origins of anxiety. Hibbs, Hamburger, Kruesi, and Lenane (1993) found that low expressed emotion was associated with a lack of psychopathology and to more functional and healthy family environments. Expressed emotion measures utilized in studies such as this are comprised of dimensions of criticism and emotional overinvolvement. Family environments, thus, that have less parental criticism and overinvolvement are associated with being healthier.

Three specific dimensions of family environment explored by Peleg-Popko and Klingman (2002) were communication, encouragement of personal growth, and system maintenance. They found that children's test and trait anxiety were negatively correlated with these three dimensions. Test anxiety, considered to be a form of state anxiety by Spielberger (1972, 1980) and Spielberger and Vagg (1995), refers to a transient emotional condition which increases and fluctuates over time, whereas trait anxiety refers to a stable tendency to respond to various stimuli in threatening ways.

The inverse relationship between anxiety and encouragement of personal growth in the family suggests that a family environment that fosters independence also reinforces self-confidence and self-efficacy and thereby assists children with appropriate and healthy coping (Peleg-Popko & Klingman, 2002). Gender differences were found in this study with regard to personal growth. Boys' levels of test and trait anxiety were

associated with the perception of actual encouragement of personal growth, whereas anxiety levels in the girls were not predicted by the encouragement of personal growth dimension. According to Peleg-Popko and Klingman (2002), this variation amongst the genders suggests that boys are more impacted by the discouragement of personal growth, because it is incongruent with their typical socialization of being encouraged to be independent, and thus, the experience of being hindered may cause anxiety.

Family environment and lack of satisfaction with family life might also be related to anxiety later in life (Chorpita et al., 1998; Peleg-Popko & Klingman, 2002; Siqueland et al., 1996). Studies that define satisfaction with family environment refer to what family members expect to receive versus what they actually identify as having received (Fox & Storm, 1981; Kristjanson, 1991; Porter, 1961). This concept compelled Peleg-Popko and Klingman (2002) to examine the discrepancies between the perceived-actual and desirable family environment to determine how these perceptions impact on children's test anxiety. The children's anxiety levels were found to be positively associated with incongruities between the actual and the desirable family environment.

Siqueland et al. (1996) were likewise interested in perceived family environments as well as observed family interactions. It was predicted that children and parents would minimize individual distress and family difficulties in self-reports (Stark, Humphrey, Crook, & Lewis, 1990; Strauss, Last, Hersen, & Kazdin, 1988) and, as expected, parents rated themselves the same as the control parents in terms of psychological control and acceptance (Siqueland et al., 1996). In contrast, McClure et al. (2001) found that adolescents' perception of controlling and rejecting parenting was not connected to the relationship between mother and child anxiety disorders.

It is, thus, imperative to measure the independence and autonomy levels of individuals in order to determine if the hindrance of individuation indeed affects the development of anxiety problems. The Family Environment Scale (FES; Moos & Moos, 1994) adequately highlights this variable and makes it possible to take a closer look at the internal climate of families. Families that allow greater independence provide children with many opportunities to investigate their environments and grow from their mistakes. It is predicted that inhibited children will lack autonomy and exhibit heightened levels of anxiety in their various relationships and endeavors.

The Expression of Conflict and/or Anger in Families

Another variable in this study is the expression of conflict and/or expression of overt anger between family members and how this impacts the development and progression of anxiety and anxiety disorders. It is predicted that the ability for all family members to freely and outwardly express conflict and/or anger will reduce the possibility of anxious symptomatology. The Family Environment Scale (FES; Moos & Moos, 1994) examines the degree to which conflict is expressed in families and will provide a necessary depiction of individuals' families' ability to openly communicate conflict. Additionally, Halberstadt's (1986) Family Expressiveness Questionnaire (FEQ) offers a more precise measurement of the types of emotion expressed. For example, the quadrants for negative dominant and negative submissive styles of communicating will indicate a family's tolerance level for anger expression.

Dadds and Powell (1991) found that marital problems in parents were highly correlated with child anxiety. Children who, therefore, grow up in homes with constant

bickering and fighting may be more likely to display anxious behaviors. Similarly, Stark et al. (1990) found that anxiety-disordered children identified their families as being high on enmeshment and conflict, low on support and cohesion, as well as having difficulty with making decisions by utilizing the Self-Report Measures of Family Functioning (SRMFF) (Bloom, 1985). Poor communication between parents and their children was found to be inversely related to anxiety in children (Chorpita et al., 1998).

Kerig (1988) also studied the effects of parental conflict on children. Although Kerig discovered statistically insignificant gender differences between how daughters and sons responded to marital discord, there were some clear variations, and children's overall appraisals were found to serve as moderators between parental conflict and adjustment. Boys' and girls' appraisals of parental acrimony did not indicate overall mean differences; however, feelings of threat were associated with boys' exposure to conflict, whereas self-blame was associated with girls' exposure to parental conflict. In addition, the likelihood of conflict being related to externalizing symptoms was found in boys, while internalizing was observed in girls. Siqueland et al. (1996), on the other hand, found no significant differences reported between the levels of covert-overt marital conflict of parents with anxious children versus control children.

These studies involved examining the effects of parental freedom on overt conflict expression. It would seem from the research summarized above that the findings are inconclusive. Further research to explore sibling conflict and parent-child conflict with regard to anxiety specifically is needed. Studies that are geared to explore the level of conflict in the family and how various degrees of conflict influence individual family members' anxiety levels should provide critical information about the impact of conflict

on anxiety development. This study was intended to examine overall conflict levels in families to determine the effect of such environments on anxiety. It was predicted that lower expressions of conflict, therefore the need to suppress anger and disappointment, would be related to higher levels of anxiety.

According to several research studies, there seems to be similarities in family environments in which there is a covariation of anxiety and conduct problems in children (Gregory, Eley, & Plomin, 2004; Werry, Reeves, & Elkind, 1987; West & Prinz, 1987). Risk factors such as parental discord and divorce, psychiatric illnesses, and alcoholism were found to be associated with increased anxiety and conduct problems in children (Werry et al., 1987; West & Prinz, 1987). The expression of conflict, anger, and disappointment in families should be examined to determine if there are relationships between these types of affect and increased anxiety levels.

Burrowes and Halberstadt (1987) examined how the familial and individual styles of emotional expressiveness impact upon the unique expression of anger in individuals. They found that the expression of negative affect in families was significantly associated with individuals' experiences and expressions of anger. In addition, individuals from families which were highly expressive in negative emotions were found to have a greater intensity and duration of anger. Although these individuals reported less control over their anger experiences, they were more willing to discuss these experiences of anger.

As a result of this research, Burrowes and Halberstadt (1987) concluded that the family norms and beliefs instilled in childhood do indeed influence individuals' anger expressions in the present. They postulated that, since the expression of negative affect in families seems to be linked to anger expression in young adulthood, the learned

expression of positive affect in childhood could also be associated with individuals' present-day expressions of happiness.

Bohnert, Crnic, and Lim (2003) examined aggression in school-age children with regard to emotional competence. In this study, the researchers found that children who exhibited aggressive behaviors had specific commonalities, more intense and frequent anger expression, as well as difficulty recognizing the triggers of their emotions. Shields and Cicchetti (1998) also determined that children with higher aggression also had difficulty modulating their emotions. Saarni (1999) identified one's capability for emotional awareness as one of the most fundamental elements of emotional competence. Furthermore, one's capacity to recognize emotion states as well as triggers and correlates of emotion states comprises what Harris (1993) referred to as emotion understanding. It seems apparent that the aggressive children, who did not recognize their emotional states or their triggers in these studies, did not have appropriate models for how to regulate anger and to appropriately express negative affect.

Emotional contagion in families might lead children to respond to stimuli and situations in various ways. Barsade (2002) found that emotions were contagious in groups, specifically in the context of the workplace. Emotional contagion significantly influenced the attitudes of individuals and group processes. Empirical advancement with regard to emotional contagion and the encouragement or inhibition of emotions in the context of families is warranted.

Environments that encourage attention to threat as well as environments that are threatening in nature, such as conflictual family settings, need to be examined in order to

determine if these types of environments influence, foster, or promote the development of heightened anxiety.

In a study conducted by Taghavi, Neshat-Doost, Moradi, Yule, and Dalgleish (1999), biases in visual attention were investigated. Taghavi et al. (1999) referred to a theory that was formulated by Beck, Emery, and Greenberg (1985) that explained anxiety as a biased information-processing system. They asserted that individuals possess cognitive structures that were potentially formed early in life which are responsible for processing threat-related stimuli. Overactive structures are thought to be distinguishing attributes of anxiety disorders in the early development phase. The structures operate as guides to the intake of threat-congruent stimuli in the environment. This heightened attention to danger and threat often lead individuals to inaccurately approximate levels of threat in their environment (Beck & Clark, 1988).

Tagahavi et al.'s study yielded findings that support Beck et al.'s assertions. The results indicated that clinically anxious children specifically allotted more time to visual processing of threat stimuli in comparison to control children. Beck et al. (1985) determined that these biases are key factors in the etiology and maintenance in anxiety disorders. The findings, thus, raise an interest in how biases are initially formed and/or learned. The most logical and likely answer would be within the family environment. Are family environments that encourage the expression of conflict and anger more threatening than those that discourage anger expression and conflict? Do children become more vigilant and biased to subtle signs and nonverbal cues of unexpressed anger and conflict as Halberstadt (1986) asserted, thereby increasing their anxiety levels?

The Direct Expression of Feelings in Families

The degree to which the direct expression of feelings is promoted within families is the third and final variable of this investigation. It was being postulated that people who are able to express emotions freely would be healthier in terms of mental health. Those individuals who are forced to suppress emotions deemed negative by their families were predicted to suffer from symptoms of anxiety and, ultimately, anxiety disorders. Both the FES (Moos & Moos, 1994) and the FEQ (Halberstadt, 1986) measures allowed the thorough examination of this variable. Specifically, the FES was used to determine the extent to which expression was permitted, and the FEQ was utilized to further pinpoint the acceptable style of expression within the family.

According to Gottman and DeClaire (2001), there are four types of family philosophies of emotion: (1) emotion-coaching philosophy, (2) emotion-dismissing philosophy, (3) emotion-disapproving philosophy, and (4) laissez-faire philosophy. Within families, feelings and emotions such as pride and accomplishment, love and affection, anger, sadness, and fear are either encouraged or discouraged. As a result, these reinforcements might help to create varying levels of anxiety and in extreme cases anxiety disorders.

According to Halberstadt and Eaton (2002), there is great variation in the overall expressiveness of families. The frequency and intensity with which emotions are experienced varies across individuals (Halberstadt & Carpenter, 1993; Larsen, Diener, & Emmons, 1986). It was hypothesized that the general family environment impacts the emotional expression of individuals. Halberstadt and Eaton (2002) stated, "Individuals living in families experience their emotions within a social context, and other family

members may act to suppress, modify, or intensify each others' emotions" (p. 36). Halberstadt and Eaton provided some examples from their other studies that might offer explanations as to why this occurs. Emotions might be suppressed, for instance, because they are either not valued or they are considered dangerous by family members (Dunsmore & Halberstadt, 1997; Halberstadt, Dunsmore, McElwain, Eaton, & McCool, 2001). It is also important to note the infectious nature of emotions in families even when this contagion is unintentional (Hatfield, Cacioppo, & Rapson, 1994; Levenson, 1996).

Whereas Gottman and DeClaire (2001) discussed specific family types, Malatesta-Magai (1991) identified five approaches to parenting with regard to the socialization of discrete emotions. The five strategies are: reward, punish, override, neglect, and magnify.

These methods were thought to either encourage or discourage specific emotional expressions in children. *Reward* refers to parents who comfort, empathize, and assist their children when they exhibit sadness, anger, and/or fear. Parents, who express disapproval, inflict shame, and laugh at their children, are categorized in the p*unish* strategy. *Override* signifies dismissive parenting in which children's feelings are minimized or dismissed. For example, a child who expresses sadness might be told to "cheer up." The *neglect* strategy would be comprised of the ignoring of emotions by parents. The fifth strategy, *magnify*, suggests a parenting style in which the children's expressed emotions are matched by their parents' reactions. An example of this would be a parent who becomes fearful when a child is scared and joyful when the child is happy.

Siqueland et al. (1996) offered another philosophy of emotion in families which might contribute a plausible explanation as to the etiology and/or maintenance of anxiety disorders. They assert that children's realizations that their emotional expressions and personal views are unaccepted and consequently not tolerated by their families in conjunction with their confused struggles to understand the incongruity between their own emotions and views and their parents' play a probable role in the cause and maintenance of this debilitating disorder. Siqueland et al. (1996) surmised that these families mirrored those families that Minuchin et al. (1978) referred to in which "loyalty is valued over autonomy and approval is valued over competence" (p. 56). Siqueland et al. hypothesized that perhaps autonomy and differentiation are restricted because they threaten the family system, also ruling out the expression of conflict and disagreement.

The inhibition or encouragement of negative and positive affect could either aid or hinder feelings of anxiety. According to Buck (1984), children could likely begin to experience anxiety in their efforts to conceal their facial displays of emotions and feelings that have not been sanctioned by their parents. Children who are taught to control emotions that are typically unharmful to others seem to react to other people's suffering with self-focused, internalized anxiety and distress rather than sympathy (Buck, 1984; Eisenberg, Fabes, Schaller, Carlo, & Miller, 1991).

Various styles of emotion expression in families could also impact social competence in children. Gottman et al. (1996) suggested that parents' responsiveness to emotions in addition to direct instruction for the expression and experience of emotions are responsible for the development of social competence in children. This concept of responsiveness and direct instruction was referred to as parental emotion coaching.

Parents, who are attentive and aware of their children's emotions, are able to discuss emotions in a differentiated way, are accepting of their children's emotions, validate their children's feelings, assist them in labeling their feelings, and are able to teach their children how to handle emotions, particularly negative ones, are said to be high on emotion coaching. Those parents who are low on emotion coaching demonstrate poor responsiveness and instruction. They are observed to disregard, deny, and distract their children from experiencing emotions.

In a study by Ramsden and Hubbard (2002), parental emotion coaching and family expressiveness were examined in order to learn how these variables play a role in emotion regulation and aggression. The authors suggested that children who were exposed to higher levels of negative emotion expression in families with minimal positive expressiveness would create an environment in which more negative emotions would have to be regulated. On the contrary, a lack of emotion coaching would possibly impair children's abilities to manage these negative emotions. Ramsden and Hubbard found an indirect link between emotion regulation in children and negative family expressiveness and mothers' abilities to accept negative emotions expressed by their children. In sum, the way parents experience their own feelings and emotions seems to govern the way that they parent their children (Gottman et al., 1996).

This study introduces the importance of self-soothing in children. Although the focus was on self-regulation and externalizing behavior, specifically aggression in children, Ramsden and Hubbard (2002) recognized the importance of learning the relationship between the family environment and emotion regulation. It is essential to understand the role of family environment on self-soothing styles when considering the

causes of anxiety development in individuals. Many studies have explored the impact of self-soothing on children's regulatory behavior (Garner, 1995; Garner & Power, 1996; Gottman, et al., 1996; Hooven, Gottman, & Katz, 1995); however, none of them was focused specifically on the regulation of anxious emotions. Garner (1995) investigated the role of social context and family expressiveness in the emotional regulation of toddlers and found that maternal reports of positive emotions within the family were associated with toddlers' increased abilities to self-soothe, whereas negative-submissive emotion was inversely related to emotion regulation.

With regard to negative affect, Garner and Power (1996) also determined that higher levels of sadness in families led children to consequently also express higher levels of negative affect when faced with a disappointing prize. Bohnert et al. (2003) investigated emotional competence and aggressive behaviors and determined that children who had the ability to regulate their emotions reacted positively to the disappointment paradigm and exhibited healthier emotional competence.

Self-soothing abilities are essential in reducing the body's anxious states. The inability to reduce anxiety or to self-regulate might be associated with the development of anxiety and ultimately anxiety disorders. This is an area of study that requires thorough exploration.

Several researchers discovered a significant relationship between parental emotion coaching and the physiological abilities to regulate emotions in children (Gottman et al., 1996; Hooven et al., 1995). Gottman et al.'s (1996) research on the regulatory physiology of children led him to the influential earlier works of Davidson (1994), Davidson and Fox (1982), and Davidson, Ekman, Saron, Senulis, and Friesen

(1990). Davidson et al. (1990) defined emotions that were lateralized in the left frontal lobe as approach emotions. Language, positive affects, and anger are all left-lateralized in the brain. Positive affects as well as anger are referred to as approach emotions because they engage individuals rather than cause them to isolate and withdraw. Also lateralized in the left frontal lobe are emotions that Davidson referred to as withdrawal affects. Some examples of these negative affects are fear, disgust, and sadness.

Based on Davidson's contributions, Gottman et al. (1996) hypothesized that the ability to concurrently openly discuss negative affects while experiencing those emotions would lead to a decreased sense of withdrawal and isolation and an increased sense of control and mastery over negative affect as well as the parasympathetic autonomic reactions associated with feelings of fear, disgust, and sadness. Parenting styles of emotion coaching, therefore, need to be further examined to explore Gottman's hypothesis. In the present study, it is hypothesized that parents who discourage the open expression of negative and/or positive emotion will likely have children who have difficulty gaining a sense of control and mastery over physiological responses related to anxiety.

Dating back to the innovative work of Breuer and Freud in 1895, the concept of "strangulated affect" (Breuer & Freud, 1957, p.17) was addressed because Freud believed that the suppression of emotions was the main cause of psychological problems. Freud's subsequent talk therapy was proposed as a means of releasing those emotions that had once been restricted. Today psychodynamic therapies continue to be based on the belief that emotional inhibition might indeed be a cause of psychological problems.

Practitioners of expressive therapies consequently encourage the open expression of inhibited emotions (Brenner, 1982; Levy, 1990).

There are also those researchers who believe that a certain degree of emotion inhibition is necessary for healthy development (Thompson, 1991). Adults learn to filter and ultimately suppress ranges of emotions to a certain degree (Tomkins, 1984). According to Gross and Levenson (1997), emotions that are unregulated could lead to impulsive outbursts of anger characteristic of intermittent explosive disorder. Questions need to be generated regarding how unregulated emotions might lead to impulsive attacks of panic and other symptoms characteristic of anxiety disorders.

In their study, Gross and Levenson (1997) examined the acute effects of inhibiting both negative (sadness) and positive (amusement) emotions on physiological responses, in order to determine the potential effects of emotional inhibition on the psychological functioning of undergraduate female students. The findings indicated that the suppression of positive and negative emotions resulted in various physiological changes, such as increases in the sympathetic activation of the cardiovascular system and decreases in facial and somatic reactions. The enhancement of the sympathetic activation of the cardiovascular system as well as the finding that heart rate normally followed somatic activity was also found in Gross and Levenson's 1993 study on the emotion of disgust. These changes in the sympathetic nervous system are also features commonly associated with state anxiety or anxiety attacks. The authors, thus, suggested that the suppression of emotions might indeed influence psychological functioning in terms of cognitive performance, behavior, and social interaction. Cole, Michel, and Teti (1994) contend that children can learn to modulate their emotions by verbalizing how they feel.

There needs to be an increased focus on how the suppression of feelings or inability to freely express one's feelings may precipitate state anxiety and actually be the triggering event that precedes the body's subsequent physiological responses. This will partly be explored by employing the FEQ. Participants who indicated that negative dominant and submissive emotional expressions had to be suppressed in their families of origin were expected to indicate increased symptoms of anxiety. Although this suppression of emotion could not be adequately pinpointed as the catalyst for the actual episode of state anxiety, this investigation can serve as a springboard for future research in this area.

Emotional Expressiveness in Young Adulthood

According to Boyum and Parke (1995), the family serves as the first setting in which affective messages are recognized and expressed. Members of the family communicate affective messages to the children. Gradually, over time, the children are expected to interpret and reply to these communications of affect. As the child matures and meets people from outside the family, the contextual clues learned within the family may no longer serve as adequate cues. These social interactions might also be challenging to interpret because display rules may differ, people may not take the time to understand the child, and the child may not view others' affective communications as clear. Boyum and Parke affirmed that children who are knowledgeable in emotion skills, as they move away from the confines of the family, will be at an advantage. As children encounter new people, they will need to further develop emotion skills, such as interpreting emotions in themselves and others.

This researcher believes that the child is not completely free to alter, develop, and/or implement his or her own style of affective communication until the child literally moves away from the confines of the family. Although the child has had to make some adjustments in order to communicate with external significant others, it is likely that the family's consistent influence, as long as the child lives with the family, causes a youngster to revert back to and closely adopt the affective communication style learned within the family of origin.

More than likely, launching is first evident when the young adult leaves home for college, military service, or a first time job that requires a move from the home locale. The young adult will need to utilize the display rules and contextual clues learned from the family and other significant individuals in one's life thus far. He or she will need to adapt to another context, share his or her life with persons outside of the family, and negotiate how to communicate ones emotions independently for the very first time away from home and the influences of family sanctions. Boyum and Parke (1995) determined that, though the type or style of affect children were exposed to in their families-of origins was crucial in emergent peer relationships, so was the frequency of this exposure. Cassidy, Parke, Butkovsky, and Braungart (1992) supported this in their study, which highlighted the importance of the family's emotional climate with regard to children's understanding of emotions and their abilities to develop healthy social relationships with their peers. This author, thus, postulated that the inability to express specific emotions in childhood would lead to difficulties and challenges in young adulthood. The college-age student would either continue to communicate in the accustomed manner or would try to adapt to new surroundings. This adaptation might cause anxiety because of trying to

compromise between how the family has communicated and a current wish to communicate differently (Bowlby, 1973; Siqueland et al., 1996). Furthermore, anxiety would be caused when the young adult attempted to express an emotion that was either inhibited or prohibited by the family. This inability or struggle to freely express oneself would ultimately cause the development of anxiety and strife.

College-age students were selected as participants to take part in this study due to the aforementioned reasons, and also because Halberstadt, Crisp, and Eaton (1999) found that the positive outcomes of negative family expressiveness were not evident until late adolescence. Halberstadt (1998) suggested that children who experienced negative affect during their upbringing as a normal part of their lives would likely be at ease with the expression of negative affect in both late adolescence and during their college years.

Moreover, before undertaking the complexities characterized by a clinical sample, this author was seeking to first generate normative data applicable to family emotional environments and anxiety.

Attempts to Distinguish Between Two Internalizing Disorders – Anxiety and Depression

The comborbidity of anxiety and depression is high, and the symptoms for both anxiety and depression often overlap, making it difficult to discern between these two internalizing disorders. Questionnaires and clinical measures utilized to determine the presence of anxiety and/or depression in children have been criticized for not tapping into criteria specific to symptoms for each of these disorders (Muris, Schmidt, Merckelbach, & Schouten, 2001). Consequently, the lack of adequate measures makes it a challenge to

ascertain the margins between diverse types of negative emotions (Lonigan, Carey, & Finch, 1994; Muris et al., 2001). With regard to family dynamics and the development of these disorders, researchers have also found similarities. For instance, in a family study of anxiety and depression, Stark et al. (1990) discovered that children with either anxiety or depression described their families as displaying comparable characteristics. These children identified their families as showing increased conflict and enmeshment. Additionally, these families were characterized as being less supportive and encouraging, less cohesive and accepting of open expression, and also demonstrated less autonomous decision-making. The children's viewpoints of their families were substantiated by their mothers.

In a subsequent study, Stark, Humphrey, Laurent, Livingston, and Christopher (1993) attempted to distinguish between childhood anxiety and depression by examining three variables: cognition, behaviors, and family environment. They determined that anxiety and depression could be differentiated based on cognition and family environment. Depressed children perceived themselves, the world, and their futures as more negative than did anxious children. Moreover, in comparison to anxious children, depressed children were actually found to be offered more negative feedback about themselves, the world, and the future from their fathers.

Siqueland et al. (1996) recommended taking a closer look at family interactions as a means of differentiating between the two disorders. They suggested that there might be differences in the families of children with anxiety disorders with regard to the acceptance of the expression of specific negative emotions and the demonstration of contradictory perspectives.

Studies on maternal reactions to the emotional displays of children who withdraw and internalize have been conducted (Rubin & Mills, 1990). Mothers of children who withdraw and internalize were found to react more angrily, became more embarrassed and disappointed, and experienced feelings of guilt when their children withdrew and became aggressive than did the mothers of control children. The expression of these negative feelings by parents might be associated with the overinvolvement that characterizes such families. Rubin and Mills postulated that the parents' negative responses might be explained by potentially angry undertones related to this overinvolvement.

Rubin and Mills (1991) also provided a plausible way in which internalizing disorders could evolve in childhood, contradictory to the causality proposed by Bowlby (1973). The interaction of three conditions - children's temperament, parents' styles of socialization, and various settings (i.e., family stress, low socioeconomic status) – could possibly lead to struggles regarding internalizing disorders. Furthermore, Rubin and Mills elaborated on their views of how temperament in infancy could impact upon parenting. Infants with a more cautious and distrustful temperament might be more difficult to comfort, thereby causing parents to become less responsive and receptive. An insecure attachment might, thus, result between parent and infant, and the infant would be less likely to freely explore his or her environment. This is a vicious cycle because the parents, with the intention of being helpful, would then take over or develop a highly directive style of parenting and this overcontrol or overinvolvement would cause the infant to develop further feelings of helplessness and incompetence. McCarty et al. (2004), however, found that emotionally overinvolved expressed emotion in parents was

not indicative of problematic parent-child interactions. Rubin and Mills also stated that a wary temperament was not a requirement for internalizing disorders. Instead, it was suggested that the aforementioned parenting styles could cause children with calmer temperaments as well to develop these internalized disorders.

Summary

Anxiety and anxiety disorders have been researched quite thoroughly for many years. Many of the earlier studies were focused on anxiety and how this debilitating disorder impacts the individual. The efficacies of certain treatments, for example cognitive behavioral therapy, medication, and support groups, have also been methodically examined. Causality has also been addressed from both biological (Craske, et al., 2001; Hayward, et al., 2000; Warren, et al., 1999) and nurturance perspectives, without any definitive answers about the origins of this disorder.

More recent literature that attempts to explore the origins of anxiety has been centered on the family (Barrett, et al., 1996; Chorpita, et al., 1998; Dadds et al., 1992; Parker, 1983; Siqueland, et al., 1996). This research suggests that anxiety and anxiety disorders are linked to the family in some way. Although some researchers have found heredity (Craske, et al., 2001; Hayward, et al., 2000; Warren, et al., 1999) to play a role in the causality of anxiety, others asserted that emotions are learned (Denham et al., 1994; Halberstadt, 1986; Lanzetta & Kleck, 1970; Tomkins, 1991). It is quite likely that heredity and socialization impact individuals in conjunction and that heightened anxiety and anxiety disorders materialize when both criteria are present.

The study of emotions dates back to Darwin's (1872/1955) time and has continuously evolved for many decades. Although the socialization of expressed emotions is an area that has been emphasized in the literature (Chodorow, 1978; Eisenberg et al., 1998; Gottman et al., 1996; Malatesta-Magai, 1991; Malatesta & Wilson, 1988), these studies have not been integrated with studies on anxiety and anxiety disorders. The relationship between the two should be examined quite closely, yet, prior to this study, no such studies existed. There had been studies to examine how emotional expression affects aggression (Bohnert et al., 2003; Cicchetti, 1998; Ramsden & Hubbard; 2002) and how it is related to self-soothing, (Garner, 1995; Garner & Power, 1996; Gottman, et al., 1996; Hooven, et al., 1995; Ramsden & Hubbard; 2002) but none of the studies went a step further to determine how the socialization of emotional expression specifically affects the development of heightened anxiety and, potentially, anxiety disorders.

There was also a need to investigate the overall environments of families to determine if specific characteristics assist in fostering the progression of anxiety to anxiety disorders. Although conflict in families has been empirically studied (Dadds & Powell, 1991; Kerig, 1988; Siqueland et al., 1996), there is limited information as to how various levels of conflict in the family explicitly affect the development of anxiety. Finally, even though attachment and autonomy (McClure et al., 2001; Siqueland et al., 1996) have been studied quite extensively and the concepts of anxious attachments and separation anxiety (Bowlby, 1973) in the family have been repeatedly addressed in the past, researchers need to continue their examination of how the family's intolerance for

independence (Goodyer, 1990; McClure et al., 2001; Siqueland et al., 1996) can potentially lead to disorders of and problems with anxiety.

Though the research on anxiety disorders is quite abundant, the areas of socialized emotions in the family as well as the levels of conflict, expressiveness, and autonomy and the impact they have on the individual represent a major limitation in the literature. There is a strong need for supplementary studies in the area of anxiety and the family with precise focus on the family environment; thus, the present study was developed to narrow the gap in the literature.

In order to learn how the aforementioned variables in families potentially impact the development of increased anxiety levels in individuals, this researcher explored the overall family environment. The independent variables of independence and psychological autonomy, the expression of conflict and anger in families, and the direct expression of feelings in families were being studied by this researcher to determine if they are related to heightened levels of anxiety. More specifically, individuals who indicate less tolerance for independence in their families of origin are expected to report increased anxiety levels. Additionally, the ability to freely express conflict and anger within the family environment was expected to be associated with less anxiety in individuals. Finally, overall freedom of emotional expression was predicted to be related to emotional well-being and lack of anxiety. Specifically, the inability to express negative dominant and negative submissive emotions was expected to lead to heightened anxiety.

Hypotheses

Based on a review of the literature, the following hypotheses were proposed:

Hypothesis I: Lower levels of emotional expression, conflict expression, and independence in families of origin will be significantly related to higher levels of anxiety symptoms in individuals.

Hypothesis II: Lower levels of negative dominant and negative submissive styles of expression in families of origin will be significantly related to higher levels of anxiety symptoms in individuals.

CHAPTER III: METHODOLOGY

Introduction

This chapter includes the design of the study, the selection process for participants including the criteria for inclusion and exclusion, the recruitment methods, and characteristics or demographics of the participant population. In addition, the procedure and measures which were utilized will be described. The independent and dependent variables will be defined and the statistical analyses for this study will also be provided.

Design of the Study

The present study was a quasi-experimental correlational design that examined the relationship of family environment and anxiety. The independent variables in this study were the styles of expression in the family of origin (negative dominant versus negative submissive) as well as the level of emotional expressiveness in the family, the degree to which conflict and anger are expressed, and the level of independence permitted in the family. The dependent variable was the degree of free-floating (transitory), manifest anxiety (comprising both state and trait anxiety).

Participants

The participants were 18 years and older recruited from psychology courses at a private university in the northeast of the United States. Students were instructed to sign up with the Director of Research in the Psychology Department if they were interested in taking part in the study.

The number of participants in this study was calculated by conducting a power analysis utilizing GPOWER software (Erdfelder, Faul, & Buchner, 1996). The alpha level was set at .05, and a medium effect size of .5 was assumed. The power was set at .80 and a quasi-experimental correlational design was identified. The results indicated that 103 participants would be an adequate sample size for this study.

Procedure

This study was first submitted for approval by the Institutional Review Board (IRB) at the University where the study was undertaken (see Appendix A). Participants were provided with questionnaire packets to complete. The return of the completed questionnaire packets implied their consent to take part in the research. Participation was voluntary, and participants were informed that they could discontinue involvement if they should feel uncomfortable at any time during the study. They were also advised that they could speak to a group leader, therapist, friend, family member, or this researcher. Class credit might be offered to participants in some courses for participating in the research. If a student, therefore, decided not to participate, then his or her instructor provided an alternate means of gaining credit. Confidentiality was achieved by instructing participants to maintain their anonymity by omitting their names and any other identifying information from the packets.

The questionnaire packet was administered by the author and included a set of detailed directions (see Appendix B), a demographics form, three measures, SAF, FES, and the FEQ. Participants were only provided with the Real Form (Form R) of the FES to complete. This form required participants to reflect back on the time that they resided

with their families-of-origin in order to capture the actual or perceived environments of their families. The directions were also read aloud and all questions were answered by the researcher prior to asking students to begin to complete the questionnaires. The research packets took approximately 40 minutes to complete. Any incomplete questionnaire packets provided by participants were excluded from the analysis.

Measures

Demographics Page

A demographics page was provided in the questionnaire packet to determine specific information about the sample of participants (see Appendix C). The form was divided into sections. The first section required the participants to indicate their ages, genders, and number of years in college, as well as educational, occupation, and socioeconomic status of parents, and the culture and religious preferences of self and parents. The next section focused on family composition during the participants' upbringing, such as, marital status of parents, number of siblings, number of brothers and sisters, and number of other family members or individuals who lived in the home.

The final section included questions about the mental health of the participants as well as their family members. This section focused specifically on the presence of anxiety disorders in the family during the participants' upbringing. Furthermore, questions about the specific diagnosis, age of onset, therapy, medication, and duration of this illness was provided. This demographic information assisted the researcher in establishing the generalizability of the data and to make decisions about potential covariates.

Standardized Measures

The following three instruments were selected as viable measures for this study: the IPAT Anxiety Scale Questionnaire – Self Analysis Form (SAF; Cattell, 1963), the Family Environment Scale (FES; Moos & Moos, 1994), and the Family Expressiveness Questionnaire (FEQ; Halberstadt, 1986). These measures were specifically chosen because they isolate the exact variables to be explored: anxiety levels; expressiveness, conflict, and autonomy within the family environment; and the style of emotional expression in families.

Each of the instruments was selected due to their reliabilities and validity, and because they are additionally relatively short and would not take extensive amounts of time for the participants to finish and would perhaps increase the overall completion rates. Furthermore, the questionnaires could be self-administered to large groups and required limited instruction.

IPAT Anxiety Scale Questionnaire – (Self Analysis Form), (Cattell, 1963)

The Self Analysis Form (SAF; Cattell & Scheier, 1963) was selected as a measure to identify the presence of anxiety in individuals (see Appendix D). This particular form is utilized by diagnosticians as a means of identifying total anxiety levels as well as overt and covert anxiety in individuals. Sten scores of 8, 9, or 10 indicate those participants who either reached or surpassed the 85^{th} percentile for anxiety level. The term sten refers to standard ten. The raw scores of the participants are converted to sten scores, which represent a fixed range of ten points ($M = 5.5$, $SD = 0.5$).

The SAF has often been chosen over other anxiety measures because the test can be easily administered individually or to larger groups. Additionally, the test can be self-administered. The SAF is relatively short, consisting of only 40 items which take approximately 5 or 10 minutes to answer. The SAF is also easy to score by hand and takes only about 30 seconds. Furthermore, the self-administered nature of the test affords privacy and allows for more honesty than a face-to-face interview. Most importantly, according to Cattell and Scheier's data (1963), the questionnaire is not generally experienced as stressful by those completing it.

The IPAT Anxiety Scale consists of 40 questions which are divided into five components of anxiety to measure the source or expression of anxiety. The five components are: (1) Q3 (-): defective integration (lack of self sentiment), (2) C (-): ego weakness (lack of ego strength), (3) L: suspiciousness or paranoid insecurity, (4) O: guilt proneness, and (5) Q4: frustrative tension or Id pressure. The last 20 items of the test refer to anxiety in an overt manner whereas the first 20 items concern more covert anxiety. Some examples of overt items include, "I tend to get over-excited and 'ratfled' in upsetting situations," "I tend to tremble or perspire when I think of a difficult task ahead," and "I sometimes get in a state of tension or turmoil as I think over my recent concerns and interests." The following are examples of covert items from the questionnaire: "I admire my parents in all important manners," "I need my friends more than they seem to need me," and "I feel restless as if I want something but do not know what."

The SAF has been found to be both valid and reliable in the measurement of anxiety (Cattell & Scheier, 1963). In fact, the Anxiety Scale tends to rank clients in the

same order as qualitative psychiatric interviews. Construct validity was found to be +.85 to +.90. Reliability was examined according to total scale score and overt and covert part score. For the total scale score, the dependability-reliability as measured by test-retest after one week was +.93 with male and female adults and after a 2-week interval with Japanese college students was +.87. Homogeneity, as examined by split-half and corrected by the Spearman-Brown, was +.91 in normals and hospitalized neurotics and +.84 in normals. For the Covert Scale, the dependability-reliability as assessed by test-retest after a one-week interval was +.89 and +.82 for the Overt Scale.

For the purpose of this study, only the total 40-item score was utilized, because the individual use of the five personality components is less reliable and their utility was suggested to be experimental in order to potentially develop "leads." The internal consistencies are: guilt proneness +.59, tension +.60, unintegrated self-sentiment +.42, ego weakness +.43, and suspiciousness or paranoid insecurity +.26. These reliabilities are quite high considering the brevity of the components (Cattell & Scheier, 1963). Hypotheses which are formulated based on these subscales can be further explored for reliability by utilizing the scales from the longer 16PF Test for the same factors.

Norms for the general adult population, college student population, and teenage high-school students are provided for the total score but not for the overt/covert subscales. These norms were useful and strengthened the validity of this study because the participants were college-age students. Gender was also considered because gender norms were organized both together and separately. Since this study focused on college-age students, the means and standard deviations of this specific population were provided. There was a mean of 28.7 with a standard deviation of 10.4 for both genders

combined and means of 27.7 with a standard deviation of 10.1 for men only and 29.7 for women only with a standard deviation of 10.2.

Family Environment Scale (FES; Moos & Moos, 1994)

The Family Environment Scale (FES; Moos & Moos, 1994) is a 90-item true/false measure normed on 1,432 normal and 788 distressed families (see Appendix E). The families on which it was normed were from diverse backgrounds. They had origins in various regions of the United States; some were from single-parent families and others from multigenerational families. They were also comprised of various age and cultural groups. The distressed families were derived from a family clinic and a correctional facility. Some samples of distressed families were families of patients with alcoholism, depression, psychiatric problems, and adolescent stressors.

Subscale means and standard deviations for both the normal and distressed families were provided and were consistent with other investigators' findings (Moos & Moos, 1994). This study focused on 3 of the 10 subscales: expressiveness, conflict, and independence. The means and standard deviations for the normal families were $M = 5.54$, $SD = 1.61$ for expressiveness; $M = 3.18$, $SD = 1.91$ for conflict; and $M = 6.66$, $SD = 1.26$ for independence. The distressed families had means and standard deviations as follows: $M = 4.71$ and $SD = 1.78$ for expressiveness, $M = 4.02$ and $SD = 2.07$ for conflict, and $M = 6.03$ and $SD = 1.35$ for independence.

The Family Environment Scale (Moos & Moos, 1994) is a measure used to assess the actual, preferred, and expected social climates of families. For the purpose of this study, only the actual social environment of families was examined; thus, only the Real

Form (Form R) was provided to the participants. This form required the participants to reflect back on the time that they resided with their families-of-origin in order to capture the actual or perceived environments of their families.

There are 10 subscales which are grouped according to three dimensions. Although there are three dimensions (relationship, personal growth, and system maintenance), only the relationship and personal growth dimensions were explored. The subscales within the relationship dimension that were examined are expressiveness and conflict, and the subscale of independence will be the focus of the personal growth dimension. Two examples of expressiveness items include, "Family members often keep their feelings to themselves" and "We say anything we want to around home." Some examples of conflict items are "We fight a lot in our family," "Family members rarely become openly angry," and "Family members sometimes get so angry they throw things." An example of an independence item is "We don't do things on our own very often in our family."

The raw scores for each participant were determined by summing the items indicated in the provided subscale columns. The raw score for expressiveness, conflict, and independence will be utilized.

According to Moos and Moos (1994), the internal consistencies of the 10 subscales were within satisfactory ranges. Specifically, the internal consistency for the expressiveness subscale was .69, the conflict subscale .75, and independence .61.

Test-retest reliabilities were also satisfactory for both 2-month and 4-month intervals (Moos & Moos, 1994). The test-retest reliabilities for the 2- and 4-month

intervals for expressiveness were .73 and .70, .85 and .66 for conflict, and .68 and .54 for independence, respectively.

Family Expressiveness Questionnaire (FEQ; Halberstadt, 1986)

The Family Expressiveness Questionnaire (FEQ; Halberstadt, 1986) is a 40-item assessment utilized to learn the degrees of expressiveness exhibited in various people's families-of-origin in order to determine the general expressive environment of a family (see Appendix F). Specifically, the measure was designed to assess the frequency with which certain emotions were expressed in individuals' families-of-origin in comparison to other families. This questionnaire asks participants to reflect back on their childhoods in order to explore the emotional environments at that time.

There are four quadrant subscales for this questionnaire with 10 items in each: Positive Submissive (PS), Positive Dominant (PD), Negative Submissive (NS), and Negative Dominant (ND). These subscales "represent the affect dimension crossed by the power dimension" (Halberstadt, 1986, p. 828). The 40 items were measured by utilizing a Likert scale to determine the degree of positivity (pleasant to not at all pleasant) as well as degree of dominance (dominant to not at all dominant). Individual scores, rather than quadrant scores, were used. This scoring has been approved by the author (A. Halberstadt, personal communication, July, 18, 2005) and has been used in this way before.

An example of a Positive Submissive (PS) item would be "Thanking family members for something they have done." Some examples of Positive Dominant (PD) items include, "Showing forgiveness to someone who broke a favorite possession" and

"Praising someone for good work." An example of a Negative Submissive (NS) item would be "Sulking over unfair treatment by a family member," while a Negative Dominant (ND) item would be "Showing contempt for another's actions."

Internal consistency and reliability were found to be adequate during the test construction studies. Test-retest reliability was high for each quadrant: r (30) = .91 for PS and ND as well as r (30) = .92 and .89 for PD and NS, respectively. These findings indicate that there is stability and dependability in participants' Family Expressiveness (FE) reports.

Additionally, Halberstadt (1986) recognized the importance of examining the accuracy of individuals' perceptions by testing for consistency amongst family members. Asking individuals to reflect on their childhoods may be precarious with regard to subjectivity and accuracy of family-awareness. Halberstadt, thus, examined the agreement rate between family members from the preliminary subject pool and found significant student-parent correlations across all four quadrants.

Discriminant validity tests indicated that FE was perceived by participants as clearly different from self-expressiveness and shyness (Halberstadt, 1986). There was, however, a degree of relatedness between self-expressiveness and family-expressiveness in males, which is consistent with the hypothesis that these two constructs are positively related.

Statistical Analysis

The demographic information of participants was analyzed initially to determine if there were any significant relationships between the demographics and independent and/or dependent variables.

Multiple regression analyses were used to explore the relationship between the independent variables (styles of expression in the family of origin, the level of emotional expressiveness in the family, the degree to which anger and conflict were expressed, and the level of independence permitted in the family) and the dependent variable (free-floating, manifest anxiety).

These analyses were employed to test both hypothesis one and two.

Hypothesis I: Lower levels of emotional expression, conflict expression, and independence in families of origin will be significantly related to higher levels of anxiety symptoms in individuals. The independent variables are expressiveness, level of conflict, and degree of independence and the dependent variable is the presence of free floating, manifest anxiety.

It was predicted that participants who freely express themselves and are encouraged to be autonomous would be less likely to internalize their emotions and as a result would not experience anxiety problems. Participants, therefore, who are restricted in expression of emotions and autonomy, were expected to struggle with anxiety.

Hypothesis II: Lower levels of negative dominant and negative submissive styles of expression in families of origin will be significantly related to higher levels of anxiety symptoms in individuals. Negative dominant and negative submissive styles of

expression are the independent variables and the presence of free floating, manifest anxiety is the dependent variable.

It was expected that the regression analyses would determine that participants who had difficulties expressing negative affect, whether dominant or submissive, in their families-of-origin would also have increased difficulties with anxiety.

Summary

In conclusion, this research explored whether there were any relationships between heightened anxiety levels in individuals and freedom of emotion expression, levels of expressed conflict, and degree of autonomy. It was expected that increased levels of anxiety would be related to lower levels of emotional expression, conflict, and independence in families of origin.

It was also predicted that lower levels of negative dominant and negative submissive styles of expression in families of origin would be significantly related to higher levels of anxiety symptoms in individuals.

CHAPTER IV: RESULTS

Introduction

This chapter provides a comprehensive overview of the data, including descriptions of the sample, descriptive analyses, and an overview of the scales. Additionally, evaluations of assumptions are supplied as well as exploratory analyses and hypotheses testing. Tables presented throughout this chapter give at-a-glance visual representations of the data.

Overview of the Data

Sample

One hundred and ten questionnaire packets were distributed to the sample population. Seven of those packets were not utilized in this study due to mistakes participants made in completing the questionnaires. Four packets were returned with incomplete questionnaires, two packets contained multiple answers for one item, and one packet was eliminated because the participant did not follow the directions. The results of the present study are, therefore, based on 103 accurately completed questionnaire packets.

Participants' ages ranged from 17 to 22 years old, with a mean age of 18.86 and a standard deviation of 1.00. The most frequently reported age was 18 ($N = 43$), comprising 41.7% of the sample, and the next most frequently reported age was 19 ($N = 39$), accounting for 37.9% of the sample. Forty-seven of the participants were male, and 56 were female. The sample was made up of 56 college freshmen (54.4%), 36 sophomores (35%), five juniors (4.9%), and six seniors (5.8%). Table 1 includes the

frequencies, percentages, and cumulative percentages of the demographics discussed in this section.

Participants were also asked to provide demographic information for their parents. Mothers and fathers had similar educational backgrounds. Thirty-two percent of the sample ($N = 33$) reported their mothers to be high school graduates, and 29.1% ($N = 30$) were reported to be college graduates. Thirty-three percent of fathers ($N = 34$) were reported to have graduated from high school and 33 (32%) were reportedly college graduates (see Table 2). Occupations were quite diverse for both mothers and fathers. Mothers were most often reported as being in the education field ($N = 17$, 16.2%) while fathers most frequently were identified as being entrepreneurs or self-employed ($N = 15$, 14.3%). See Table 3 for delineation of mothers and fathers employment. Two family income categories were most frequently reported in this sample. Seventeen and a half percent of this sample ($N = 18$) reported their family income to range from $91,000 - $105,000 while 17.5% ($N = 18$) reported at the level of $121,000+. Table 4 also provides a detailed distribution of the participant families' income levels.

A large number of participants ($N = 33$, 31.4%) identified themselves and both their mothers ($N = 39$, 37.1%) and fathers ($N = 39$, 37.1%) as European. When asked to identify their ethnicity, the next most frequent response by participants was White ($N = 18$, 17.1%). White was also the next most commonly identified ethnicity for both mothers ($N = 23$, 21.9%) and fathers ($N = 23$, 21.9%). See Table 5 for a complete itemization of cultures identified by participants.

Table 1

Demographic Characteristics of the Participants (N = 103)

Characteristic	*n*	%	Cumulative percent
Participants' ages			
17	1	1.0	1.0
18	43	41.7	42.7
19	39	37.9	80.6
20	11	10.7	91.3
21	7	6.8	98.1
22	2	1.9	100.0
Participants' years in college			
Freshman	56	54.4	54.4
Sophomore	36	35.0	89.3
Junior	5	4.9	94.2
Senior	6	5.8	100.0

Table 2
Education Levels of Parents in Years (N = 103)

Characteristic	*n*	%	Cumulative percent
Education level of mother			
3	1	1.0	1.0
8	1	1.0	1.9
10	1	1.0	2.9
12	33	32.0	35.0
13	2	1.9	36.9
14	21	20.4	57.3
15	1	1.0	58.3
16	30	29.1	87.4
18	6	5.8	93.2
20	7	6.8	100.0
Education level of father			
6	5	4.9	4.9
12	34	33.0	37.9
13	4	3.9	41.7
14	12	11.7	53.4
15	1	1.0	54.4
16	33	32.0	86.4
18	11	10.7	97.1
20	3	2.9	100.0

Table 3

Occupations of Parents (N = 103)

Characteristic	*n*	%	Cumulative percent
Occupation of mother			
Housewife/babysitter	9	8.6	8.7
Healthcare	14	13.3	22.3
Business/management	6	5.7	28.2
Entrepreneur	1	1.0	29.1
Student	1	1.0	30.1
Administrative	11	10.5	40.8
Engineer	1	1.0	41.7
Postal job	1	1.0	42.7
Musician	1	1.0	43.7
Education	17	16.2	60.2
Transportation	4	3.8	64.1
Retail	2	1.9	66.0
Clerk	5	4.8	70.9
Lawyer	1	1.0	71.8
Finance/accounting/ banking	10	9.5	81.6
Restaurant	2	1.9	83.5
Real Estate	1	1.0	84.5

(Table 3 continues)

(Table 3 continued)

Characteristic	*n*	%	Cumulative percent
Farmer	1	1.0	85.4
Hairdresser	1	1.0	86.4
Lawyer & nurse	1	1.0	87.4
Housewife & PT interior decorator	1	1.0	88.3
Lab tech/crossing guard	1	1.0	89.3
Disabled	1	1.0	90.3
Unemployed	3	2.9	93.2
None/NA	7	6.7	100.0
Occupation of father			
Entrepreneur/ self-employed	15	14.3	14.6
Construction/mechanic	11	10.5	25.2
Accountant/finance/ banking	8	7.6	33.0
Jeweler	1	1.0	34.0
Postal job	2	1.9	35.9
Business/management	11	10.5	46.6
Farmer	1	1.0	47.6
Security/police	10	9.5	57.3

(Table 3 continues)

(Table 3 continued)

Characteristic	*n*	%	Cumulative percent
Maintenance	1	1.0	58.3
Architect	1	1.0	59.2
Musician	1	1.0	60.2
Healthcare	7	6.7	67.0
Driver/transportation	8	7.6	74.8
Engineer	5	4.8	79.6
Carpenter	2	1.9	81.6
Lawyer	1	1.0	82.5
Journalist	1	1.0	83.5
Education	2	1.9	85.4
Shipping clerk	1	1.0	86.4
Works at gas station	1	1.0	87.4
Plumber	1	1.0	88.3
Unemployed/student	3	2.9	91.3
None/NA	9	8.6	100.0

Table 4

Family Income ($)

Characteristic	*n*	%	Cumulative percent
0 – 15,000	1	1.0	5.8
16,000 – 30,000	5	4.9	10.7
31,000 – 45,000	11	10.7	21.4
46,000 – 60,000	17	16.5	37.9
61,000 – 75,000	8	7.8	45.6
76,000 – 90,000	13	12.6	58.3
91,000 – 105,000	18	17.5	75.7
106,000 – 120,000	7	6.8	82.5
121,000 +	18	17.5	100.0

Table 5

Cultural Background (N = 103)

Characteristic	*n*	%	Cumulative percent
Culture of student			
American	10	9.5	9.7
White	18	17.1	27.2
European American	1	1.0	28.2
African American	5	4.8	33.0
Asian	3	2.9	35.9
Filipino(a)	3	2.9	38.8
Hispanic	2	1.9	40.8
Latino	10	9.5	50.5
European	33	31.4	82.5
Arab	2	1.9	84.5
French Canadian	1	1.0	85.4
Indian	1	1.0	86.4
Pakistani	1	1.0	87.4
Cuban, Irish	1	1.0	88.3
Trinidadian, Nigerian	1	1.0	89.3
Italian, German, Syrian, Dutch	1	1.0	90.3

(Table 5 continues)

(Table 5 continued)

Characteristic	*n*	%	Cumulative percent
Mexican, Yugoslavian, American	1	1.0	91.3
None/NA	9	8.6	100.0
Culture of mother			
American	2	1.9	1.9
White	23	21.9	24.3
European American	4	3.8	28.2
African American	4	3.8	32.0
Asian	4	3.8	35.9
Filipino(a)	3	2.9	38.8
Hispanic	1	1.0	39.8
Latino	12	11.4	51.5
European	39	37.1	89.3
French Canadian	1	1.0	90.3
Egyptian	1	1.0	91.3
Israeli	1	1.0	92.2
Indian	1	1.0	93.2
Pakistani	1	1.0	94.2

(Table 5 continues)

(Table 5 continued)

Characteristic	*n*	%	Cumulative percent
Irish, Cherokee	1	1.0	95.1
Black, German	1	1.0	96.1
Cuban, French	1	1.0	97.1
Italian/Syrian	1	1.0	98.1
None/NA	2	1.9	100.0
Culture of father			
American	2	1.9	1.9
White	23	21.9	24.3
European American	2	1.9	26.2
African American	3	2.9	29.1
Asian	3	2.9	32.0
Filipino(a)	3	2.9	35.0
Hispanic	3	2.9	37.9
Latino	12	11.4	49.5
European	39	37.1	87.4
African	1	1.0	88.3
Arab	2	1.9	90.3
French Canadian	1	1.0	91.3

(Table 5 continues)

(Table 5 continued)

Characteristic	*n*	%	Cumulative percent
Russian American	1	1.0	92.2
Israeli	1	1.0	93.2
Indian	1	1.0	94.2
Pakistani	1	1.0	95.1
Black, Cherokee	1	1.0	96.1
Black, White	1	1.0	97.1
None/NA	3	2.9	100.0

The religious backgrounds of the students, mothers, and fathers were also examined in the demographic page. Catholicism was the most frequently reported religion. Sixty-five percent of the participants ($N = 67$) reported that they and their fathers were Catholic ($N = 67$). Participants also identified 74.8% of mothers ($N = 77$) as being Catholic. See Table 6 for the full list of religious preferences.

Family composition was an area of exploration in the demographic page. Participants reported 70.9% ($N = 73$) of parents to be married, 11.7% ($N = 12$) of parents as divorced, 6.8% ($N = 7$) as being separated, and 5.8% ($N = 6$) of parents as never having married. The smallest percentages of families were those in which the parents were remarried ($N = 3$, 2.9%) or widowed ($N = 1$, 1.0%). Table 7 depicts the categories of the participants' family compositions.

More than one third of the participants (39.8%, $N = 41$) reported having one sibling. In addition, 26.2% of the sample reported having one older brother ($N = 27$, 26.2%) or sister ($N = 16$, 15.5%) while 38.8% ($N = 40$) reported having one younger brother or sister ($N = 26$, 25.2%). Only 9.7% ($N = 10$) of the participants identified having a family member other than parents or siblings living in their homes.

Although this was a non-clinical sample, the presence and diagnosis of anxiety in participants and their family members was explored in an attempt to determine what percentage of the sample might have actually been part of a clinical population. Only 2.9% ($N = 3$) of the students identified themselves as having an anxiety disorder. The diagnoses they reported were generalized anxiety disorder ($N = 1$, 1%) and anxiety disorder ($N = 1$, 1%). The onset of the generalized anxiety disorder was identified as beginning at age 18 and persisted for 2 months, while the onset of the anxiety disorder

was reported to be at age 11 and continued for 60 months. Those who received treatment were 3.9% ($N = 4$) of the sample, with only 2.9% ($N = 3$) of the sample finding the treatment helpful. Medication was not found to be helpful by the one participant (1.0% in the sample) for whom it was prescribed. Additionally, seven (6.8%) of the participants' mothers were identified as having suffered from an anxiety disorder; however, the mothers were labeled as suffering from bi-polar disorder and a combination of stress and anxiety. Fathers were identified as having an anxiety disorder 3.9% ($N = 4$) of the time, yet the labels provided were bi-polar disorder and a comorbid diagnosis of bi-polar and depression. Only 1% ($N = 1$) of other family members living in the home were reported as having an anxiety disorder; however, this disorder was identified as depression.

Scales

Means and standard deviations were determined for each of the dependent and independent variables. The predictor variables--expressiveness, conflict, and independence--were measured by the Family Environment Scale (FES). The means and standard-deviation scores were $M = 5.10$, $SD = 1.99$ for expressiveness; $M = 4.08$, $SD = 2.49$ for conflict; and $M = 6.64$, $SD = 1.58$ for independence. These are presented in Table 8. The remaining two predictor variables, Negative Dominant (ND) and Negative Submissive (NS), were measured by the scores on the Family Expressiveness Questionnaire (FEQ). The means and standard deviation scores for Negative Dominant were $M = 48.81$, $SD = 13.11$ and for Negative Submissive $M = 52.39$, $SD = 11.35$ (see Table 8). The outcome variable was anxiety and was measured by the Self Analysis

Form (SAF). The mean anxiety score was 34.39 with a standard deviation of 10.78 (see Table 8).

Internal consistencies of these measures were computed in order to assess level of confidence within the data to insure that this sample matched the samples on which the measures were based and these are also illustrated in Table 8. Cicchetti (1994) set guidelines to measure the size of coefficient variables. Cicchetti determined that "when the size of the coefficient alpha ... is below .70, the level of clinical significance is unacceptable; when it is between .70 and .79, the level of clinical significance is fair; when it is between .80 and .89, the level of clinical significance is good; and when it is .90 and above, the level of clinical significance is excellent" (p. 286).

The internal-consistency score for anxiety measured by the Self-Analysis Form (SAF, Cattell & Scheier, 1963) was .82, thus, making the level of reliability good. The scores for the dependent variables expressiveness (.52) and independence (.40) as measured by the Family Environment Scale (FES, Moos & Moos, 1994) fell in the unacceptable range. Moos and Moos (1994), however, also found unacceptable but higher levels for expressiveness (.69) and independence (.61). The dependent variable conflict (.77) was found to be fair. On the Family Expressiveness Questionnaire (FEQ, Halberstadt, 1986), negative dominant (.85) and negative submissive (.70) scores were good and fair respectively. The scores for the five dependent variables and one dependent variable are summarized in Table 8. Based on these analyses, some of the aforementioned measures had adequate reliability, thus making the continuation of the present study possible.

Additional analyses were conducted on the other seven subscales of the FES that were not examined in this study. The scores for cohesion (.79), achievement orientation (.41), intellectual-cultural orientation (.61), active-recreational (.63), moral religious (.73), organization (.74), control (.63) were computed in order to have confidence in this measure. The achievement orientation, intellectual-cultural orientation, and active-recreational were all low; however, the scores comparatively concur with Moos and Moos' scores (.64, .78, .67), respectively. Also see Table 8 for a complete overview of the internal-consistency scores for these seven subscales.

Table 6

Religious Preference (N = 103)

Characteristic	*n*	%	Cumulative percent
Religious preference of student			
Jewish	1	1.0	1.0
Catholic	67	65.0	66.0
Christian/Protestant	14	13.6	79.6
India	1	1.0	80.6
Islam/Muslim	1	1.0	81.6
Orthodox (Greek, Coptic, Russian)	3	2.9	84.5
Mormon	1	1.0	85.4
Buddhist	1	1.0	86.4
Agnostic	2	1.9	88.3
None/NA	12	11.7	100.0
Religious preference of mother			
Jewish	2	1.9	1.9
Catholic	77	74.8	76.7
Christian/Protestant	14	13.6	90.3

(Table 6 continues)

(Table 6 continued)

Characteristic	*n*	%	Cumulative percent
India	1	1.0	91.3
Islam/Muslim	1	1.0	92.2
Orthodox (Greek, Coptic, Russian)	3	2.9	95.1
Buddhist	2	1.9	97.1
None/NA	3	2.9	100.0
Religious preference of father			
Jewish	2	1.9	1.9
Catholic	67	65.0	67.0
Christian/Protestant	19	18.4	85.4
India	1	1.0	86.4
Islam/Muslim	2	1.9	88.3
Orthodox (Greek, Coptic, Russian)	3	2.9	91.3
Mormon	1	1.0	92.2
Buddhist	2	1.9	94.2
None/NA	6	5.8	100.0

Table 7

Marital Status of Parents (N = 103)

Characteristic	*n*	%	Cumulative percent
N/A	1	1.0	1.0
Married	73	70.9	71.8
Never married	6	5.8	77.7
Separated	7	6.8	84.5
Divorced	12	11.7	96.1
Widowed	1	1.0	97.1
Remarried	3	2.9	100.0

Table 8

Descriptive Statistics of the Participants' Scores on the Five Independent and One Dependent Variable

Variable	*N*	*M*	*SD*	α
Expressiveness	103	5.10	1.99	.52
Conflict	103	4.08	2.49	.77
Independence	103	6.64	1.58	.40
Negative Dominant	103	48.81	13.11	.85
Negative Submissive	103	52.39	11.35	.70
Anxiety	103	34.39	10.78	.82
Cohesion	103	6.63	2.36	.79
Achievement Orientation	103	6.32	1.55	.41
Intellectual-Cultural Orientation	103	4.81	2.09	.61
Active-Recreational Orientation	103	5.40	2.08	.63
Moral Religious Emphasis	103	5.09	2.32	.73
Organization	103	5.40	2.40	.74
Control	103	4.50	2.23	.63

Evaluation of Assumptions / Exploratory Analysis

Correlation coefficients were conducted on the independent variables to determine potential evidence of multicollinearity between each of the variables. There were several statistically significant correlations between variables, both at the .001 and .05 levels. Expressiveness and negative dominant were significantly associated at the .05 level (p = -.25), whereas conflict and negative dominant were significantly correlated at the .01 level (p = .65). There were also statistically significant relationships between independence and negative dominant at the .001 level (p = -.41) as well as with negative submissive at the .05 level (p = -.23). The results of these analyses are depicted in Table 9.

Supplemental correlational analyses were conducted on the remaining seven subscales from the FES and can also be viewed in Table 9. There were statistically significant relationships between expressiveness and cohesion at the .001 level (p = .40). There was also significance between conflict and several of the variables. Conflict and cohesion (p = -.61) as well as conflict and organization (p = -42) were significant at the .001 level, and conflict and control (.21) were significant at the .05 level. In addition, there were significant relationships found between negative dominant and organization (p = -.29) at the .001 level. Although the findings suggest some overlap of the variables, there was not enough significance to imply multicollinearity.

Table 9
Intercorrelations Scores on the Five Predictor Variables

Subscale	1	2	3	4	5	6	7	8	9	10	11	12
1. Expressiveness	--	-.08	.15	-.25*	-.07	.40***	-.16	-.05	.13	-.02	.04	-.13
2. Conflict		--	-.15	.65***	.15	-.61***	.07	-.25	-.16	-.18	-.42***	.21*
3. Independence			--	-.41***	-.23*	.11	-.04	-.05	-.04	-.11	.09	-.31
4. Negative Dominant				--	.46***	-.48	.09	-.27	-.15	-.07	-.29***	.21*
5. Negative Submissive					--	-.08	.10	.06	.09	.02	.12	.04
6. Cohesion						--	.07	.39***	.31***	.25*	.40***	-.10
7. Achievement Orientation							--	.30***	.19	.18	.27***	.32***
8. Intellectual- Cultural Orientation								--	.42***	.31***	.36***	.22*
9. Active-Recreational Orientation									--	.23	.07	.04
10. Moral Religious Emphasis										--	.18	.31***
11. Organization											--	.18
12. Control												--

Note. * $p < .05$. *** $p < .001$.

MANOVAS were computed on 11 of the demographics provided by participants to determine the impact of these variables on the independent variable, anxiety (see Table 10 for an illustration). There were no significant differences between anxiety and any of the independent variables, except for the variable identified as anxiety disorder in the mother F (6, 96) = 3.66, p = .003.

The test of other variables indicated no significant relationship with anxiety: gender F (6, 96) = 1.46, p = .20, mother's level of education F (54, 453.31) = 1.18, p = .18; father's level of education F (42, 425.59) = 1.08, p = .34; family income F (54, 453.31) = .67, p = .96; student's religious preference F (54, 453.31) = .93, p = .62; mother's religious preference F (42,425.59) = 1.37, p = .07; father's religious preference F (48, 441.98) = .96, p = .54; anxiety disorder in student F (6, 96) = 1.30, p = .26; anxiety disorder in father F (6, 96) = .47, p = .83, anxiety disorder in other family member F (6, 96) = .81, p = .56

Table 10

Multivariate Analyses of Variance for Eleven Demographic Variables

Source	*df*	*F*	*p*
Gender	6	1.46	.20
Mother's education level	54	1.18	.18
Father's education level	42	1.08	.34
Family income	54	.67	.96
Student's religious preference	54	.93	.62
Mother's religious preference	42	1.37	.07
Father's religious preference	48	.96	.54
Anxiety disorder in student	6	1.30	.26
Anxiety disorder in mother	6	3.66	.003
Anxiety disorder in father	6	.47	.83
Anxiety disorder in other family member	6	.81	.56

Hypothesis Testing

In hypothesis I, it was predicted that lower levels of emotional expression, conflict expression, and independence in families of origin would be significantly related to higher levels of anxiety symptoms in individuals. A multiple regression analysis was conducted to examine this relationship (see Table 11). The predictor variables were expressiveness, conflict, and independence, with anxiety being the criterion variable. Independence ($\beta = -.08$, p = n.s.) was the only variable to show no significant relationship with anxiety. The findings indicate a significant relationship between conflict ($\beta = .30$, $p < .001$) and anxiety, but not in the hypothesized direction. This would suggest that, when conflict is on the rise, anxiety heightens as well. The analyses also determined a statistically significant relationship between expressiveness and anxiety, suggesting partial support for hypothesis I, with levels of expressiveness directly related to anxiety symptoms ($\beta = -.36$, $p < .000$). As expected, these findings would suggest that anxiety increases when emotional expression decreases.

Table 11

Regression Analysis Summary for Family Environment Variables Predicting Levels of Anxiety (N = 103) for Hypothesis I

Variable	β	*SE* β	β
Expressiveness	-1.94	.48	-.36***
Conflict	1.30	.38	.30***
Independence	-.51	.60	-.075

Note. *** $p < .001$.

In hypothesis II, a prediction was made that lower levels of negative dominant and negative submissive styles of expression in families of origin would be significantly related to higher levels of anxiety symptoms in individuals. A multiple regression analysis was also conducted to examine this relationship (see Table 12). The findings were not in support of the hypothesis. The Negative Dominant (ND) style of expression was found to be related to anxiety, but not in the expected direction of the hypothesis ($\beta = .37, p < .000$). The data, thus, indicate that, as ND expressiveness increases, so do the levels of anxiety. According to the findings, Negative Submissive (NS) styles of expression were not found to have a significant relationship with anxiety ($\beta = .04$, p = n.s.).

Table 12

Regression Analysis Summary for Family Environment Variables Predicting Levels of Anxiety (N = 103) for Hypothesis II

Variable	β	*SE* β	β
Negative Dominant	.31	.09	.37***
Negative Submissive	.04	.10	.04

Note. *** $p < .001$.

Supplemental Analyses

Since in testing hypothesis I, both expressiveness and conflict showed statistical significance as predictor variables for levels of anxiety, an interest arose as to whether expressiveness would still be significant if conflict was entered first and at what level

(see Table 13). A hierarchical regression was, thus, conducted with conflict entered first. The results suggested that expressiveness still accounts for increased levels of anxiety variability and at an even higher level of significance ($\beta = -.37$, $p < .000$).

Table 13

Supplemental Hierarchical Regression Analysis Summary for Family Environment Variables Predicting Levels of Anxiety (N = 103)

Variable	β	*SE* β	β	R^2	$^{\Delta}R^2$
Step 1					
Conflict	1.46	.41	.34***	.11	.11
Step 2					
Expressiveness	-2.00	.47	-.37***	.13	.23

Note. *** $p < .001$.

While the data have indicated a lack of statistical significance for Negative Submissive (NS) styles of emotion expression, it would be unwise to dismiss the potential effect of all negative and positive emotions on the development of anxiety. This author, therefore, conducted further analyses on the impact of positive expressiveness on individuals. Multiple regression analyses identified a significant negative relationship between Positive Dominant (PD) and anxiety ($\beta = -.43$, $p < .021$). The data suggested that people from families who reported positive dominant expressiveness identified lower

frequencies of anxiety (see Table 14). The findings suggested an overwhelming need for positivity in families.

Table 14

Regression Analysis Summary for Family Environment Variables Predicting Levels of Anxiety (N = 103) for PD and PS

Variable	β	*SE* β	β
Positive Dominant	-.40	.17	-.43*
Positive Submissive	.08	.16	.09

Note. * $p < .05$.

In light of the findings for hypotheses I and II, it is possible that lower levels of overall emotional expression, and higher levels of ND expressiveness would cause increases in anxiety symptoms. A multiple regression was conducted to investigate this theory, and the findings supported this hypothesis. Both lower levels of overall emotional expression ($\beta = -31, p < .001$) and higher levels of ND expressiveness ($\beta = .31, p < .001$) caused an increase in anxiety. The findings are presented in Table 15.

Table 15

Regression Analysis Summary for Family Environment Variables Predicting Levels of Anxiety (N = 103) for Expressiveness and ND

Variable	β	*SE* β	β
Expressiveness	-1.70	.49	-.31***
Negative Dominant	.26	.07	.31***

Note. *** $p < .001$.

In order to examine the present findings with confidence, one final analysis was performed. The impact of the independent variables on the dependent variable, anxiety, was investigated. Levels of anxiety were determined by computing total anxiety scores on the Self-Analysis Form (SAF, Cattell & Scheier, 1963). The total score was compiled by adding the separate overt and covert anxiety scores. This author, therefore, thought it prudent to examine the effects of the predictor variables on the criterion variable, anxiety, by splitting the criterion into categories of overt and covert anxiety.

The results for hypothesis I were the same with regard to the statistically significant relationships between expressiveness ($\beta = -.31, p < .000$) and conflict ($\beta = .40, p < .000$) with the criterion of covert anxiety. Independence was still not found to be significant ($\beta = -.10, p$ = n.s.). These findings are illustrated in Table 16.

Table 16

Regression Analysis Summary for Family Environment Variables Predicting Levels of Covert Anxiety (N = 103) for Hypothesis I

Variable	β	*SE* β	β
Expressiveness	-.82	.22	-.31***
Conflict	.84	.18	.40 ***
Independence	-.32	.28	-.10

Note. *** $p < .001$.

Conflict, however, was no longer significant when the independent variable was overt anxiety ($\beta = .17$, p = n.s.) (see Table 17). Expressiveness ($\beta = -.34$, $p < .001$) continued to show significance, and Independence continued to yield an insignificant relationship with anxiety ($\beta = -.05$, p = n.s.).

Table 17

Regression Analysis Summary for Family Environment Variables Predicting Levels of Overt Anxiety (N = 103) for Hypothesis I

Variable	β	*SE* β	β
Expressiveness	-1.12	.31	-.34***
Conflict	.45	.25	.17
Independence	-.19	.40	-.05

Note. *** $p < .001$.

There were no changes in the results when hypothesis II was examined with overt and covert anxiety as the dependent variable. When the subscale of overt anxiety was examined, Negative Dominant styles of expression continued to show significance ($\beta = .25$, $p < .05$), and Negative Submissive styles of expression were still not significant ($\beta = .05$, p = n.s.). Table 18 provides a visual representation of these findings.

Table 18

Regression Analysis Summary for Family Environment Variables Predicting Levels of Overt Anxiety (N = 103) for Hypothesis II

Variable	β	*SE* β	β
Negative Dominant	.12	.06	.25*
Negative Submissive	.03	.06	.05

Note. * p < .05.

Negative Dominant ($\beta = .46$, $p < .001$) was also found to be significantly related to covert anxiety. Negative Submissive ($\beta = .02$, p = n.s.) emotional styles, however, were still not associated significantly with covert anxiety. Table 19 provides an illustration of these data. These findings would imply that negative dominant styles of expressiveness impact anxiety whether its symptoms are apparent or obscured.

Table 19

Regression Analysis Summary for Family Environment Variables Predicting Levels of Covert Anxiety (N = 103) for Hypothesis II

Variable	β	*SE* β	β
Negative Dominant	.18	.04	.46***
Negative Submissive	.01	.05	.02

Note. *** $p < .001$.

This was also found to be true when positive dominant and positive submissive styles of expression were run with overt and covert anxiety as the dependent variable. Positive Dominant ($\beta = -.37$, $p = .05$) continued to be significantly related to overt anxiety while Positive Submissive ($\beta = .14$, $p =$ n.s.) still showed no significance (see Table 20).

Table 20

Regression Analysis Summary for Family Environment Variables Predicting Levels of Overt Anxiety (N = 103) in PD and PS

Variable	β	*SE* β	β
Positive Dominant	-.22	.11	-.37 *
Positive Submissive	.08	.10	.14

Note. * $p = .05$.

When the Covert-Anxiety subscale was the criterion, Positive Dominant (β =-.40, p = .03) expressiveness styles were still significant while Positive Submissive (β = -.004, p = n.s.) styles were not (see Table 21). It can, consequently, be determined that even when positive dominant styles of expressiveness were evaluated the influence on anxiety did not vary when either overt or covert anxiety was the criterion variable.

Table 21

Regression Analysis Summary for Family Environment Variables Predicting Levels of Covert Anxiety (N = 103) in PD and PS

Variable	β	*SE* β	β
Positive Dominant	-.18	.08	-.40 *
Positive Submissive	-.002	.08	-.004

Note. * p < .05.

Summary

This chapter contains the results of the multiple regression analyses conducted to determine the validity of the hypotheses statements. Based on the data, there were significant relationships between levels of expressiveness and anxiety and conflict and anxiety, indicating that, when expressiveness decreased, anxiety symptoms increased, and, when conflict increased, anxiety did as well. The statistically significant relationship between expressiveness and anxiety was in the hypothesized direction while the relationship between conflict and anxiety was not.

The descriptive statistics that were conducted indicated that the average age of the participants in this study was 18.86. Fifty-six (54.4%) of the participants were female, and 56 (54.4%) were freshmen. A large number of participants ($N = 33$, 31.4%) identified themselves and their mothers ($N = 39$, 37.1%) and fathers ($N = 39$, 37.1%) as European and their religion as Catholic (for students and fathers $N = 67$, 65%; for mothers $N = 77$, 74.8%).

There was a minimal presence and/or diagnosis of anxiety in participants and their family members, thus offering support for the sample being non-clinical. Only 2.9% ($N = 3$) of students identified themselves as having an anxiety disorder, generalized anxiety disorder ($N = 1$, 1%), or anxiety disorder ($N = 1$, 1%). Additionally, 6.8% ($N = 7$) of mothers were identified as having suffered from an anxiety disorder; however, the labels provided by participants were described as being bi-polar and as having a combination of stress and anxiety. Among fathers, 3.9% ($N = 4$) were identified as having an anxiety disorder, yet the labels the participants presented were bi-polar disorder and a comorbid diagnosis of bipolar and depression. Only 1% ($N = 1$) of other family members living in the home were reported as having an anxiety disorder; however, this disorder was labeled by the participant as depression. Depression, as defined by the *DSM – IV*, is not an anxiety disorder.

CHAPTER V: SUMMARY AND CONCLUSIONS

Introduction

This chapter contains an overview of the findings in this study. In order to adequately discuss the findings, the research problem is restated, and the sample described. A discussion of the results compares this study to results of previous research to determine whether there are commonalities. Limitations of the study are discussed as well as recommendations for future research and clinical practice.

Problem Restatement

The most commonly reported mental-health problem in the United States at this point in time is anxiety disorders (NMHA, 2004). Over 19 million adults are impacted by these disorders each year.

Gaining a broader understanding of the evolution of emotions in individuals and society is key to discovering the development of anxiety disorders. Emotions play a vital role in human communication, cognition, and behavior. Emotions, consequently, guide and shape social interactions within peer groups, families, and communities.

This study was designed to explore the emotional expressiveness of families, specifically the inhibition of emotions regarded as negative by families. It was predicted that particular styles of communicating emotions within families and specific family environments might result in the development of heightened anxiety. This research investigated the following questions: Are lower levels of emotional expression, conflict, and independence in families-of-origin significantly related to higher levels of anxiety symptoms in individuals? Are lower levels of negative dominant and negative

submissive styles of expression in families of origin significantly related to higher levels of anxiety symptoms in individuals?

The terms negative dominant (ND) and negative submissive (NS) refer to the two subscales that were examined from Halberstadt's (1986) FEQ assessment. These subscales "represent the affect dimension crossed by the power dimension" (Halberstadt, 1986, p. 828). The degree of positivity (pleasant to not at all pleasant) and the degree of dominance (dominant to not at all dominant) were measured via Likert scales. An example of a Negative Submissive (NS) item is "Sulking over unfair treatment by a family member." A Negative Dominant (ND) item would be "Showing contempt for another's actions."

It was predicted in hypothesis I that lower levels of emotional expression, conflict expression, and independence in families of origin would be significantly related to higher levels of anxiety symptoms in individuals. It was also hypothesized in hypothesis II that lower levels of negative dominant and negative submissive styles of expression in families of origin would be significantly related to higher levels of anxiety symptoms in individuals. The findings partially supported the first hypothesis. The data suggested that, as expression in families decreases, anxiety levels increase. There was a significant positive relationship between conflict and anxiety, however, not in the expected direction. Analysis of the impact of independence on anxiety levels, however, yielded non-significant results.

This study contributes to the literature on anxiety in individuals and families as well as to the literature on emotional expression in families. Anxiety is a topic that has been widely researched. There are currently ongoing research debates as to whether or

not this psychological/medical problem is related to genetic or environmental influence. Many studies examine family systems and how anxiety symptoms are maintained. The socialization of emotional expression in individuals and families also has been extensively researched; however, there are no studies, to this researcher's knowledge, that link the two areas of research. The present study is unique in seeking to bridge the gap in literature on how being reared in families-of-origin directly impacts the development of emotional expression in individuals and the literature on how emotional expression influences contribute to the development of heightened anxiety symptoms.

Sample

The sample was comprised of 103 participants ranging in age from 17-to-22 years-old from psychology courses at a private university in the northeast of the United States. The most frequently reported age was 18 (N= 43), comprising 41.7% of the sample. The next most frequently reported age was 19 (N= 39), accounting for 37.9% of the sample. Forty-seven of the participants were male; 56 were female. The sample was made up of 56 freshmen (54.4%), 36 sophomores (35%), five juniors (4.9%), and six seniors (5.8%). Catholicism was the religious preference (65%) most frequently reported by participants. The majority of the sample indicated that they were reared in intact families (70.9% of biological parents had remained married). There was a minimal presence and/or diagnosis of anxiety in participants and their family members, offering support for this being a non-clinical sample.

The participants were provided with a set of detailed directions (Appendix B) and four questionnaires to complete: a demographics form (Appendix C), the IPAT Anxiety

Scale Questionnaire (IASQ) – Self Analysis Form (Cattell, 1963) (Appendix D), the Family Environment Scale (FES; Moos & Moos, 1994) (Appendix E), and the Family Expressiveness Questionnaire (FEQ; Halberstadt, 1986) (Appendix F). These measures were specifically chosen because they are reliable, valid, and isolate the precise variables to be explored: (1) anxiety levels, (2) expressiveness, conflict, and autonomy within the family environment, and (3) the style of emotional expression in families. The questionnaires could also be self-administered to large groups and required limited instruction.

Discussion of Hypotheses

Hypothesis I: It was predicted that lower levels of emotional expression, conflict expression, and independence in families of origin would be significantly related to higher levels of anxiety symptoms in individuals. This research question was partially supported by the findings.

As expected, symptoms of anxiety were found to increase when levels of emotional expression decreased. These findings indicated that symptoms of anxiety were indeed lessened when individuals were encouraged and supported to express their emotions within their families-of-origin. The inhibition and suppression of emotions, therefore, would be related to the development of heightened levels of anxiety as postulated. The data suggested that family emotional environments characterized by poor communication, inhibited emotional expression, and display rules that discourage open disclosures would likely yield family members with complaints of anxiety symptomatology.

The results of this study were consistent with research conducted by Gross and Levenson (1997) in which adults were required to conceal their emotions of sadness. Though the suppression of the outward expressions of sadness was successful, the actual experience of sadness typically continued. The findings of Gross and Levenson would suggest that just because families-of-origin successfully suppress emotional expressiveness in their family members, this does not indicate that the emotions are not, in fact, experienced. This author's contention that the continued presence and experience of emotion that must be masked may lead to increased anxiety is reinforced. The current findings also correspond with Margalit and Eysenck's (1990) beliefs that anxiety might be caused by poor, vague, or restricted communication within families. Clear, open, and direct communications in early childhood were thought to serve as safeguards against tension and stress. Additionally, early exposure to clear and straightforward communication was thought to possibly increase self-assurance and self-efficacy in children (Bandura, 1995).

Although conflict expression was significantly related to anxiety, this relationship was not in the hypothesized direction. When conflict was freely expressed in families, anxiety increased. The predictor variable, independence, yielded non-significant findings. It would, however, be negligent to completely disregard the impact of these variables simply because they did not support the hypothesis.

There are several possible explanations as to why conflict expression and independence did not have the anticipated results. A potential reason for the failure to discover significant relationships between conflict and anxiety in the expected direction might be credited to the selected measures for this study. It was predicted that the ability

to freely and outwardly express conflict and/or anger within families-of-origin would reduce the development of anxiety. As a result, the suppression of anger and conflict would thus lead to the festering of internalized emotions, ultimately resulting in a problem of heightened anxiety. The Family Environment Scale (FES; Moos & Moos, 1994) was used to examine the degree to which conflict was expressed and openly communicated in families. Halberstadt's (1986) Family Expressiveness Questionnaire (FEQ) was utilized to provide a more precise measurement for negative emotions expressed. The quadrants for negative dominant and negative submissive styles of communicating indicate families' tolerance levels for anger expression. Although both of these measures seem to adequately encompass the variable of conflict in families, they may not have captured the true essence of the research question.

Perhaps the inhibition of negative emotions is not a conscious process, thus making the method of self-report questionnaires an ineffective means of measurement. Bronstein et al. (1996) critiqued the utilization of self-report measures in their study of emotional expressiveness and adjustment in late adolescence "because self-report measures assume an awareness of one's feelings, whereas the suppression of an unacceptable emotion may be an unconscious process" (p. 761).

This study was never intended to dispute the fact that conflictual family environments would cause anxiety. On the contrary, there is a great deal of literature to support the position that conflict causes anxiety. For example, Dadds and Powell (1991) determined that childhood anxiety was highly correlated with marital problems in parents. Children exposed to fighting were more likely to display anxious behaviors.

Similarly, Stark et al. (1990) found that anxiety-disordered children identified their families as being high on enmeshment and conflict (Bloom, 1985).

This researcher, intending to look beyond the apparent and well-researched impact of conflict on families, attempted to examine the more subtle concern for families who feel conflict, but are not allowed to express it. It is quite possible that these two measures tapped into the overt responses to conflict rather than the intended covert reactions to conflict suppression. In a study conducted by Kerig (1988), gender differences in response to marital conflict were discovered. Boys were found to externalize their symptoms, while girls were observed to internalize their symptoms. This internalization of symptoms is precisely what had been intended as the focus of this study, but perhaps the selected measures did not adequately highlight this particular facet.

It is also possible that conflicts and reactions to conflicts are inconsequential with regard to obvious, overt anxiety development. Siqueland et al., (1996) found no significant differences between the levels of covert-overt marital conflict of parents with anxious children versus control children. Perhaps if Siqueland et al.'s study had measured covert anxiety levels the results would have been different.

With regard to the independent variable, independence, it was expected that lower levels of autonomy within families-of-origin would cause heightened levels of anxiety in individuals. This researcher hypothesized that children who were provided an opportunity to explore their environments as infants and toddlers as well as adolescents would be asymptomatic with regard to anxiety. On the contrary, children whose parents impeded their psychological growth would experience self-doubt and, as a result, would lack confidence in their abilities. This insecurity could eventually manifest into an

anxiety-type disorder when the children were expected to make autonomous decisions, particularly in young adulthood and college. The failure to find a significant relationship between independence and anxiety may also be attributed to the selected measure (FES, Moos & Moos, 1994), since there is clear evidence from prior studies that anxiety can be caused by the hindrance of independence. In addition, perhaps the non-clinical nature of the sample narrowed the range of measured anxiety, so that the correlation could not be established. In studies with clinical samples (Chorpita et al., 1998; Dumas et al., 1995; Parker, 1983; Rapee, 1997; Siqueland et al., 1996), anxiety disorders were more prevalent when independence was thwarted. Parental discouragement of independence, high degrees of protection, poor communication, and lack of cohesiveness and support in families may be related to anxiety disorders in their children later in life (Chorpita et al., 1998; Parker, 1983; Siqueland et al., 1996). Parental overinvolvement and overprotection are also thought to be linked with anxiety disorders (Siqueland et al., 1996). In a study conducted by Siqueland et al. (1996), parents of children with anxiety disorders were observed to provide less approval for psychological autonomy. Other researchers also demonstrated a relationship between maternal control and anxiety in children (Dumas et al., 1995; Rapee, 1997). Systems theorists such as Bowen (1978) strongly believed in the value of the process of differentiation whereby individuals gain independence when they differentiate from the family emotional system and, in doing so, experience diminishing levels of anxiety and reactivity.

Hypothesis II: Lower levels of negative dominant and negative submissive styles of expression in families of origin will be significantly related to higher levels of anxiety symptoms in individuals. This hypothesis was not supported by the data. It was

predicted that the inhibition of negative dominant (ND) and negative submissive (NS) emotions, such as anger and disappointment, would cause an increase in anxiety if the families-of-origin, in which the participants were reared, discouraged the expression of these emotions. There was a significant positive relationship between negative dominant expressiveness and anxiety. According to the findings, as negative dominant expressiveness increases, so do the individual family member's anxiety levels. Contrary to these findings, Halberstadt et al. (1999) found that there were some advantages evident in later adolescence that imply that exposure to negative styles of expressiveness in childhood is actually a healthy aspect of upbringing. Apparently, Halberstadt (1999) believed that being raised in a family where negative affect was considered normal could promote increased comfort with and sympathy toward others' expressions of negative expressions in adolescence as well as during the college years.

While this study was never planned to dispute that negative dominant and negative submissive styles of emotional expression could lead to feelings of anxiety, it was predicted that an inhibition to express these ND and NS emotions would actually be more detrimental to individuals. Perhaps the findings reflect the participants' overall unease for being subjected to these types of expressions and, as a result, the measures could not adequately isolate and, therefore, accurately measure the stifling of participants' negative emotion expressions.

Secondary Analyses

Additional analyses were conducted to examine the relationship between the expressiveness and conflict variables. A hierarchical regression was performed to

determine if expressiveness would still be significant if conflict was entered first and at what level. The findings suggested that expressiveness still accounted for increased levels of anxiety variability and at an even higher level of significance. Data indicated that increased conflict expression in families-of-origin yields an increase in individual family members' anxiety levels.

The current findings correspond with the research of Dadds and Powell (1991) in which marital problems were highly correlated with child anxiety and Stark et al.'s (1990) findings that anxiety-disordered children identified their families as being high on enmeshment and conflict, low on support and cohesion, and as having difficulties with decisiveness (Bloom, 1985). Similar results were reported by Kerig (1988), who also studied the effects of parental conflict on children, although Kerig discovered that children's overall assessments were found to serve as moderators between parental conflict and adjustment.

Consideration of further possibilities may facilitate an explanation pertaining to why the results were not in the expected direction. The findings were supported by the beliefs of Nolen-Hoeksema (1987) who suggested that internalizing disorders in girls could actually be the result of fathers' encouraging the expression of negative emotions, such as sadness. Additionally, the work of Garside and Klimes-Dougan (2002) is in partial support of the current findings. These researchers found that children's psychological distress was related to parental cues that inhibited the expression of negative emotions. Although the present study did not identify a significant relationship for negative emotions, the inhibition of expressiveness in general was found to be related to the psychological distress (in this case, anxiety) of the participants.

Before dismissing the effect of discrete emotions on anxiety development, this author conducted further analyses on the impact of positive expressiveness on individuals. Multiple regression analyses identified a significant negative relationship between Positive Dominant (PD) expressiveness and anxiety. The data suggested that people from families who reported positive dominant expressiveness identified lower frequencies of anxiety. The findings suggested an overwhelming need for positivity in families.

Conflict and negative dominant expressiveness appear to induce anxiety in individual family members. Examination of the sample's mean and standard deviation scores for conflict ($M = 4.08$, $SD = 2.49$) revealed a striking similarity to the normed distressed sample ($M = 4.02$, $SD = 2.07$) of the Family Environment Scale (FES, Moos & Moos, 1994). This data would suggest that this sample of participants responded in the same way as the distressed sample of participants from the FES. The implications of this prospect suggest that the participants were raised in families with higher levels of open conflict expression. In addition, the fact that the conflict and negative dominant variables are highly correlated suggests that the participants engage in more open negative conflict expression rather than positive conflict expression in their families-of-origin. The results of conflict and negative dominant expressiveness being associated with higher levels of anxiety in individuals, therefore, would make sense.

Extant literature supports the need for open communication in families between parents and children. It would seem that higher levels of open negative communication could be harmful to individuals' mental health. Chorpita et al. (1998) identified that poor communication between parents and their children was found to be inversely related to

anxiety in children. Chorpita et al.'s findings as well as the results of this study imply that open communication and positive dominant expressiveness in families' home environments may be the underpinning for the overall emotional well-being of individuals.

The interpretation of the results from hypotheses I and II would propose that the specific style of emotional expression (negative dominant) is implicated in whether anxiety develops. In light of the findings for hypotheses I and II, it is possible that lower levels of overall emotional expression and higher levels of ND expressiveness would cause increases in anxiety symptoms and possibly lead to anxiety disorders, rather than the suppression of specific and discrete emotions. A multiple regression was conducted to investigate this possibility, and the findings supported this conjecture. Lower levels of overall emotional expression and higher levels of ND expressiveness both caused anxiety to heighten. Contrarily, Hibbs, et al. (1993) found that low emotional expression was not associated with psychopathology and that family environments characterized by low emotional expression were actually less dysfunctional.

In order to examine the current findings with confidence, one final analysis was performed. The impact of the independent variables on the dependent variable, anxiety, was further investigated. Levels of anxiety were determined by computing total anxiety scores on the Self-Analysis Form (SAF, Cattell & Scheier, 1963). The total score was compiled by adding the separate overt and covert anxiety scores. The author, therefore, thought it prudent to examine the effects of the independent variables on the dependent variable when it was split into groupings of overt and covert anxiety.

The results for hypothesis I were the same with regard to anxiety and expressiveness, but conflict was no longer significant when the dependent variable was overt anxiety. This finding might imply that conflict expression appears to affect only symptoms consistent with covert anxiety, such as the manifestations of psychosomatic complaints and possibly alcoholism and other addictions. These results would suggest that the ability to express conflict freely would yield a decrease in overt anxiety. Contrarily, when people show conflict, anxiety manifests covertly. It is possible that individuals dealing with conflict are unsure of their feelings and, as a result, covert anxiety, of which the individual is unaware, develops. This discomfort might lead to injurious self-soothing measures such as smoking, nail biting, and drinking because anxiety underlies their personal experience of conflict. Future studies should, therefore, include psychosomatic and addictions assessments to measure the repercussions of conflict on anxiety and anxiety disorders.

There were no changes in the results when hypothesis II was examined with overt and covert anxiety as the dependent variable. This would suggest that negative dominant styles of expressiveness impact anxiety whether its symptoms are evident or concealed. This was also found to be true when positive dominant and positive submissive styles of expression were run with overt and covert anxiety as the dependent variable. It can, therefore, be concluded that when positive dominant styles of expressiveness were assessed, the influence on anxiety did not differ even when anxiety was broken down into overt and covert categories.

Clinical Implications

The socialization of emotions is strongly influenced by caretakers. Suitable expressions of emotion are learned by children through parents' reactions to their emotional expressions, parents' methods of expressing emotions, and parents' genuinely conveyed beliefs about emotional experience and expression (Denham, Zoller, & Couchoud, 1994; Tomkins, 1991).

Children's emotional expressions are either promoted or discouraged according to their rearing. This learned behavior is developed and refined throughout childhood and adolescence and becomes hardwired into one's emotional inventory. It was, therefore, pertinent to dissect the influence of family factors on anxiety and anxiety disorders experienced in young adulthood.

It was proposed that the hindering of emotions thought to be negative by a family would result in increased anxiety in individual family members. It was this incapacity to freely express experienced emotions that was expected to negatively affect individuals' well-being, expressly their levels of experienced anxiety. There was a significant relationship between heightened levels of anxiety and expressiveness. Anxiety levels decrease in families when expressiveness is increased between family members. One clear implication of this study is the importance of communication amongst family members, specifically the communication of emotions.

These findings suggest some practical implications for professionals working with families and individuals struggling with anxiety problems, as well as anxiety disorders. Professionals working from a systemic framework and perhaps, more importantly, those who conceptualize presenting problems from a linear perspective, would benefit from

thoroughly examining the interactions between family members in order to study the problems of the symptom bearers. Specific emphasis on the expression of emotions within families-of-origin would help tap into the symptom bearers' manifestation of anxiety. Rather than focusing on the individual exclusively, the entire family--particularly the parents--should be engaged in the treatment in order to first understand the cause of the anxiety problem and to later alleviate the symptoms. The findings of Chorpita et al. (1998) identified the importance of communication between parents and children in families. Poor communication between parents and their children was found to be inversely related to anxiety in children. Techniques to increase communication within the family, specifically the expressiveness of emotions, should, therefore, be a primary goal of treatment.

The results also have a major impact on society today in terms of education and the importance of preventative efforts. Proactive teaching about the consequences of inhibited expressiveness in families can be conveyed by a broad span of professionals, not simply mental-health specialists. The findings also suggest that conflict and negative dominant expressiveness in families induce anxiety in individual family members. Goals of family therapy should be focused on appropriate conflict resolution, such as the use of "I messages" and fighting fair as well as assisting families in identifying patterns of communication that result in arguments. Treatment should also consist of providing psychoeducation to families about the harm in negative dominant expressiveness between family members. In addition, families characterized by primarily negative dominant expressiveness might need assistance in learning how to communicate positively. Modeling and role playing examples of positive dominant expressiveness in the sessions

would provide the family with an appropriate illustration of this communication style, and it would also offer them an opportunity to practice this style of expression with a professional coach.

Pediatricians, teachers, coaches, and religious leaders are several significant groups of professionals who have the opportunity to work with individuals and families to prevent the development of heightened anxiety. Any professional in the position to teach the public would benefit others from learning and teaching about the importance of the socialization of free expression of emotions.

Limitations

Despite the evident advantages of the current study, including the appropriate size of the sample, the relatively equal number of male and female participants, and this being the first study to explore the possible role of the family emotional environment on anxiety development, there are some limitations that need to be addressed prior to making assumptions about the general population based on the current sample. Generalizations from the data of the present study should be made with caution because the participants identified their ethnic/cultural backgrounds to be predominately European and described their families-of-origin to be middle-class to upper-class, Catholic, and intact.

The sample should be considered when examining the findings. The fact that the sample was predominately European suggests that perhaps the participants were not subjected to discrimination. In addition, participants with European heritages may have different rules on emotion socialization and, as an outcome, conflict may evoke feelings of shame and guilt resulting in the covert anxiety found in this study. Future studies

should attempt to recruit a more diverse sample, so that anxiety and this researcher's predictor variables could be examined across various ethnicities. The socioeconomic status of the participants may have also influenced the results. The stress level associated with high-demand and high-paying jobs might have impacted the emotional environments of the participants' families-of-origin.

In generalizing these findings to other groups, the composition of families needs to be explored. A majority of participants (70.9%) reported their parents to be married. With the high frequency of divorce today and consequently blended families, the unusually high rate of intact families in this sample should be critically accounted for before making speculations. Characteristics of intact families versus blended families and divorced families should be considered. Perhaps the levels of anxiety would have been higher in blended families, thus, impacting the emotional environment. Participants from divorced families might have grown up in homes with higher degrees of conflict and according to the results of this study would likely experience heightened levels of anxiety. While the demographics page was generally a thorough and comprehensive measure, the author failed to consider the possibility of adoption. This is a critical oversight when the nature-versus-nurture argument is considered.

Additionally, the sample was comprised of college students, a non-clinical population, as was supported by the findings from the demographics page. The rationale behind utilizing a non-clinical sample was to first generate normative data that could be applied to family emotional environments and anxiety and to avoid the complexities of a clinical sample. Although the measures for anxiety yielded non-significant results with regard to relevant increased anxiety levels, assumptions about the non-clinical nature of

the sample should, nonetheless, be made with vigilance. Responses that participants gave on the demographic pages about the histories of mental health in themselves and family members seemed to indicate a lack of knowledge or understanding about anxiety disorders. It became apparent to the author that some of the participants did not have an accurate definition of anxiety and anxiety disorders. For example, when they were prompted to provide the specific diagnoses of their anxiety disorders, other disorders such as depression and bipolar personality disorder were given. Future replications of this study should perhaps phrase the question of diagnoses on the demographics page as a label of the mental-health problem, something that the general population can more easily understand. It should not be assumed that the participants will have the knowledge of clinical diagnoses and terminology as professionals in the field of psychology.

A sample from a clinical population would have provided more insight into families' emotional environments when a family member or caretaker actually had been diagnosed with an anxiety disorder. Conceivably, these types of environments would be correlated with a higher rate of anxiety development. According to the MANOVA analyses, there was a significant relationship between mother's anxiety and overall anxiety levels of individuals, and would, thus, provide a strong rationale to examine a clinical population in future studies.

This study was based solely on self-report measures, which might have obscured the findings. Future research should include reports from significant others and family members in order to adequately cross-reference. The present study also had the expectation for participants to reflect back on their childhoods and on the emotional

climates in their families-of-origin. Inaccurate memories and recollections need to be accounted for when examining retrospective data.

The gender of the participants was rather equally represented, and, therefore conclusions with regard to male and female similarities and differences can be made. The anonymous nature of the questionnaires, as well as the disguised nature of the study, may have encouraged the response rate of the male participants, because males purportedly do not characteristically report accounts of anxiety.

Recommendations for Future Research

Now that a baseline for anxiety and the socialization of emotional expression has been provided, it would be worthwhile to replicate this study with a clinical population. Perhaps a sample of participants who have been diagnosed with an anxiety disorder, recruited from a clinic, agency, or hospital which specializes in the treatment of anxiety disorders, could be studied to determine the strength of the relationship between the degree of expressiveness in families-of-origin and the development of anxiety disorders. If specific family characteristics could be identified as prompting the onset or progression of anxiety disorders in individuals, then precautionary measures could be taken to impede this course. As such, the results of the current study should be taken as further reinforcement for the movement to assess symptoms of anxiety from a systemic stance rather than from the traditional, linear approach to prevention and treatment of anxiety.

Future studies should involve attempts to recruit a more diverse sample. The sample in the present study was composed of primarily European, Catholic, middle-to-upper-class students from intact families. The findings, therefore, could not be

generalized confidently outside of these parameters. The ability to generalize findings is always the primary objective of quantitative research designs, and, therefore, the need for a more representative sample.

The sample was rather equally comprised of males and females. Although there were no significant relationships between gender and the other variables, it would be useful to explore how the socialization of emotions in families differs across genders, if in fact, it does. Eisenberg, et al. (1991) found that there were encouraging outcomes in adult women's being able to openly experience negative emotion when they came from families with positive styles of expressiveness. The prevalence of anxiety disorders in males and females should also be examined to determine if frequency differs according to gender.

Future studies should employ more comprehensive methods of collecting data. The present study exclusively utilized self-report measures to capture the college-aged students' recalled memories of their childhood. Retrospective studies have the potential for inaccuracy because memories fade and are not always correct or verifiable. Future studies should cross-validate findings by interviewing significant others. The sole use of self-report measures also runs the risk of untruthful accounts. Cross-validating would strengthen the accuracy of the findings. Furthermore, a search for a measure that would tap into the ambivalent expressions of emotions in parents is warranted, because it is likely that participants grew up in environments in which styles of expressiveness fell into a gray area, rather than being clear. It is also quite possible that individuals from the same family perceive and interpret appropriate emotion expression differently from one another.

Longitudinal studies would be advantageous in examining the progression of the socialization process with regard to emotional expression and the development of anxiety. Additionally, transitional periods across the lifespan leading to and through graduation from college could be closely monitored to determine how differentiation and the influence of family interactions around the socialization of emotional expression affect an individual's ability to adequately express emotions.

Although the present study represented an attempt to determine if the participants' family members suffered from heightened levels of anxiety, patterns of anxiety could not be assessed and/or attributed to genetic predispositions or socialization styles. It would be of interest to explore any likely role genetics may play in anxiety development and how the emotional environment might differ in families with histories of anxiety disorders, thus rearing children to be more anxious in nature, and, ultimately to develop anxiety disorders of their own. Facts about adoption should be obtained during the demographic assessment in future studies.

Conclusion

Overall, the findings of the present study indicate that the ability to openly express oneself within families-of-origin is significantly related to a reduction in anxiety symptoms. Specifically, data pointed to the benefits of positive dominant expressiveness and the drawbacks of negative dominant styles of expression between individuals in families. The role of genetics was not explored in this study, thus, making it difficult to state with certainty that expressiveness in families is the answer to eliminating the development of anxiety and, therefore, the only viable option in the prevention and

treatment of anxiety problems. Nonetheless, the results reinforce the need to work from a systemic framework when working with individuals and families whether prevention or treatment is the goal.

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Appendix A: Institutional Review Board Approval

SETON HALL UNIVERSITY
1 8 5 6

October 26, 2005

Angela Nasca Toto
45 Heritage Drive
Allentown, PA 08501

Dear Ms Nasca Toto,

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled "The Emotional Environments of Families and How They Influence the Development of Anxiety in Individuals". Your research protocol is hereby approved as revised through expedited review. The IRB reserves the right to recall the proposal at any time for full review.

Enclosed for your records are the signed Request for Approval form and the stamped original Consent Form. Make copies only of this stamped Consent Form.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol must be reviewed and approved by the IRB prior to their implementation.

According to federal regulations, continuing review of already approved research is mandated to take place at least 12 months after this initial approval. You will receive communication from the IRB Office for this several months before the anniversary date of your initial approval.

Thank you for your cooperation.

Sincerely,

Mary F. Ruzicka, Ph.D.

Mary F. Ruzicka, Ph.D.
Professor
Director, Institutional Review Board

cc Dr Robert F. Massey

Office of Institutional Review Board
Presidents Hall
Tel: 973.313.6314 • Fax: 973.275.2978
400 South Orange Avenue • South Orange, New Jersey 07079-2641

Appendix B: Letter of Solicitation

SETON HALL UNIVERSITY
1 8 5 6

Dear Potential Participant:

My name is Angela Nasca Toto, and I am a doctoral candidate in the Marriage and Family Program in the Department of Professional Psychology and Family Therapy at Seton Hall University in South Orange, NJ. I am currently working on my doctoral dissertation on the influences of family and the experiences of anxiety in young adults. I am asking for your approval to participate in this project.

Purpose and Duration of Research
I appreciate your time and willingness to consider participating in this study. The purpose of this study is to gain a better understanding of the potential relationship between the development of anxiety in young adulthood and the influences of families. The estimated participation time is approximately 40 minutes.

Procedures
You will be asked to complete a packet of questionnaires. The very first page of the packet is an instruction page that includes directions on how to complete the following three questionnaires: the Family Environment Scale (FES; Form R), the Family Expressiveness Questionnaire (FEQ), the Self Analysis Form (SAF), and a demographics form. Also, an envelope has been enclosed for you to return the materials.

I have provided some examples of the items that will be encountered on these questionnaires. The FES includes statements such as: "Family members often keep their feelings to themselves," "Family members rarely become openly angry," and "We don't do things on our own very often in our family." The FEQ has two of the following items: "Praising someone for good work" and "Showing contempt for another's actions" and the SAF includes, "I tend to get over-excited and 'rattled' in upsetting situations" and "I feel restless as if I want something but do not know what."

Voluntary Participation
Participation in this study is completely voluntary. You may withdraw your participation from the study at any time without consequence. If your instructor should decide to offer class credit to you for engaging in the research, then your instructor will also offer an alternative means of gaining credit if you decide not to be involved.

Anonymity Preservation
Anonymity will be maintained. You will be instructed not to include your name or any other identifying information on the questionnaires. There will be no way of identifying you. If your instructor offers extra credit for participating in this study, then the respective psychology lab instructors will keep track of who comes to fill out the questionnaire packets on a separate form. This form will include both your name and your professors' name and will be collected separately and then forwarded to the professors by the lab instructors. Again, you will be instructed to not put any form of identification on the actual questionnaire packets that I will receive. Results presented or published professionally will be in group form only.

Confidentiality Maintenance
All material will be collected in the strictest confidence. The completed survey packet will be sent directly to me to maintain confidentiality. Returned questionnaires will be kept in a locked cabinet and will be accessible only to myself and my advisor. You may receive a copy of the study's results if interested.

College of Education and Human Services
Department of Professional Psychology and Family Therapy
Tel: 973.761.9451
400 South Orange Avenue • South Orange, New Jersey 07079-2685

Anticipated Risks and Discomfort

There are minimal risks and no expected personal benefits involved in the study because the study is simply an exploratory project, not a treatment study. Should you experience any discomfort during or after completing the survey, it is suggested that you speak with a therapist, friend, family member, or other trusted person with whom you feel comfortable processing this experience. You can also seek help at the Seton Hall University Counseling Center at (973) 761-9500.

Research Contact

I would like to thank you in advance for your willingness to consider participating in the study. If you would like to receive a copy of study results, please send your request to me at the University address at the close of this letter. If you have any questions about this study or what to expect about your participation, please feel free to contact me at (973) 761-9451. If you have any questions about your rights to participate in this study or feel that you have been placed at risk, you may contact Dr. Robert F. Massey, Ph.D. at (973)761-9451 or the Office of the IRB, Dr. Ruzicka, Ph.D., Director, at (973) 313-6314.

Completing and returning the questionnaires implies consent to participate in this research.

Thank you again for your invaluable support.

Sincerely,

Angela Nasca Toto, M.A., Ed.S.
Doctoral Candidate: Marriage & Family Program
Department of Professional Psychology
and Family Therapy
Seton Hall University
400 South Orange Avenue
South Orange, NJ 07079
(973) 761-9451
nascaang@shu.edu

Appendix C: Demographics Form

Demographics Page

Student's Age: _____

Student's Gender: _____

Year in College: _____

Educational Level: Mother- # of years of school: _____
# of years of college: _____
# of years of post-college: _____

Father- # of years of school: _____
# of years of college: _____
# of years of post-college: _____

Occupation: Mother_____

Father_____

Income Level: 0 – $15,000 _____
$16,000 – $30,000 _____
$31,000 - $45,000 _____
$46,000 - $60,000 _____
$61,000 - $75,000 _____
$76,000- $90,000_____
$91,000- $105,000_____
$106,000- $120,000_____
$116,000- $135,000_____

Cultural Background: Student_____
Mother _____
Father _____

Religious Preference: Student _____
Mother _____
Father _____

Family Composition:
Marital status of parents during your upbringing (please circle one):

Married Separated Divorced Never married

Widowed- circle mom or dad Remarried

Total Number of siblings: _____
Number of older brother(s): _____ younger brother(s)_____
Number of older sister(s): _____ younger sister(s)_____
Number of family members other than parents or siblings who lived in your home:
_____

Mental Health:
Have you ever been diagnosed with an anxiety disorder? _____
If yes, please answer the following questions:
What was the specific diagnosis?_____
How old were you? _____
Did you receive therapy? _____ Was it experienced as helpful?_____
Were they prescribed medication? _____ Was it experienced as helpful? _____
How many months _____or years _____did you suffer with this disorder?

Were any of the family members in your household diagnosed with an anxiety disorder during your upbringing? _____
If yes, please answer the following questions:
Who? mother _____ father_____ other _____
What was the specific diagnosis? _____
How old was the family member(s) at time of diagnosis? _____
Did they receive therapy? _____ Was it experienced as helpful?_____
Were they prescribed medication? _____ Was it experienced as helpful? _____
How many months _____ or years _____did they suffer with this disorder?

Appendix D: IPAT – Self-Analysis Form (SAF)

SELF ANALYSIS FORM

T.M.

NAME _____ TODAY'S DATE _____
First Middle Last

SEX _____ AGE _____ OTHER FACTS _____
(Write M or F) (Nearest Year) (Address, Occupation, etc., as instructed)

CONFIDENTIAL

Inside this booklet there are forty statements about how most people feel or think at one time or another. There are no right or wrong answers. Just pick the one that is really true for you, and mark the **a**, **b**, or **c** answer.

You'll start with the two simple examples below, for practice. Read the first sentence and then put an X in the box that tells how you feel about walking. If you enjoy walking, you would put an X in the **a** box. If you don't, you'd mark the **c** box. If you enjoy walking once in a while, you'd mark the middle box. But mark the middle box *only* if it is impossible for you to decide definitely **yes** or **no**. But don't use it unless you absolutely have to.

1. I enjoy walking. a b c
   [a] yes, [b] sometimes, [c] no. ☐ ☐ ☐

Now do the second example.

2. I would rather spend an evening: a b c
   [a] talking to people, [b] uncertain, [c] at a movie. ☐ ☐ ☐

Now:

1. Make sure you have put your name, and whatever else the examiner asks, at the top of this page.

2. Please answer every statement. Don't skip a single one. Your answers will be entirely confidential.

3. Remember, use the middle box only if you cannot possibly decide on **a** or **c**.

4. Don't spend time thinking over the statement. Just mark your answer quickly, according to how you feel about it *now*.

   It will take only ten minutes or so to finish. Hand in the booklet when you're through, unless told to do otherwise. As soon as you're told to, turn the page and begin.

STOP HERE—WAIT FOR SIGNAL

Catalog No. CA 166

A

	a	b	c
1. My interests, in people and ways to have fun, seem to change quite fast. **[a] true, [b] in between, [c] false.**	☐	☐	☐
2. Even if people think poorly of me I still go on feeling O.K. about myself. **[a] true, [b] in between, [c] false.**	☐	☐	☐
3. I like to be sure that what I'm saying is right, before I join in on an argument. **[a] yes, [b] in between, [c] no.**	☐	☐	☐
4. I am inclined to let my feelings of jealousy influence my actions. **[a] sometimes, [b] seldom, [c] never.**	☐	☐	☐
5. If I had my life to live over again I'd: **[a] plan very differently, [b] in between, [c] want it the same.**	☐	☐	☐
6. I admire my parents in all important matters. **[a] yes, [b] in between, [c] no.**	☐	☐	☐
7. It's hard for me to take "no" for an answer, even when I know what I'm asking is impossible. **[a] true, [b] in between, [c] false.**	☐	☐	☐
8. I wonder about the honesty of people who are more friendly than I'd expect them to be. **[a] true, [b] in between, [c] false.**	☐	☐	☐
9. In getting the children to obey them, my parents (or guardians) were: **[a] usually very reasonable, [b] in between, [c] often unreasonable.**	☐	☐	☐
10. I need my friends more than they seem to need me. **[a] rarely, [b] sometimes, [c] often.**	☐	☐	☐
11. I feel sure I could "pull myself together" to deal with an emergency if I had to. **[a] true, [b] in between, [c] false.**	☐	☐	☐
12. As a child I was afraid of the dark. **[a] often, [b] sometimes, [c] never.**	☐	☐	☐
13. People sometimes tell me that when I get excited, it shows in my voice and manner too obviously. **[a] yes, [b] uncertain, [c] no.**	☐	☐	☐
14. If people take advantage of my friendliness I: **[a] soon forget and forgive, [b] in between, [c] resent it and hold it against them.**	☐	☐	☐
15. I get upset when people criticize me even if they really mean to help me. **[a] often, [b] sometimes, [c] never.**	☐	☐	☐
16. Often I get angry with people too quickly. **[a] true, [b] in between, [c] false.**	☐	☐	☐
17. I feel restless as if I want something but don't know what. **[a] hardly ever, [b] sometimes, [c] often.**	☐	☐	☐
18. I sometimes doubt whether people I'm talking to are really interested in what I'm saying. **[a] true, [b] uncertain, [c] false.**	☐	☐	☐
19. I'm hardly ever bothered by such things as tense muscles, upset stomach, or pains in my chest. **[a] true, [b] in between, [c] false.**	☐	☐	☐
20. In discussions with some people, I get so annoyed I can hardly trust myself to speak. **[a] sometimes, [b] rarely, [c] never.**	☐	☐	☐

CONTINUE ON NEXT PAGE.

A Score ☐

B

21. I use up more energy than most people in getting things done because I get tense and nervous.
[a] true, [b] uncertain, [c] false. ☐a ☐b ☐c

22. I make a point of not being absent-minded or forgetful of details.
[a] true, [b] uncertain, [c] false. ☐a ☐b ☐c

23. No matter how difficult and unpleasant the snags and stumbling blocks are, I always stick to my original plan or intentions. **[a] yes, [b] in between, [c] no.** ☐a ☐b ☐c

24. I get over-excited and "rattled" in upsetting situations.
[a] yes, [b] in between, [c] no. ☐a ☐b ☐c

25. I sometimes have vivid, true-to-life dreams that disturb my sleep.
[a] yes, [b] in between, [c] no. ☐a ☐b ☐c

26. I always have enough energy to deal with problems when I'm faced with them.
[a] yes, [b] in between, [c] no. ☐a ☐b ☐c

27. I have a habit of counting things, such as steps, or bricks in a wall, for no particular purpose.
[a] true, [b] uncertain, [c] false. ☐a ☐b ☐c

28. Most people are a little odd mentally, but they don't like to admit it.
[a] true, [b] uncertain, [c] false. ☐a ☐b ☐c

29. If I make an embarrassing social mistake I can soon forget it.
[a] yes, [b] in between, [c] no. ☐a ☐b ☐c

30. I feel grouchy and just don't want to see people.
[a] almost never, [b] sometimes, [c] very often. ☐a ☐b ☐c

31. I can almost feel tears come to my eyes when things go wrong.
[a] never, [b] very rarely, [c] sometimes. ☐a ☐b ☐c

32. Even in the middle of social groups I sometimes feel lonely and worthless.
[a] true, [b] in between, [c] false. ☐a ☐b ☐c

33. I wake in the night and have trouble sleeping again because I'm worrying about things.
[a] often, [b] sometimes, [c] almost never. ☐a ☐b ☐c

34. My spirits usually stay high no matter how many troubles I seem to have.
[a] true, [b] in between, [c] false. ☐a ☐b ☐c

35. I sometimes get feelings of guilt or regret over unimportant, small matters.
[a] yes, [b] in between, [c] no. ☐a ☐b ☐c

36. My nerves get on edge so that certain sounds, such as a screechy hinge, are unbearable and give me the shivers. **[a] often, [b] sometimes, [c] never.** ☐a ☐b ☐c

37. Even if something upsets me a lot, I usually calm down again quite quickly.
[a] true, [b] uncertain, [c] false. ☐a ☐b ☐c

38. I seem to tremble or perspire when I think of a difficult task ahead.
[a] yes, [b] in between, [c] no. ☐a ☐b ☐c

39. I usually fall asleep quickly, in just a few minutes, when I go to bed.
[a] yes, [b] in between, [c] no. ☐a ☐b ☐c

40. I sometimes get tense and confused as I think over things I'm concerned about.
[a] true, [b] uncertain, [c] false. ☐a ☐b ☐c

STOP HERE. BE SURE YOU HAVE ANSWERED EVERY QUESTION.

B Score ☐

Name _____ Sex _____ Age _____ Date _____ Examiner _____

A Score (Covert, indir.) _____ (p. 2 score) B Score (Overt, manifest, sympt.) _____ (p. 3 score).

TOTAL RAW SCORE _____ (A + B)

TOTAL, STANDARD STEN SCORE _____ (from Table)

Experimental Scales:

Overt-Covert Ratio $\left(\frac{B}{A}\right)$ _____. Q_3 _____ _, C _____, L _____, O _____, Q_4 _____.

Observations:

Diagnostic Summary:

Appendix E: Family Environment Scale (FES)

Family Environment Scale

Form R

Item Booklet

Rudolf H. Moos

Published by Mind Garden, Inc.
1690 Woodside Road Suite 202, Redwood City California 94061 USA
Phone: (650) 261-3500 Fax: (650) 261-3505
Info@mindgarden.com
www.mindgarden.com

Instructions

There are 90 statements in this booklet. They are statements about families. You are to decide which of these statements are true of your family and which are false. Make all your marks on the separate answer sheet. If you think the statement is *True* or mostly *True* of your family, make an X in the box labeled T (true). If you think the statement is *False* or mostly *False* of your family, make an X in the box labeled F (false).

You may feel that some of the statements are true for some family members and false for others. Mark T if the statement is *true* for most members. Mark F if the statement is *false* for most members. If the members are evenly divided, decide what is the stronger overall impression and answer accordingly.

Remember, we would like to know what your family seems like to *you*. So do not try to figure out how other members see your family, but *do* give us your general impression of your family for each statement.

Work Across →

1. Family members really help and support one another.
2. Family members often keep their feelings to themselves.
3. We fight a lot in our family.
4. We don't do things on our own very often in our family.
5. We feel it is important to be the best at whatever you do.
6. We often talk about political and social problems.
7. We spend most weekends and evenings at home.
8. Family members attend church, synagogue, or Sunday School fairly often.
9. Activities in our family are pretty carefully planned.
10. Family members are rarely ordered around.
11. We often seem to be killing time at home.
12. We say anything we want to around home.
13. Family members rarely become openly angry.
14. In our family, we are strongly encouraged to be independent.
15. Getting ahead in life is very important in our family.
16. We rarely go to lectures, plays or concerts.
17. Friends often come over for dinner or to visit.
18. We don't say prayers in our family.
19. We are generally very neat and orderly.
20. There are very few rules to follow in our family.
21. We put a lot of energy into what we do at home.
22. It's hard to "blow off steam" at home without upsetting somebody.
23. Family members sometimes get so angry they throw things.
24. We think things out for ourselves in our family.
25. How much money a person makes is not very important to us.
26. Learning about new and different things is very important in our family.
27. Nobody in our family is active in sports, Little League, bowling, etc.
28. We often talk about the religious meaning of Christmas, Passover, or other holidays.
29. It's often hard to find things when you need them in our household.
30. There is one family member who makes most of the decisions.

31. There is a feeling of togetherness in our family.
32. We tell each other about our personal problems.
33. Family member hardly ever lose their tempers.
34. We come and go as we want to in our family.
35. We believe in competition and "may the best man win."
36. We are not that interested in cultural activities.
37. We often go to the movies, sports events, camping, etc.
38. We don't believe in heaven or hell.
39. Being on time is very important in our family.
40. There are set ways of doing things at home.
41. We rarely volunteer when something has to be done at home.
42. If we feel like doing something on the spur of the moment we often just pick up and go.
43. Family members often criticize each other.
44. There is very little privacy in our family.
45. We always strive to do things just a little better the next time.
46. We rarely have intellectual discussions.
47. Everyone in our family has a hobby or two.
48. Family members have strict ideas about what is right and wrong.
49. People change their minds often in our family.
50. There is a strong emphasis on following rules in our family.
51. Family members really back each other up.
52. Someone usually gets upset if you complain in our family.
53. Family members sometimes hit each other.
54. Family members almost always rely on themselves when a problem comes up.
55. Family members rarely worry about job promotions, school grades, etc.
56. Someone in our family plays a musical instrument.
57. Family members are not very involved in recreational activities outside work or school.
58. We believe there are some things you just have to take on faith.
59. Family members make sure their rooms are neat.
60. Everyone has an equal say in family decisions.

61. There is very little group spirit in our family.

62. Money and paying bills is openly talked about in our family.

63. When there's a disagreement in our family, we try hard to smooth things over and keep the peace.

64. Family members strongly encourage each other to stand up for their rights.

65. In our family, we don't try that hard to succeed.

66. Family members often go to the library.

67. Family members sometimes attend courses or take lessons for some hobby or interest (outside of school).

68. In our family each person has different ideas about what is right and wrong.

69. Each person's duties are clearly defined in our family.

70. We can do whatever we want to in our family.

71. We really get along well with each other.

72. We are usually careful about what we say to each other.

73. Family members often try to one-up or out-do each other.

74. It's hard to be by yourself without hurting someone's feelings in our household.

75. "Work before play" is the rule in our family.

76. Watching TV is more important than reading in our family.

77. Family members go out a lot.

78. The Bible is a very important book in our home.

79. Money is not handled very carefully in our family.

80. Rules are pretty inflexible in our household.

81. There is plenty of time and attention for everyone in our family.

82. There are a lot of spontaneous discussions in our family.

83. In our family, we believe you don't ever get anywhere by raising your voice.

84. We are not really encouraged to speak up for ourselves in our family.

85. Family members are often compared with others as to how well they are doing at work or school.

86. Family members really like music, art and literature.

87. Our main form of entertainment is watching TV or listening to the radio.

88. Family members believe that if you sin you will be punished.

89. Dishes are usually done immediately after eating.

90. You can't get away with much in our family.

Appendix F: Family Expressiveness Questionnaire (FEQ)

FAMILY EXPRESSIVENESS QUESTIONNAIRE

This is a questionnaire about family expressiveness. We'd like to know more about the degree of expressiveness shown in different families. Therefore, we'd like you tell us about the frequency of expression in your family while you were growing up. By frequency we mean, "How often does this situation occur in your family, relative to other families?"

Try to think of the following scenarios in terms of how frequently they occurred in your family, compared to other families, while you were growing up. Use the rating scale below to indicate how frequently that activity occurred. Thus, if a situation rarely occurred, or occurred not at all frequently, circle a 1, 2, or 3. If it occurred with some or moderate frequency, circle a 4, 5, or 6. And if it occurred very frequently, circle a 7, 8, or 9.

Please do this example:

Expressing affection in public.

Not at all frequently 1 2 3 4 5 6 7 8 9 *Very frequently*

Some items may be difficult to judge. However, it is important to answer every item. Try to respond quickly, but not randomly.

Thank you very much for your time.

Family Expressiveness Questionnaire

1. Showing forgiveness to someone who broke a favorite possession.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

2. Thanking family members for something they have done.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

3. Exclaiming over a beautiful day.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

4. Showing contempt for another's actions.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

5. Expressing dissatisfaction with someone else's behavior.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

6. Praising someone for good work.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

7. Expressing anger at someone else's carelessness.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

8. Sulking over unfair treatment by a family member.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

9. Blaming one another for family troubles.

   Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

10. Crying after an unpleasant disagreement.

    Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

11. Putting down other people's interests.

    Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

(OVER)

12. Showing dislike for someone.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

13. Seeking approval for an action.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

14. Expressing embarrassment over stupid mistakes.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

15. Going to pieces when tension builds up.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

16. Expressing exhilaration after an unexpected triumph.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

17. Expressing excitement over one's future plans.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

18. Demonstrating admiration.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

19. Expressing sorrow when a pet dies.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

20. Expressing disappointment over something that didn't work out.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

21. Telling someone how nice they look.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

22. Expressing sympathy for someone's troubles.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

23. Expressing deep affection or love for someone.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

(OVER)

24. Quarreling with a family member.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

25. Crying when someone leaves.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

26. Spontaneously hugging a family member.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

27. Expressing momentary anger over a trivial irritation.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

28. Expressing concern for the success of other family members.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

29. Apologizing for being late.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

30. Offering to do somebody a favor.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

31. Snuggling up to a family member.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

32. Crying for being punished.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

33. Trying to cheer up someone who is sad.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

34. Telling family members how hurt you are.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

35. Telling family members how happy you are.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

(OVER)

36. Threatening someone.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

37. Criticizing someone for being late.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

38. Expressing gratitude for a favor.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

39. Surprising someone with a little gift or favor.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently

40. Saying "I'm sorry" when one realizes one was wrong.

Not at all frequently 1 2 3 4 5 6 7 8 9 Very frequently