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EARLY MALADAPTIVE SCHEMAS:
THE ROLE OF GENDER

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

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

by
Renee Kathleen Prince
December 2009

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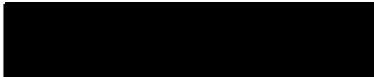
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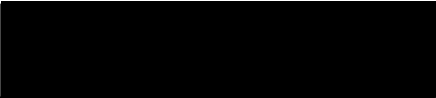


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ABSTRACT

Early Maladaptive Schema (EMS) therapy is an innovative prototype which blends aspects of many schools of thought to enhance treatment outcomes for difficult to treat clients with ingrained character issues. To date, gender difference findings regarding scores on the EMS have been equivocal. This thesis studied the effects of self-identified gender, gender roles and beliefs, and gender attributes on EMS. A total number of 170 subjects participated in this study. They completed the Young Schema Questionnaire, the Sex Role Egalitarian Scale Form KK, the Personal Attributes Questionnaire, and the Marlowe Crowne Social Desirability Scale, as well as a Demographic Survey. Results revealed that females scored higher than males on the EMS of Self-Sacrifice, and males scored higher than females on Dependence/Incompetence. Traditional gender role beliefs predicted higher scores on the EMS of Enmeshment/Undeveloped Self and Subjugation in females, but did not predict higher scores on the EMS tested for males. It was also predicted that the interaction of the PAQ-Expressiveness scale and the PAQ-Instrumentality scale would add explanatory variance above their main effects in the prediction of EMS. This turned out not to be the case, though main effects were

observed. Social desirability was observed for the EMS of Abandonment/Instability, Subjugation, Social Isolation and total EMS. Social desirability differences were also tested between Latinos and Caucasians, and there were no significant differences. Results are discussed in terms of the limited amounts of gender and social desirability differences on EMS, and whether differences on EMS could be influenced by other factors.

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I would also like to express gratitude to Dr. David Chavez for giving me his article on simpatia, and Dr. Gloria Cowan for suggesting I use the Personal Attributes Questionnaire rather than the Bem Sex-Role Inventory and why. I would also like to thank the California State University, San Bernardino Associated Students, Incorporated, for awarding me with funds that made this research possible. And I am, as always, appreciative to my family for their encouragement and support.

DEDICATION

To my mother, Alexine Prince, for you are always
there for me.

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CHAPTER ONE

INTRODUCTION

Cognitive behavioral therapy (CBT) has been empirically supported for the treatment of several Axis I disorders including anxiety and depressive disorders (Butler, Chapman, Forman, & Beck, 2006). Although CBT is effective for many, its efficacy with individuals with personality disorders is more tenuous (Young, Klosko, & Weishaar, 2003). Young developed Schema therapy drawing from "cognitive-behavioral, attachment, Gestalt, object relations, constructivist, and psychoanalytic" (Young et al., 2003, p. 1) models to form an innovative conceptual and treatment model, particularly for individuals with chronic disorders who historically have been difficult to treat because of underlying characterological problems (Young et al., 2003). Schema therapy adds to traditional cognitive therapy by emphasizing childhood and adolescent beginnings of psychological troubles and enduring ideas about self and other people called Early Maladaptive Schemas (EMS; Young et al., 2003).

Schemas, in general terms, are structures, frameworks or outlines. In the area of psychology, schemas are "patterns imposed on reality or experience which help

individuals explain it, to mediate perception, and to guide their responses" (Young et al., 2003, p. 6). Schemas are maintained through cognitive misrepresentations, maladaptive lifestyles and self-defeating schema coping styles. Cognitive distortions are misperceptions of reality that reinforce schemas, while self-defeating lifestyles are unconsciously chosen situations and relationships that are consistent with schemas and thus perpetuate the schema. Coping styles include overcompensation, avoidance and surrender. Each of these schema maintenance operations prevent the person from experiencing information that disconfirms the schema, thus contributing to schema stability. Coping responses are behavioral, cognitive and emotive strategies. While schemas remain stable over time, coping strategies may change depending on the person's situation and are employed in response to painful emotions associated with EMS and generally operate outside one's awareness (Young et al., 2003).

Examples of coping responses for the Abandonment/Instability schema (an expectation that attachments to others are unreliable and that others will abandon them) include surrender - selecting partners who can not make a commitment and staying with them; avoidance

- avoiding close relationships; and overcompensation - clinging to and smothering a relationship. Examples of coping responses for the Dependence/Incompetence schema (a conviction that one can not handle everyday tasks without assistance from others) include surrender - asking significant others to make decisions for them; avoidance - not attempting new challenges; and overcompensation - becoming so self-reliant that one doesn't ask anyone for any help (Young et al., 2003).

Although research has demonstrated that EMS are predictive of psychopathology and may represent a cognitive vulnerability for psychopathology, to date, there are only a few published, equivocal studies on gender differences in the development of EMS. The present study will examine gender, gender role beliefs and gender attributes in the development of EMS.

In Young's schema model, there are 18 EMS, which are grouped into five broad groups called schema domains. Each domain is believed to represent EMS that are developed due to similar unmet needs and from similar types of family of origin.

Domain I: Disconnection and Rejection

According to Young et al. (2003), individuals with EMS "in this domain are unable to form secure and satisfying attachments towards others" (p. 13) and "believe their need for stability, safety, nurturance, love, and belonging will not be met" (p. 13). The EMS under this domain are Abandonment/Instability, Mistrust/Abuse, Emotional Deprivation, Defectiveness/Shame, and Social Isolation/Alienation (Young et al., 2003).

As stated by Young et al. (2003), typical families of origin of those with EMS in this domain are unpredictable, abusive, not affectionate, rejecting or cut off from the outside world. People with Abandonment/Instability schemas believe their needs will not be met because of the unreliability of others, while those with Mistrust/Abuse schemas expect that those around them will take advantage of them. Individuals with Emotional Deprivation schemas believe that their need for emotional encouragement will not be met by others, specifically scarcity of support, empathy and protection. Persons with Defectiveness/Shame schemas feel inferior to others. Those with Social Isolation/Alienation schemas feel isolated and not a part of society (Young et al., 2003).

Domain II: Impaired Autonomy and Performance

Individuals with schemas in this domain feel that they will fail in attempts to function independently. Their families of origin were either overprotective or neglectful. The EMS in this domain are Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self and Failure. The Dependence/Incompetence schema is the belief that one can not handle daily tasks without the assistance of others, while the Vulnerability to Harm or Illness schema is the fear that something catastrophic will happen, whether it is medical, emotional (going crazy, for example) or external (being victimized by external events) catastrophes. The Enmeshment/Undeveloped Self schema involves over-attachment to others at the cost of individuality. The Failure schema is the belief that one has been unsuccessful or will not achieve one's goals (Young et al., 2003).

Domain III: Impaired Limits

People with EMS in this domain exhibit a lack of internal limits, duty to others, and/or ambition. Characteristic families of origin in this domain had parents that were overly permissive or indulgent. The EMS

in this domain are Entitlement/Grandiosity and Insufficient Self-Control/ Self-Discipline. Those with Entitlement/Grandiosity EMS believe they are superior to others, while those with Insufficient Self-Control/Self-Discipline exhibit low aggravation tolerance and self-restraint (Young et al., 2003).

Domain IV: Other-Directedness

Individuals with EMS in this domain show an excessive focus on others' needs to the detriment of their own. Typical families of origin had parental conditional acceptance and love; children had to control themselves to get affection and support. The EMS in this domain are Subjugation, the yielding of control to others under perceived coercion, including the suppression of needs and emotions, Self-Sacrifice, the voluntary center on the meeting of others' needs to the detriment of one's own, and Approval-Seeking/Recognition-Seeking, the striving to be the center of attention and over-focus on gaining attention and support of others (Young et al., 2003).

Domain V: Overvigilance and Inhibition

People with EMS in this domain place excessive emphasis on suppressing spontaneity and focus on meeting rigid internal rules about the individual's behavior. The

typical family of origin was bleak, repressed and strict. The EMS in this domain are Negativity/Pessimism, Emotional Inhibition, Unrelenting Standards/Hypocriticalness, and Punitiveness. The Negativity/Pessimism EMS involves an excessive dwelling on the depressive features of life, while minimizing optimistic features, while Emotional Inhibition is the holding back of feelings such as anger, actions, such as affection, or communication, such as the expression of vulnerability. Many individuals with Emotional Inhibition EMS also place disproportionate emphasis on rationality and disregard emotions. The Unrelenting Standards/Hypocriticalness EMS encompasses the belief that one must always meet excessively elevated standards of accomplishments and behavior and exhibit perfectionism, rigid rules in life, also stressing with timeliness and competence. The Punitiveness EMS involves the notion that people, including oneself, should be severely disciplined for making errors and have difficulty with forgiving errors (Young et al., 2003).

The Relationship of Early Maladaptive Schemas and Psychological Symptoms

A mounting literature has provided support for the schema model as proposed by Young. Several studies have demonstrated that EMS are significant predictors of

psychological symptoms. Schmidt, Joiner, Young, and Telch, (1995) examined the relationship between self-esteem, psychological distress, personality disorder traits, dysfunctional attitudes related to depression and EMS in a sample of 181 undergraduates (85 women and 96 men) enrolled in an introductory psychology class with a mean age of 19.2 and an SD of 3.7. The ethnic composition was as follows: 77% Caucasian, 12% Hispanic, 6% Asian American, and 5% African American. The authors examined the relationship between EMS as measured by Young Schema Questionnaire (YSQ; Young, 1991, as cited in Schmidt et al., 1995) and psychological distress as measured by Symptom Checklist-90-R (SCL-90-R; Derogatis, 1983); General Severity Index, (GSI; summed ratings of each symptom in the SCL-90-R), the Positive And Negative Affect Scale (PANAS; Watson & Clark, 1990, as cited in Schmidt et al., 1995; Watson, Clark, & Tellegen, 1988; assesses positive and negative affect), the Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979; assesses depression), Dysfunctional Attitudes Scale (DAS, Weissman, 1979; examines rigid and excessive beliefs), Personality Diagnostic Questionnaire---Revised (PDQ-R; Hyler & Rieder, 1987; assesses personality disorders), and Rosenberg

Self-Esteem Questionnaire (SEQ; Rosenberg, 1965; assesses global self-esteem).

Results revealed that the total score of EMS significantly correlated with overall psychological distress as measured by the GSI. Results also showed that EMS significantly correlated with depression and anxiety. Further findings revealed that EMS significantly correlated with rigid and excessive beliefs that are thought to be a vulnerability factor for depression. Three of the original 18 schemas failed to emerge in factor analysis and were omitted. These schemas are Approval/Recognition Seeking, Negativism/Pessimism, and Punitiveness. Results of stepwise regression analyses revealed that 3 of the remaining 15 EMS entered the equation accounting for 54% of the variance in symptoms of psychological distress. The EMS of Vulnerability to Harm or Illness entered first and accounted for 38.0% of the variance in psychological distress, followed by Dependency/Incompetence (10% additional explanatory variance), and Insufficient Self-Control/Self-Discipline (6% additional explanatory variance). For depression as measured by the BDI, stepwise regression revealed that 2 of the 15 EMS entered the equation accounting for 33% of the variance in depression. The EMS of

Dependence/Incompetence accounted for 27.0% of the variance and Defectiveness/Shame accounted for an additional 6% of the explanatory variance in depression. For anxiety as measured by the SCL-90-R Anxiety subscale, 3 EMS were entered and accounted for a total of 34% of the variance in anxiety. Specifically, the EMS of Vulnerability to Harm or Illness accounted for 28.0% of the variance in anxiety and Dependence/Incompetence and Emotional Inhibition each accounted for an additional 3% of explanatory variance. Consistent with the Schema Model, results revealed that EMS accounted for a predominant amount of variance in predicting psychological distress. Specifically, the EMS of Dependency/Incompetence and Defectiveness/Shame were more useful in predicting depression, and Vulnerability to Harm or Illness and Dependence/Incompetence were more useful in predicting anxiety (Schmidt et al., 1995).

In a clinical population, Glaser, Campbell, Calhoun, Bates, and Petrocelli, (2002) examined the relationship between the 15 EMS as measured by Young Schema Questionnaire-Short-Form (YSQ-SF; Young, 1994) and psychological distress/symptoms as measured by numerous mental health questionnaires including the SCL-90-R; (Derogatus, 1983). The sample consisted of 141 outpatients

(99 women and 42 men) where the mean age was 28.95 years (SD = 7.80, range = 18-52). The ethnic composition of the sample was 94.0% Caucasian, 4.3% African American, 0.7% Hispanic, and 0.7% American Indian. The results revealed that the majority of the 15 EMS subscales significantly correlated with global psychological distress and specific symptoms of anxiety and depression as measured by the SCL-90-R. In general, all EMS subscale scores accounted for 54.0% of the total variance in overall psychological distress, 54.0% of the total variance in depressive symptoms, and 50.0% of the total variance in anxiety. In summary, the results of this study are also consistent with Young's model, specifically EMS were predictive of anxiety and depression.

In a similar line of research, Welburn, Coristine, Dagg, Pontefract, and Jordan, (2002) assessed the relationship between EMS (measured by YSQ-SF) and psychological distress as measured by the Brief Symptom Inventory (BSI; Derogatis, 1993) in a clinical sample of 196 (131 women and 65 men) day treatment referral patients with the mean age of 36.9 (SD = 9.3, range = 18-63). Ninety-eight percent of these referrals had received least one Axis I diagnosis, with 46% receiving more than one diagnosis. In addition, 36% had at least one Axis II

diagnosis and 3% more than one Axis II diagnosis. No other demographic information about the sample was provided.

Consistent with Glaser et al. (2002), Welburn et al. (2002) also found that the majority of the 15 EMS significantly correlated with anxiety, depression, and paranoid ideation. Results of regression analyses revealed that all EMS accounted for 47.0% of the variance in depression due to the reliable effects of Abandonment/Instability and Insufficient Self-Control/Self-Discipline. Likewise for anxiety, regression analyses revealed that all EMS accounted for 52.0% of the variance in anxiety due to the reliable effects of Abandonment/Instability, Vulnerability to Harm or Illness, Failure, Self-Sacrifice and Emotional Inhibition. Lastly, all EMS accounted for 62.0% of the total variance in paranoid ideation mostly due to the reliable effects of Mistrust/Abuse, Vulnerability to Harm or Illness, Self-Sacrifice and Insufficient Self-Control. As with the previous research, results of this study are consistent with Young's model, where EMS were predictive of psychological symptoms i.e., depression, anxiety, and paranoid ideation.

Harris and Curtin (2002) also examined the relationship between parenting, EMS, and depression in a

sample of 194 undergraduates (59.8% women and 60.8% men). The mean age of the sample was 19.3 (SD = 2.27; range = 18-38). No other demographic information was provided. Participants were given the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1995) to assess the level of depression, and a version of the YSQ that measures 13 EMS (Incompetence/Inferiority, Emotional Deprivation, Defectiveness/Shame, Insufficient Self-Control, Mistrust, Self-Sacrifice, Unrelenting Standards, Abandonment, Enmeshment, Vulnerability, Dependence, and Emotional Inhibition, Fear of Losing Control). A stepwise regression revealed that all EMS accounted for 63.3% of the total variance in depression. The four significant unique predictors were Defectiveness/Shame, Insufficient Self-Control, Incompetence/Inferiority, and Vulnerability. Study findings are consistent with Young's model in that EMS were highly predictive of depression and represent a cognitive vulnerability for depression.

Shah and Waller (2000) also studied the relationship between depression and EMS. Their clinical sample consisted of a depressed group of 17 men and 43 women, age range 18-60 years, each meeting the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American

Psychiatric Association, 1994) criteria for major depressive disorder who were recruited by their therapists (no other demographic information was given). Their non-clinical comparison group consisted of 33 men and 34 women, age range 20-60 years, who had no current or past history of depression and were not students (no other demographic information was given).

Shah and Waller (2000) found that the clinical depression group had more unhealthy core beliefs (as measured by the YSQ) than the non-depressed group. Each EMS scale was significantly higher for the clinical depressed group than for the non-depressed group. Specifically, the greatest differences in YSQ scores occurred on the EMS scales of Defectiveness/Shame, Self-Sacrifice, and Insufficient Self-Control. This study provided support for the schema model and the proposition that EMS represent a cognitive vulnerability for psychopathology.

Although research has demonstrated that EMS are predictive of psychopathology and may represent a cognitive vulnerability for psychopathology, to date, there are only a few published, equivocal studies on gender differences in the development of EMS. The present

study will examine gender, gender role beliefs, and gender attributes in the development of EMS.

Gender Differences in Early Maladaptive Schemas

To date, self-identified gender difference findings regarding scores on the Young Schema Questionnaire-Short Form (YSQ-SF; Young, 1998) have been equivocal. Reeves and Taylor (2007) sampled 804 college students (405 men, 399 women) from a large university that were 18 or older (mean age 19.9). Ethnicity data from 301 students were missing, but the remaining participants were White (71.6%), African American (10.5%), Hispanic/Latino (8.9%), Asian (3.2%), with the remaining participants affirming other ethnicities. Reeves and Taylor (2007) reported that males scored higher than females on the EMS of Emotional Deprivation, Social Isolation, Defectiveness/Shame and Emotional Inhibition, while women scored higher on Self-Sacrifice. No explanation was offered for these observed differences.

Bendo (2001) sampled 419 undergraduate students whose ages ranged from 17 to 52 with a mean age of 20.88. Participants' reported ethnicities were Caucasian (59.4%), Hispanic (13.1%), Asian (11.7%), African-American (8.1%), Native American (1.2%), "Other" (4.8%), and 1.7% no

response. Most reported that they were single (82.3%), while 9.5% were married, 4.1% were living with a significant other, 1.7% were divorced, 1.2% separated, and 0.2% widowed. The majority of the sample classified themselves as Freshmen or Sophomores (93.4%). Of the 419 subjects, 418 had completed YSQ-SF questionnaires (266 females and 152 males). Bendo (2001) reports that men scored higher on the EMS of Emotional Inhibition, while women scored higher on the EMS of insufficient Self-Control/Self-Discipline, Self-Sacrifice and Enmeshment. Upon explaining the results, Bendo (2001) conjectured that Western culture encourages men to be autonomous, while women are taught to be empathic and seeking connection through relationships.

Brotchie, Meyer, Copello, Kidney, and Waller (2004), studied individuals who abused alcohol (21 men and 23 women, mean age 43.8, age range 24-66), abused opiates (24 men and 12 women, mean age 27.7, age range 17-51), abused both alcohol and opiates (13 men and four women, mean age 29.9, age range 18-48) and a comparison non-student group of 34 men and 53 women with a mean age of 33.6 (age range 19-59) who abused neither alcohol or opiates. They found that for the sample as a whole, males scored higher in Emotional Inhibition, while females score higher in

Dependence/Incompetence. When analyzing the substance abuse groups individually (excluding the combined alcohol and opiate group because of its small sample size), they found very similar patterns of YSQ-SF self-identified gender differences to those shown by the group as a whole (i.e., that males scored higher in Emotional Inhibition, while females scored higher in Dependence/Incompetence). No explanation was offered as to why these gender differences were found.

Stallard (2007), used a modified schema questionnaire for children (Stallard & Rayner, 2005, as cited in Stallard, 2007) in sample of 77 school children (43 boys and 34 girls), ages 9 or 10. Results revealed that schoolgirls scored higher than schoolboys on the EMS of Subjugation, while school boys scored higher than school girls on Mistrust/Abuse and Emotional Deprivation. In a separate clinical sample of 53 boys and girls (24 boys and 29 girls) ages 9-18 with a mean age of 14.9, it was found that clinic girls scored higher than clinic boys on Social Isolation. The authors speculated that these relatively few self-identified gender differences might be a consequence of gender differences becoming more pronounced in later adolescence. Additionally, a discriminant function analysis was performed, and it was found that the

schema questionnaire for children test items predicted group membership (the community versus the clinic groups) except for the entitlement and unrelenting standards items. However, conclusions from this study are limited as the newly developed schema questionnaire child version only included only one item from each of the 15 EMS measured by the adult schema questionnaire. Care should be used in the construal of these results as the internal consistency reported for the newly developed, unpublished child schema questionnaire was only marginally adequate with Cronbach's alpha coefficients of .65 and .71; No comparison was made between the child scale and the original scale; and the authors did not provide validity information for the child schema questionnaire. Again, no explanation was provided for the few gender differences that did emerge.

In another EMS study, Freeman (1999) studied a total of 194 Christian men and women who were married or in a serious dating relationship. Sixty-eight participants were sampled from a Christian marriage conference in southern California; approximately 40 were drawn from Christian churches in southern California; approximately 10 were Christian adults in Colorado and California, and the remaining participants were respondents of mailings sent

to faculty or summer term undergraduate and graduate students at a Christian liberal arts university. Freeman (1998) found that women scored higher on the EMS of Abandonment/Instability, Social Isolation/Alienation, Subjugation, Self-Sacrifice and Unrelenting Standards than men. No other self-identified gender differences were reported (Freeman, 1999).

Freeman (1999) theorizes that women score higher on these EMS because they may use less cognitive strategies such as constructive thinking in dealing with difficulties in life, and rely more on emotional or relational coping strategies. Another explanation he offers is that women have higher levels of EMS due to being socialized differently than men, such as being taught to be less assertive, more sensitive to others' needs while denying their own, and more dissatisfied with their accomplishments than males. Finally, men may be taught to minimize their emotional difficulties, while women are taught to be more cognizant of their internal states. In Christian subcultures, these societal norms could be more pronounced (Freeman, 1999).

Welburn, Coristine, Dagg, Pontefract, and Jordan (2002), using a sample of 196 psychiatric patients (33% male, 67% female, age range 18-63 with a mean age of

36.9), showed that women scored higher than men on Self-Sacrifice, Enmeshment, Failure, Abandonment/Instability and Defectiveness/Shame. Welburn et al. (2002), consistent with Freeman (1999) and Bendo (2001), conjectures that women may display schemas such as self-sacrifice because of cultural influence, where females are socialized to think of others' needs as coming before their own, whereas men are raised in society to be more self-sufficient.

Rittenmyer (1997), in studying 47 elementary and junior high teachers working in Los Banos, California (28 women, 19 men, two Hispanic and the rest Caucasian), found that women scored higher on the EMS subscales of the Overconnection domain, now called the Impaired Autonomy and Performance domain. He suggests that women score higher on the Impaired Autonomy and Performance domain because of item bias. For example, he cites items pertaining to the Vulnerability to Harm or Illness schema which ask respondents if they fear being attacked or becoming economically destitute as gender biased questions as women are more apt to be victimized and earn less than their male counterparts.

Muris (2006) in a study of 173 secondary and high school students in Schiedam, The Netherlands (87 boys and

86 girls, 12-15 years old with an average age of 13.32, greater than 90% Caucasian), found that adolescent boys and girls differed only on the EMS of Social Isolation/Alienation; boys scored higher on the EMS of Social Isolation/Alienation than girls. No explanation for this gender difference was offered.

Stiles (2005) studied a sample of 210 female and 69 male university students, age range 18-24, and reported that for the most part there were no self-identified gender differences except that men scored higher than women on Entitlement/Grandiosity. Reasons for this finding were not discussed.

Prince and Lewin (2008) sampled 216 undergraduates who voluntarily participated in a study for extra course credit. Out of the 216 participants, 138 were female, and 78 were male, with a mean age of 23.79, ranging in age from 18 to 55. Self-identified ethnicity of the sample was reported as 39.9% Caucasian/White, 32.1% Latino, 8.7% Asian/Asian-American, 7.3% African-American/Black, 0.5% Native American, and 9.6% other. Results revealed that males scored higher than their female counterparts on the EMS of Social Isolation, Emotional Inhibition and Entitlement/Grandiosity. Females did not score significantly higher than males on any of the 15 EMS.

These authors offered an explanation that males scored higher than females on the EMS of Emotional Inhibition as consistent with the literature and culturally defined roles. This EMS consists of excessive inhibition of spontaneous feelings and behavior to avoid vulnerability and possible disapproval of others. Young et al. (2003) indicates that common themes of inhibition include suppression of anger, positive impulses, being vulnerable, and speaking openly about feelings. Additionally, this EMS is associated with a preference for logic and reasoning over emotionality. These EMS characteristics are consistent with gender role expectations of males in that excessive emotionality, vulnerability and expression of emotions are not reinforced in western societies.

Prince and Lewin (2008) also found that males scored higher than females on the EMS of Social Isolation/Alienation. They point out that the literature is inconsistent on this schema with some studies reporting females scoring higher than males (Stallard, 2007; Freeman, 1998) and others reporting males scoring higher than females (Reeves & Taylor, 2007; Muris, 2006). These inconsistent findings may vary depending upon the sample employed (e.g., children, substance abusers, clinical patients and college students).

Additionally, males also scored higher than females on the EMS of Entitlement/Grandiosity (consistent with one study only; Stiles, 2005) in the Prince and Lewin study (2008). The EMS of Entitlement/Grandiosity is associated with increased competitiveness, desire to dominate and be in control as well as a sense of superiority. These authors state that EMS characteristics are consistent with some gender role expectations in that males are socialized to be more competitive versus cooperative and focus on achieving individual success. Additionally, Prince and Lewin (2008) say this finding is consistent with feminist views of male privilege in a male dominated society that gives rise to expectations of superiority.

Dench, Murray, and Waller (2005) studied 50 psychiatric inpatients - 16 men (mean age = 33.8) and 34 women (mean age = 37.2). Diagnoses were: schizotypal and delusional disorders (n = 11); mood disorders (n = 24); disorders due to psychoactive substance abuse (n = 8); schizophrenia; disorders of adult personality and behavior (n = 7); and neurotic, stress-related and somatoform disorders (n = 7). Some of those studied had more than one diagnoses. They found that women scored higher than men on the EMS of Abandonment/Instability and

Dependence/Incompetence. No other differences were noted and no explanation for these findings was given.

Finally, Cecero, Nelson, and Gillie (2004), studied 220 female and 72 male undergraduates at a private, Catholic, medium-sized, liberal arts university. The participants' age range was between 17 and 21 years old, mean age 20.01, and their ethnicities were 77.7% Caucasian, 12.4% Latino, 5.2% African American, and 4.8% Asian American. Cecero et al. (2004) found no significant differences in age, self-identified gender, race or ethnicity for EMS scores.

In summary, four studies found that males scored higher on Emotional Inhibition (Reeves & Taylor, 2007; Bendo, 2001; Brotchie et al., 2004; Prince & Lewin, 2008), three found that males scored higher on Social Isolation/Alienation (Reeves & Taylor, 2007; Muris, 2006; Prince & Lewin, 2008), two on the Emotional Deprivation schema (Reeves & Taylor, 2007; Stallard, 2007), two on Entitlement/Grandiosity (Stiles, 2005; Prince & Lewin, 2008), one on Defectiveness/Shame (Reeves & Taylor, 2007), and one on Mistrust/Abuse (Stallard, 2007).

For females, four studies found that they scored higher on Self-Sacrifice (Reeves & Taylor, 2007; Bendo, 2001; Freeman, 1998; Welburn et al., 2002), three on

Abandonment/Instability (Freeman, 1998; Welburn et al., 2002; Dench et al., 2005) two on Enmeshment/Undeveloped Self (Bendo, 2001; Welburn et al., 2002) two on Dependence/Incompetence (Brotchie et al., 2004; Dench et al., 2005), two on Subjugation (Stallard, 2007; Freeman, 1998); two on Social Isolation/Alienation (Stallard, 2007; Freeman, 1998), one on insufficient Self-Control/Self-Discipline (Bendo, 2001), one on unrelenting Standards/Hypocriticalness (Freeman, 1998), one on Failure (Welburn et al., 2002), one on Defectiveness/Shame (Welburn et al., 2002) and one said that females scored higher on schemas in the Overconnection domain, now called the Impaired Autonomy and Performance domain (Rittenmyer, 1997; Young et al., 2003). (Note the inconsistency in the research on the Social Isolation/Alienation findings - three studies found that males scored higher than females on this EMS, while two studied found that females scored higher than males. For this reason, no hypothesis was offered regarding this EMS in the present study, but testing for gender differences on this EMS was carried out.)

Gender Role Attitudes and Beliefs and Early Maladaptive Schemas

In addition, the present study will examine the relationship between gender role attitudes and beliefs and EMS. No research to date has studied the relationship between gender role attitudes and beliefs and EMS, and not many studies have been done linking psychological adjustment and gender role attitudes and beliefs.

Al-Darmaki (1999) studied 413 female college students from the United Arab Emirates University (UAE University) who were 18-29 years old (mean = 20.91, 20 subjects did not report their ages). Most participants were single (84.75%), 14.77% were married, one participant was engaged and one subject did not report her marital status. The majority of the sample were from the UAE (90.55%), 4.6% were from the Gulf region such as Oman and Bahrain, 1.94% were from Arab countries such as Egypt and Algeria, and the remaining subjects (2.91%) did not identify their nationality. Class levels were 16.95% freshmen, 29.54% sophomores, 34.84% juniors, 14.29% seniors and 14 participants did not give their educational levels. Of the sample, 75.54% lived on campus, 23.97% lived off campus, and two respondents did not report their residency status. Mean GPA was 2.42 (standard deviation = .52). Mother's

level of education was illiterate (44.55 %,) less than high school education (42.86%), high school degree (4.84%), and college degree (1.69%) while 6.05% did not report their mothers' level of education. Father's education was less than high school (49.39%), no education (27.12%), high school diploma (8.96%), and college degree (7.26%), and 7.26% did not indicate the educational level of their fathers. Most participants (95.64%) reported that their mothers were not working, while 3.15% of respondents reported that their mothers worked at jobs such as schoolteacher, school principal, nurse, and secretary. The rest did not indicate the working status of their mothers.

Gender attitudes and beliefs were measured using the Attitudes Toward Women's Roles scale (ATWR; Seginer, Karayanni, & Mar'i, 1990) and the Sex-Role Egalitarianism Scale form BB (SRES-BB; King & King, 1993). Low scores on the ATWR represent more liberal attitudes toward women's roles, while high scores on the SRES-BB represent more liberal attitudes toward women and men in nontraditional roles. Self-esteem was measured using the Self-Esteem Scale (Rosenberg, 1965) and the Self-Esteem Inventory (Coopersmith, 1967). Lower scores on the Self-Esteem Scale represent higher self-esteem, while higher scores on the Self-Esteem Inventory represent higher self-esteem.

Depression was measured using the Center for Epidemiologic Studies Depression Scale (Radloff, 1977) and the Beck Depression Inventory (Beck & Beck, 1972). Higher scores on the Center for Epidemiologic Studies Depression Scale and the Beck Depression Inventory indicate higher degrees of depression (Al-Darmaki, 1999).

Al-Darmaki (1999) found no significant correlations between the gender role beliefs scales and the self-esteem and depression scales except for small correlations between Beck Depression Inventory and the Social-Parental Roles factor of the SRES-BB ($-.11$; higher depression is associated with lower beliefs in egalitarianism), the Negative View of Self (NVS) factor of the Self-Esteem Scale and the Feminine Roles factor of the Attitudes Toward Women's Roles measure ($.12$; lower self-esteem is associated with lower egalitarian beliefs), the NVS factor and the Traditional Roles factor of the SRES-BB ($-.12$; lower self-esteem is associated with less egalitarian beliefs), and the NVS factor and the Social-Parental Roles factor of the SRES-BB ($-.12$; lower self-esteem is associated with less egalitarian beliefs). A canonical correlation between the gender role belief scales and the self-esteem and depression scales revealed a small but significant relationship, in that egalitarian

beliefs were associated with greater levels of psychological well-being (Al-Darmaki, 1999).

Results of this sample did not replicate those from samples of other cultures. Al-Darmaki (1999) theorizes "that attitudes toward the roles of women and men in society may be culturally determined. ...[For example,] it...(has become) more acceptable for American women and men to be involved in non-traditional roles" than in the Emirates society (pp. 79, 80). Al-Darmaki (1999) also suggests that "the dimensions and meaning of psychological concepts such as attitudes toward women's roles, self-esteem, and depression may vary across cultures" (p. 99), thus the relationship between psychological adjustment and more liberal attitudes of gender roles may be greater in Western society.

Orlofsky and O'Heron (1987) also studied sex role attitudes and personal adjustment. Participants were college undergraduate students (200 male and 211 female) introductory psychology enrollees at the University of Missouri, Saint Louis, described as an urban commuter university. Gender role attitudes and beliefs were measured by the Attitudes toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973). They found no association between AWS and the adjustment and the self-esteem

measures. They concluded that gender role attitudes and gender attributes are all independent components of sex role phenomena and relate differently to self-esteem.

Logan and Kaschak (1980) studied psychological well-being variations due to gender role attitudes using 46 male and 63 female undergraduate psychology students at a California state university. They administered the long form of the Attitudes toward Women Scale (AWS-LF; Spence & Helmreich, 1972). There was a significant positive association for both women and men between the AWS-LF and the CPI well-being scale, such that more liberal attitudes toward women were associated with higher well-being. Logan and Kaschak (1980) suggest that well-being may precede more open-minded stances toward women and that "those who have fewer doubts about themselves are more inclined to allow freedom of movement to others" (p. 577).

Jackson, Hodge, and Ingram (1994) studied 284 female college students, 186 male college students, 253 female high school students, and 248 male high school students (25 students failed to indicate their gender). They reported the mean age was 18.73 for college students and 15.30 for high school students. The majority of college (86.6%) and high school (85.4%) students described themselves as White. Most indicated they were from middle

to upper-middle class backgrounds (84.3% of college students, 83.4% of high school students). Grade point averages were similar for the two groups of students (3.15 for college students and 3.16 for high school students). College respondents completed the Student Attitudes Survey (SAS) for extra credit in their introductory psychology class, while high school students completed the SAS during their homeroom classes. The SAS consisted of three parts, the first two of which was used by Jackson et al. (1994). Part I contained the Gender Attitudes Survey (GAS; Ashmore, Del Boca, & Bilder, 1992, as cited in Jackson et al., 1994) which measured stances about the positions of women and men in modern American society. Higher scores on this survey indicated more traditional attitudes on the part of the respondent. Part II consisted of the Self-Description Questionnaire III (SQD-III; Marsh & O'Neill, 1984), which measured "12 dimensions of self-concept and overall self-evaluation" (Jackson et al., 1994, p. 618), with higher scores indicating a more favorable self-concept.

It was found that for both males and females, gender attitudes were not related to overall self- assessment and self-concept. They suggest no relationship between stances of suitable behavior for women and men and attitudes about

the self. They also surmise that gender attitudes, self-evaluation, and self-concept may be multidimensional constructs, thus less likely to correlate as a whole to each other (Jackson et al., 1994).

Hunt, Sweeting, Keoghan, and Platt (2006) studied the relationship of gender role attitudes and suicidal behaviors and ideation in men and women. Their gender role attitude scale used five point Likert scales ranging from strongly agree to strongly disagree about three statements about gender roles. (High scores were more traditional.) These statements were:

Some equality in marriage is a good thing, but by and large the husband ought to have the main say-so in family matters"; "Women rather than men should look after relatives that need care"; and "A husband's job is to earn the money, a wife's job is to look after the home and family. (Hunt et al., 2006, p. 644)

Hunt et al. (2006) found that gender role attitudes and beliefs were not related to suicidal ideations in the 1970s cohort. However, in the 1950s cohort, those with more traditional gender attitudes and beliefs were more likely to state suicidal thoughts. In the 1930s cohort, there was a trend toward those having more traditional gender role attitudes and beliefs being more likely to

describe suicidal thoughts, but it fell short of statistical significance. Hunt et al. (2006) speculate that these results occurred because those who have more traditional views of gender roles feel more at odds with modern society. They also surmise that, more traditional views of gender roles could be an indication of a harder time in adjusting to social change.

Baker and Terpstra (1986) used self-esteem as measured by items drawn from the Personal Orientation Inventory (Gough, 1976) to predict attitudes toward women as measured by the Attitudes toward Women Scale (AWS; Spence & Helmreich, 1972). Their subjects were 101 male and 69 female student business majors at two western universities as well as nine male and 30 female university employees of those institutions. (The staff employees were included so that older subjects could be studied as well.) The subject ages ranged from 18 to 59 years old, (mean age 23.17, standard deviation 6.28 years). Average educational level was 3.43 years of college, standard deviation 1.79 years, range 0-12 years of higher education. Religious affiliations were 49% Protestant, 24% Catholic, 9% Agnostic, 2% atheist, and other religion 16%. The number of times the sample attended religious services per month

ranged from never to nine times a month, with a mean of 1.38. Five people did not complete the survey.

Baker and Terpstra (1986) found that self-esteem did not relate to attitudes toward women. They postulated that the lack of significance could be partly due to the Personal Orientation Inventory's (Gough, 1976) relatively low internal reliability (.62).

Kingery (1985) studied whether the AWS (Spence et al., 1975) was related to depression as measured by the Center for Epidemiologic Studies Depression Scale (Radloff, 1977, as cited by Kingery, 1985). The sample consisted of 84 (no breakdown by sex was given) non-clinical, married males and females who were similar on factors such as age (mean age 35), ethnicity (all were white), income (average between \$25,000-\$35,000), family size (mean number of children was 1.6), education (mean education was some college), and residential area (all lived in suburban areas of a moderate-size city of a 125,000 population). Two-thirds of the women were teachers or held middle-management positions. No information on male employment was given.

Kingery (1985) found that correlations between AWS and depression were not significant overall, but when broken down by gender, the scores were positively

correlated for females, but not significantly correlated for males. Thus more liberal attitudes for women's roles were related to higher depression scores in the sample's women. When the scores were broken down into high AWS scores versus low AWS scores and wives employed versus unemployed, housewives with more liberal attitudes exhibited higher depression scores than housewives with more conservative attitudes. No significant differences were found between employed women with liberal versus conservative views, and males, regardless of their views or the employment statuses of their wives. However, since the eight-group division led to a small number of subjects per group, Kingery (1985) cautioned that statistical analysis would not be meaningful.

Kingery (1985) explains her findings for her female subjects as consistent with the "notion that a discrepancy between ambitions or aspirations and the perceived ability to fulfill them as a factor which can lead to depression", (Rushing, 1971; Weissman & Payke, 1974, as cited in Kingery, 1985, p. 634). As for the sample's males, Kingery (1985) explains the lack of AWS correlation with depression scores as resulting from the small variance in the men's AWS scores in her sample.

In summary, it is also not clear whether or how gender attitudes and beliefs contribute to psychological health. According to the studies reported above, those who report more liberal gender attitudes and beliefs may report greater levels of well-being, or there may be no relationship between the two variables. One study also partially supported a positive relationship between more traditional gender attitudes and beliefs and adjustment (Kingery, 1985).

Gender Attributes Differences in Early Maladaptive Schemas

To date, no studies have examined self-reported gender attributes and their relationship to EMS. Spence, Helmreich and Stapp (1975) developed the Personal Attributes Questionnaire Long Form (PAQ-LF) to measure self-reported sex role attributes. Sex role attributes were either male-valued (or Instrumental) or female-valued (or Expressive). They compared scores on the PAQ-LF to scores on the Texas Social Behavior Inventory (TSBI; Helmreich, Stapp, & Ervin, 1974), which was designed as a measure of social self-esteem. EMS may be viewed as negatively linked to social self-esteem in that those with high social self-esteem would probably have lower levels

of EMS, while those with low social self-esteem may have higher levels of EMS.

Data were collected from 248 males and 282 females taking introductory psychology classes at the University of Texas at Austin. Results showed that for both men and women, PAQ-LF Instrumental and Expressive scores were positively linked to TSBI social self-esteem scores, especially for Instrumental scores. In addition, they found that Androgynous men and women, those defined as having high scores on both the Instrumental and Expressive domains, had the highest levels of social self-esteem, followed by men and women who had high Instrumental scores and low Expressive scores. Those who had low Instrumental and low Expressive scores had the lowest social self-esteem. The authors concluded that having both Instrumental and Expressive traits are culturally desirable, thus leading to higher social self-esteem. It follows that those having both Instrumental and Expressive traits would have the highest social self-esteem (Spence, Helmreich, & Stapp, 1975). These results support the hypothesis of Bem (1974) - that Androgynous individuals would have a higher level of psychological health. Although no studies have linked Instrumental and

Expressive traits with EMS, it is likely that these traits are linked with EMS in males and females as well.

Others (see for example Locksley & Colten, 1979) question the concept of Androgyny, and of using Androgyny alone as a predictor of adjustment or psychological well-being. Spence and Helmreich (1979) replied that Locksley and Colten (1979) were referring to sex-role behaviors, which are different than the personality traits measured by the PAQ (long form and short form).

O'Connor, Mann, and Bardwick (1978) replicated Spence, Helmreich, and Stapp's (1975) study on Instrumental and Expressive traits and self-esteem with a sample of upper-income, middle-aged, Caucasian, suburban homeowners. Their sample consisted of 43 men and 48 women between 40-50 years old. They found that Instrumentality (masculinity) and social self-esteem were positively correlated among men and women, but that Expressiveness (femininity) and social self-esteem was only positively correlated among women. Their findings on Androgyny replicated Spence, Helmreich, and Stapp's (1975) findings - that Androgynous men and women had the highest social self-esteem, followed by those scoring highly on Instrumental traits and low on Expressive traits, those scoring highly on Expressive traits and low on

Instrumental traits, and those scoring low on both Instrumental and Expressive traits.

Keyes (1984) also studied the relationship between Instrumental and Expressive traits (PAQ-LF) and personal adjustment. Her subjects were 190 male and 191 females from two comprehensive secondary schools in Great Britain. Average age of the males was 16 (range 15-17) and of the females was also 16 (range 15-16). Subjects were predominantly from middle-class backgrounds.

Besides the PAQ-LF, Keyes (1984) used the TSBI and the short form of the General Health Questionnaire (GHQ; Goldberg, 1972), a measure of psychological well-being or malaise. EMS has been linked to psychopathology, which is similar to psychological well-being or malaise. She found that Androgynous males evidenced the highest levels of social self-esteem and the lowest levels of malaise, while Androgynous females showed the highest levels of social self-esteem. She also found the Androgynous and masculine-typed females (females having high Instrumental scores and low Expressive scores) had the lowest levels of malaise.

Johnson et al. (2006) studied masculinity (Instrumentality) and femininity (Expressiveness) and their relationship to several measures of psychological

well-being. Their subjects were university students from a large Northeastern university and comprised of 185 females (mean age 20.65, range 18-30 years) and 101 males (mean age 20.89, range 18-30). The sample was mostly white (2% minorities) and came from lower middle class to upper middle-class homes. They administered the Bem Sex-Role Inventory (BSRI; Bem, 1974) as a measure of self-reported gender attributes, the UCLA Loneliness Scale (Revised; Russell, Peplau, & Cutrona, 1980), which assesses feelings of loneliness, the Personal Discomfort subscale of the Minnesota Multiphasic Personality Inventory Social Introversion-Extroversion scale (Graham, Schroeder, & Lilly, 1971), used to assess participants' comfort in social situations, the Rosenberg Self-Esteem Scale, which assesses participant self-reported self-esteem (Rosenberg, 1965), and the Social Anxiety and Social Avoidance Scale (Franke & Hymel, 1984), which assesses participants' perceptions of comfort with social situations.

Johnson et al. (2006) found that participants with masculine and Androgynous orientations reported higher well-being scores than those with feminine and undifferentiated (low Instrumental and low Expressive) scores. When examining Instrumental and Expressive scores separately, Johnson et al. (2006) reported that

Instrumentality was positively and Expressiveness was negatively associated with reports of well-being in participants. Aube et al. (1995, as cited in Johnson et al., 2006) and Hunt (1993, as cited in Johnson et al., 2006) argue that possessing masculine (Instrumental) traits may be more psychologically adaptive by promoting a positive outlook and serving as a cushion against stressful experiences. Feminine traits are more associated with an emotional orientation. Conway states (2000, as cited in Johnson et al., 2006) that people with a more Expressive orientation may focus on and express more negative emotions, promoting negative perceptions of adjustment and well-being.

Woo and Oei (2006) also found a link between higher Instrumental scores and psychological well-being. They stated that previous research showing Androgyny as predicting psychological health was influenced by the Instrumental component of Androgyny (high masculine scores). Fifty-two male and 18 female Singaporeans (mean age 34.6) and 39 male and 68 female Australians (mean age 32.56) who were diagnosed with a variety of clinical disorders as classified according to DSM-IV (American Psychiatric Association, 1994) were recruited for their study. The authors stated that their sample was

ethnically diverse, but did not include ethnic percentages for their sample.

The majority of participants were high school graduates. All participants had at least nine years of formal education. Fifty-six participants were subsequently excluded because they didn't answer all of the items or produced Minnesota Multiphasic Personality Inventory-2 (MMPI-2) F-scale t scores greater than 100. They administered the MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989), focusing on the Ego Strength and Low Self-Esteem scales as measures of well-being, and the Gender-Masculine and Gender-Feminine scales of the MMPI-2 as measures of masculine and feminine traits (Woo & Oei, 2006).

They found that individuals classified as Instrumental or Androgynous had scores indicating greater psychological well-being when, compared to those classified as Expressive and undifferentiated. However, when controlled for masculinity, Androgyny did not add any further variance in the measures of well-being (Woo & Oei, 2006).

Woo and Oei (2006) explain their findings by saying that masculine attributes are more valued in society (especially Western society). Masculine attributes include

assertiveness, goal-directed behavior, environmental control, self-assurance, and boldness, while feminine traits are more emotional and nurturing.

Jones, Chernovetz, and Hansson (1978) in a series of studies (N = 1,404) examined the gender by sex-type (i.e., masculinity, femininity, and Androgyny) differences on a variety of psychological adjustment (i.e., self-esteem, neurosis, locus of control and helplessness) and other dispositional measures in several samples of undergraduate psychology students. All participants were classified into masculine, Androgynous (operationally defined as endorsing similar levels of Instrumental and Expressive traits), and feminine sex-type groups based upon their scores on the BSRI. In addition to the BSRI, several subsamples completed the Eysenck Personality Inventory (Eysenck & Eysenck, 1963), which measures neurosis and extraversion/introversion, the Rotter Internal-External Locus of Control Scale (Rotter, 1966), a problem with alcohol inventory (Manson, 1965) and a measure of self-esteem (Coopersmith, 1967). Jones et al. (1978) found that Androgynous males (AM) showed a greater externality of control, more problem drinking, and a trend toward greater introversion than masculine males (MM). Feminine males (FM) reported greater external locus of control,

more neuroticism, and lower self-esteem than MM. Additionally, FM reported a non-significant trend toward lower self-esteem and more neuroticism than AM. Overall, these findings suggest that less masculine sex-typed males reported more adjustment problems. Although sex-typed differences were less pronounced in females, masculine females (MF) reported more extraversion than Androgynous females (AF) and feminine females (FF). There was also a non-significant trend indicating that MF had more problems with alcohol than did AF. A separate sample of 156 students was also tested individually for learned helplessness. Masculine, Androgynous and feminine subjects were assigned randomly to three learning conditions in which they were (a) given an insoluble learning task (helplessness group), (b) given a similar but soluble learning task (soluble group), or (c) were shown the stimulus cards without completing a task (control group). Helplessness on a subsequent task was then measured. Contrary to expectations, there were no sex-type X learning condition interaction effects, however a main effect for sex-type revealed that AM made more errors and were slower to criterion than MM on all learning tasks. No other differences were reported.

In addition, those who filled out the biographical questionnaire completed the BSRI for a second time with instructions that subjects should specify the degree to which they would like to have more, less, or remain the same on each of the aspects of the BSRI. Both females and males of all sex-types indicated greater desired increases on Instrumental (masculine) than Expressive (feminine) items. The greatest change was desired by FM and FF. Jones et al. (1978) interpret this finding as not a desire to become more masculine, but a strong wish to increase their ability to act in a more Instrumental manner, such as being more assertive, more decisive, etcetera.

Jones et al. (1978) interpret their results as showing that those who exhibit masculine (Instrumental) traits obtain societal acceptance, support, respect, admiration, and so on. Feminine behaviors are thus devalued in society. (Perhaps this theory is less true in 2009 than it was 30 years ago.) They also question the traditional definition of Androgyny (scoring high in both Instrumental and Expressive traits) as being a measure of self-esteem rather than true Androgyny.

Logan and Kaschak (1980, mentioned previously) studied mental health differences due to gender attributes. They administered the BSRI (Bem, 1974) to

assess level of Androgyny (high levels of both Instrumental and Expressive qualities) as well as the self-acceptance and well-being scales from the California Psychological Inventory (CPI; Gough, 1974), the self-confidence and elation-depression subscales derived from the mood scales of Wessman and Ricks (1966), as well as depression and anxiety scales derived from a factor analysis of 60 mental health complaints reported by college students (Winer, Dorus, & Moretti, 1974). They found no significant relationship between Androgyny and the measures of psychological well-being.

Orlofsky and O'Heron (1987) also studied gender traits and personal adjustment. The PAQ (Spence & Helmreich, 1978) was used as a measurement of gender attributes, and the Monge (1973) Self-Concept Scale and the short form (A) of the Texas Social Behavior Inventory (Helmreich & Stapp, 1974) were used as measures of self-esteem and adjustment. Self-reported gender attributes were found to be related to self-esteem and adjustment, in that traditionally masculine (Instrumental) traits and behaviors were most positively related to self-esteem and adjustment, while traditionally feminine (Expressive) qualities do not relate to self-esteem and adjustment as much as do masculine qualities. Because they

found some support that feminine traits relate to self-esteem (though not as much as masculine traits do), participants that scored highly on both the Instrumental and Expressiveness scales (Androgyny) also show higher levels of self-esteem and adjustment, though not as highly as those having only high Instrumental qualities. They surmise that positive traditionally masculine traits and to some extent positively traditionally feminine qualities are similar to items on the self-esteem scales.

Hunt et al. (2006) also studied the relationship between suicidal behaviors and ideation and gender attributes. Participants were in a longitudinal study from the Central Clydeside Conurbation in Scotland and were in three age cohorts, those born in the early 1970s, the 1950's and the 1930s, aged around 15, 35, and 55 years when first studied in 1987-1988. Structured interviews were conducted by nurses trained in interview techniques and were given in 1987-1988, 1990-1991, 1995-1996, and 2000-2002, usually in the homes of the respondents. In 1990-1991, interviews included questions on suicidal ideation and significant suicidal thoughts. They further described their method as: "In 1995-1996, when the cohorts were aged around 23 (n = 676), 43 (n = 754), and 63 (n = 723), they were asked similar questions covering the

period from 1991 to the time of the interview" (Hunt et al., 2006, p. 644). Gender attributes were assessed using the Short Form of the BSRI (Bem 1981, as cited in Hunt et al., 2006, p. 644).

Hunt et al. (2006) found that Instrumental traits were not related to suicidal thoughts in the 1970s cohort. However, in the 1950s cohort, those with higher self-reported Instrumental traits were less likely to report suicidal thoughts. In the 1930s cohort, there was a trend toward those having Instrumental traits being less likely to report suicidal thoughts, but it fell short of statistical significance. Expressive traits were not related to suicidal thoughts in any of the cohorts. Hunt et al. (2006) surmise that those having more Instrumental traits have more "self-mastery and feeling(s) of control of one's life...and these characteristics are highly valued by contemporary western societies" (Hunt et al., 2006, p. 645). Young adults may not have this association because their sense of identity is not as strong or young people may not feel items in the BSRI are relevant to their lives (Hunt et al., 2006).

Spence, Helmreich, and Hollahan (1979) developed the Extended Personal Attributes Questionnaire (EPAQ), which measures both desirable and undesirable Instrumental and

Expressive traits. Two hundred twenty male 363 female students taking introductory psychology courses at the University of Texas at Austin completed the EPAQ. Also administered was the TSBI and a biographical questionnaire assessing psychological health, which included an acting out scale measuring current use of alcohol and drugs, property destruction, shoplifting, and other minor thefts during grade school, high school, and college, lying at the these age periods, verbal and physical fights at the three age periods, and school misbehavior in grade school and high school. The second scale derived from the biographical questionnaire measured neuroticism, and included measurements of depression, certainty of life goals, social and general life satisfaction, the voluntarily seeking of professional help for psychological problems and frequency of feeling nervous, tense, fearful and anxious. With all the undesirable questions Spence et al., (1979) asked of their participants, perhaps they should have administered a social desirability scale as well.

Results showed substantial positive correlations for both men and women between the positive masculine scale (M+) and self-esteem and lower but still highly significant positive correlations for men and women on the

positive femininity scale (F+) and self-esteem. In both sexes, the correlations between self-esteem and the negative masculine scale (M-) were close to zero, and substantially negative for the negative feminine (F-) scales. Spence et al. (1979) developed two F- scales, the F_c- scale, which measures unmitigated communion and includes the adjectives "spineless, servile, gullible, and subordinating self to others" (Spence et al., 1979, p. 1676), and the verbal passive-aggressiveness scale, F_{VA}-, which includes the adjectives whiny, complaining, fussy, and nagging.)

For neuroticism, the strongest correlation for both males and females was with the M+ scale (both correlations were negative). There was no significant correlation between F+ and neuroticism for both males and females. For women only, there was a small but significant positive correlation between M- and neuroticism. For the F_{VA}- scale and neuroticism, there were highly significant positive correlations in both males and females. For men only, there was a highly significant positive correlation between F_c- and neuroticism (Spence et al., 1979).

For the acting out variable, there was a significant small negative correlation for F+ in males. Both men and women had highly significant positive correlations between

M- and acting out. For males only, there was a significant positive correlation between F_{VA} - and acting out and a small but significant positive correlation between F_C - and acting out. All other correlations were nonsignificant (Spence, Helmreich, & Hollahan, 1979).

Finally, Whitley (1984) conducted a meta-analysis on the relationship between gender attributes and psychological well-being. He categorized studies as falling into one of three models - the congruence model, where psychological well-being is higher when self-reported gender attributes is congruent with one's gender, the Androgyny model, where well-being is higher when individuals report high scores in both Instrumental and Expressive traits, and the masculinity model, where well-being is linked to having high levels of Instrumental traits only. Measures of gender attributes included the PAQ and the BSRI, while well-being measures were measures of depression and general adjustment. Upon reviewing 32 studies, he concluded that the masculinity model was best supported by the studies, regardless of gender or the interaction of gender-by-gender attributes, though there was a smaller positive relationship between Expressiveness and adjustment. Whitley surmises that this is because those who score highly in Instrumental traits have strong

self-efficacy beliefs, while those who scored highly on Expressive traits may find interpersonal relationships as a source of reward.

In conclusion, the evidence of how gender attributes relate to well-being, adjustment, and self-esteem are unclear. It appears that those who report high Instrumental and low Expressive attributes (traditionally masculine individuals) or those reporting high levels of both Instrumental and Expressive values (Androgynous individuals) have greater levels of well-being. One study found no relationship between gender attributes and well-being (Logan & Kaschak, 1980), and one report partially supported the congruence model mentioned earlier (O'Connor et al., 1978).

CHAPTER TWO

HYPOTHESES

It was hypothesized that after controlling for social desirability, there will be significant EMS differences based upon gender, gender attributes and gender role attitudes and beliefs based on previous research indicated above.

Gender (Self-Identified) Hypotheses

It was hypothesized that gender would be predictive of the EMS of Abandonment/Instability, Dependence/Incompetence, Enmeshment/Undeveloped Self, Subjugation and Self-Sacrifice with females scoring higher than males on these EMS. Additionally, it was hypothesized that gender would be predictive of the EMS of Emotional Deprivation, Emotional Inhibition and Entitlement/Grandiosity with males scoring higher than females on these EMS.

Gender Role Beliefs (Egalitarianism) Hypotheses

Although no research has been done to date on the relationship between EMS and gender role beliefs, there are a few studies examining the relationship between gender role beliefs and psychological well-being, which as

mentioned previously has been linked to EMS. These studies have been equivocal. Therefore, it was hypothesized that for females, traditional gender role beliefs would be predictive of the EMS of Abandonment/Instability, Dependence/Incompetence, Enmeshment/Undeveloped Self, Subjugation and Self-Sacrifice. Likewise, it was hypothesized that for males, traditional gender role beliefs would be predictive of the EMS of Emotional Deprivation, Emotional Inhibition and Entitlement/Grandiosity.

Gender Attributes (Instrumentality and Expressiveness) Hypotheses

No research has been done on the relationship between gender attributes and EMS, but there have been some studies examining the relationship between gender attributes and psychological well-being, and these have also been equivocal. Therefore, based on the gender research, it was hypothesized that for all participants, the interaction of Expressiveness and Instrumentality would add explanatory variance above their main effects (i.e., higher culturally defined feminine [Expressive] traits and lower culturally defined masculine [Instrumental] traits would be predictive of the EMS of Abandonment/Instability, Dependence/Incompetence,

Enmeshment/Undeveloped Self, Subjugation and Self-Sacrifice). Likewise it was hypothesized that for all participants, higher culturally defined masculine [Instrumental] traits and lower culturally defined feminine [Expressive] traits would be predictive of the EMS of Emotional Deprivation, Emotional Inhibition and Entitlement/Grandiosity).

Androgyny Hypothesis

Lastly, it was hypothesized that for all participants, the interaction of Expressiveness and Instrumentality would add explanatory variance above their main effects (i.e., higher culturally defined masculine [Instrumental] traits and higher culturally defined feminine [Expressive] traits) would be more predictive of lower EMS in general.

CHAPTER THREE

METHOD

Participants

All participants were treated in accordance with the Ethical Principles of the American Psychological Association (American Psychological Association, 2002). A total number of 170 subjects participated in this study, 91 females and 79 males, satisfying a "rule of thumb...(that there should be) 10 to 20 participants for each independent variable" (Keith, 2006, p. 202). Some subjects were dropped in certain analyses because of incomplete questionnaires.

The sample consisted of students from California State University, San Bernardino (CSUSB) who were taking Social Science classes in 2009 or who picked up questionnaires at the Psychology Department's Peer Advising Center. The mean age of the students was 21.32 (range = 18-45, SD = 4.52). Self-reported participant ethnicity was 71 Latino, 49 Caucasian (White), 16 African-American, 14 Asian-American, 10 Bi-Cultural, one who did not report ethnicity and 9 other. (It was anticipated that the ethnic backgrounds of the sample would be more diverse than the average university, because

CSUSB has a large number of students from a Hispanic/Latino background.) Of those who reported Latino heritage, 55 of 71 indicated they were Mexican-American, four South American, two Central American, one Puerto Rican, three other, and 6 did not report their Latino heritage.

When asked what was the primary language spoken by their parent(s), 89 reported English, 42 reported Spanish, 27 reported other languages, and 12 did not report a language. When asked what their yearly income was, 70 reported \$0-\$14,999, 28 reported \$15,000-\$29,999, 19 reported \$30,000-\$44,999, 10 reported \$45,000-\$59,999, 13 reported \$60,000-\$74,999, 12 reported \$75,000-\$89,999, three reported \$90,000-\$99,999, eight reported over \$100,000, and seven did not report their income. (The median income range was \$15,000-\$29,999.)

The mean number of people living on the self-reported income reported above was 2.84 (range 1-9, SD = .2.01, 10 did not report the number of people living on the income above). The median highest level of college completed by parent(s) was some college. Fifty-eight participants reported that the highest education level of their parent(s) was some college, 31 reported high school diploma or GED, 24 reported college degree, 18 reported

post-graduate work, 17 reported some high school, 13 reported middle school, and nine reported grade school.

Materials

Informed Consent

A standard informed consent form was included at the top of the packet of questionnaires that informed the participant that these questionnaires were designed to assess different factors about the participant such as his/her beliefs, values and how he/she would describe him/herself in terms of gender, ethnic identity, attributes, beliefs, and self-construals. The informed consent also notified the students that the study has been approved by the Department of Psychology Institutional Review Board Sub-Committee at California State University, San Bernardino, how long it would take to complete the packet (approximately 1½ hours), that the participant would receive four units of extra credit if he or she wishes, that the study involves no risks beyond those routinely encountered in daily life, nor will there be any direct benefits to the participant other than the four units of extra credit. The informed consent stated that participation in the study would be anonymous, so the participant should not give any identifying information,

and the results of the study would be reported in group format only. If the participant wished to receive a report of the study results, he/she should contact Dr. Michael R. Lewin. Participation in the study was completely voluntary, and the participant was free to withdraw at any time during the study without penalty. The participant had to be at least 18 years old. The participant should place an "X" at the end of informed consent if he consents to participate.

Demographic Questionnaire

The demographic questionnaire asked the participant's age, gender and ethnicity (Asian/Asian-American, African American/Black, Caucasian/White, Native American/American Indian and Latino/Hispanic). A space was also included so participants can indicate specific ethnic origin or origins. In addition, the participants was asked to indicate the primary language or languages spoken by parents or primary caretakers, their yearly income (\$0-\$14,999, \$15,000-\$29,999, \$30,000-\$44,999, \$45,000-\$59,999, \$60,000-\$74,999, \$75,000-\$89,999, \$90,000-\$99,999, and over \$100,000) and the number of people living on the yearly income listed above. Finally, participants were asked to indicate the highest education level completed by his parent(s) or caretaker(s) (grade

school, middle school, some high school, high school diploma or GED, some college, college degree, or post-graduate).

Personal Attribute Questionnaire

The Personal Attribute Questionnaire (PAQ; Spence & Helmreich, 1978; Spence, Helmreich, & Stapp, 1975) was used to measure self-reported gender attributes. Although Bem's (1974) Sex Role Inventory (BSRI) has also been used as a measure of gender attributes, Helmreich et al. (1979) argue that not all of her inventory items are Instrumental or Expressive, the BSRI consists of four factors instead of two (Pedhazur & Tetenbaum, 1979, as cited in Hemreich et al., 1979), and that the BSRI in addition measures gender roles and behaviors rather than gender attributes alone.

The PAQ consists of 24 items which consist of trait descriptions set up on five-point Likert scales ranging from A to E, which is scored zero to four respectively, with some items reverse-scored. Eight items each are classified into three domains, the Instrumentality scale (PAQ-I; also known as the Masculinity scale), the Expressiveness scale (PAQ-E; also known as the Femininity scale), and the Instrumentality-Expressiveness scale, which will not be used for this study, thus the total

number of items administered was 16. Scores for each domain therefore ranged from zero to 32. Higher scores in the PAQ-I reflected more of an Instrumentality direction, while higher scores in the PAQ-E reflected more of an Expressiveness direction. Each item consists of a pair of characteristics anchored with the letters A to E. An example of a pair of characteristics scored for the PAQ-I scale is "Not at all independent (A) -Very independent (E)". An example of a pair of characteristics for the PAQ-E scale is "Not at all emotional (A) -Very emotional (E)". Interaction scores between the PAQ-I and the PAQ-E were also computed to indicate the degree of sex-type for participants.

Cronbach alphas have ranged from .67 to .83 for the PAQ-I scale and .73 to .85 for the PAQ-E scale (Anderson & Johnson, 2003; Helmreich, Spence, & Wilhelm, 1981; Markstrom-Adams & Adams, 1995; McCreary & Steinberg, 1992; Toller, Suter and Trautman, 2004). (In this analysis, the Cronbach alpha for the PAQ-I was .68 and was .75 for the PAQ-E.) In addition, there is considerable evidence for the construct and predictive validity of the PAQ scales (e.g., Helmreich, & Spence, 1978; Helmreich, Spence & Holahan, 1979; Klein & Willerman, 1979; Spence & Helmreich, 1978; Spence, Helmreich, & Holahan, 1979).

Sex Role Egalitarianism Scale

The Sex Role Egalitarianism Scale (SRES; King & King, 1993) was used to measure gender role beliefs and attitudes. This includes both male and female gender role beliefs and attitudes. Other surveys only examine female gender role beliefs, such as the Attitudes Toward Women's Roles scale (ATWR; Seginer, Karayanni, & Mar'i, 1990), the Attitudes toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973), and the long form of the Attitudes toward Women Scale (AWS-LF; Spence & Helmreich, 1972). The SRES was designed to measure both beliefs and judgments about the role behaviors of women and men. It was intended to "reflect...a bidirectional movement from traditional to nontraditional (egalitarian) gender roles" (King & King, 1993, as cited by King & King, 1997). Questions are classified into five domains: marital roles, parental roles, employment roles, social-interpersonal-heterosexual roles, and educational roles. Two alternate SRES abbreviated forms (BB and KK) were later constructed. These two forms each contain five items from each domain. The five items from each domain were chosen because they had the highest item-domain total correlations within their domains. King and King (1997) state that "the short form-full form correlations indicated that the abbreviated

versions of the SRES provide good approximation of the full scale measurements" (p. 74), though they do not include what the correlations are. [The SRES KK form was used for this study because of its higher internal consistency scores (King & King, 1997.)]

Instructions began with a neutral declaration that the instrument contains "statements about men and women". Respondents were asked to judge their extent of agreement or disagreement with each item. A sample item from the marital domain of form KK is "Things work out best in a marriage if a husband stays away from housekeeping tasks." The items are accompanied by a five-point Likert response scale, ranging from strongly agree (5) to strongly disagree (1). Items are scored such that higher values reflect a more egalitarian belief system. The authors recommend that only total scores across the 25 items be computed (King & King, 1997).

Strong internal consistency estimates for the SRES-BB and SRES-KK were reported. This includes .94 (King & King, 1997) and .89 to .97 (Berkel, 2004; King & King, 1997; Scandura, Tejeda and Lankau, 1995) for forms BB and KK, respectively. (In this analysis, the Cronbach alpha for the SRES-KK was .88) Tests were also done to establish that the SRES-BB was free from response bias, specifically

social desirability, and to establish its discriminant validity (Stith, 1986; Stith, Crossman, & Bischof, 1991).

Discriminative validity was tested between SRES-B and the PAQ by King, King, Carter, Surface, and Stepanski (1994). Though the correlations between the SRES-B and the PAQ-I and E scales were statistically significant (the sample size was large), the actual correlations represented were relatively low (.08 and .21, respectively).

Marlowe Crowne Social Desirability Scale

The Marlowe Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960) is currently the most common measure of non-pathological socially desirable responding (Leite & Beretvas, 2005). Consisting of 33 items, the MCSDS was used to measure whether participants tend to answer questionnaires in a socially desirable manner. Each item consists of a statement which the respondent rates as either true or false for him- or her-self. An example question is "I have never intensely disliked anyone". Kuder-Richarson internal consistency reported by Crowne and Marlowe (1960) is .88 and test-retest reliability of .89. Cronbach's alphas have ranged from .73-.83 (Strahan & Gerbasi, 1972). (In this analysis, the Cronbach alpha for the MCSDS was .79) Validity of the MCSDS was inferred by

correlating scores with the MMPI Lie scale (.54; Crowne & Marlowe, 1960). Since Latinos are the largest ethnic group in this study, and some research has shown that Latinos answer in a more socially desirable fashion than Euro-Americans (Booth-Kewley, Rosenfeld, & Edwards, 1992, using the Balanced Inventory of Desirable Responding; Ross & Mirowsky, 1984, using a shortened version of the MCSDS; Shultz & Chavez, 1994, using an 11-item survey similar to the MCSDS comparing participants filling out English versus Spanish versions of the questionnaire), differences in MCSDS scores among Latino and Caucasian groups were analyzed. Higher scores on social desirability by Latinos are thought to be the result of the cultural value Latinos have of *simpatia*, a wish for a smoothness of interpersonal relationships and the minimization of discord (Triandis, Marin, Betancourt, Lisansky, & Chang, 1982; as cited in Shultz & Chavez, 1994). However, other research, including Marin and Marin (1991; studied issues related to cigarette smoking and its relationship to a shortened version of the MCSDS), were not found to be influenced by social desirability.

Young Schema Questionnaire - Short Form

The Young Schema Questionnaire - Short Form (YSQ-SF; Young, 1998) is a 75-item self-report questionnaire

designed to measure the presence and severity of EMS. Higher scores indicate greater presence and/or severity of EMS. The YSQ-SF yields five domains and 15 schemas. As stated before, three of the original 18 schemas failed to emerge in factor analysis (Schmidt, Joiner, Young, & Telch, 1995) and have been omitted. These schemas are Approval/Recognition Seeking, Negativism/Pessimism, and Punitiveness. There are five questions for each schema, rated on a six-point Likert scale (1 = completely untrue of me to 6 = describes me perfectly). A sample question in the Emotional Deprivation domain is "Most of the time, I haven't had someone to nurture me, share him/herself with me, or care deeply about everything that happens to me." Adequate internal consistency of the schema subscales has been reported with Cronbach's alpha coefficients ranging from .71 to .96 (Welburn et al., 2002; Glaser, Campbell, Calhoun, Bates, & Petrocelli, 2002; Schmidt et al., 1995). (In this analysis, Cronbach alphas for the YSQ-SF ranged from .70 to .88 for each of the schemas to be tested, and .95 for the total YSQ-SF.) Construct validity of this measure has been demonstrated where all 15 of the EMS subscales were correlated with symptoms measures and accounted for statistically significant variance in

several measures of clinical symptomology (Glaser et al., 2002).

Debriefing Statement

A standard debriefing statement was included at the end of the questionnaire packet stating that the main objective of the study is to assess different factors about the participant such as his/her beliefs, values and how he/she would describe him/herself in terms of gender, ethnic identity, attributes, beliefs, and self-construals. The debriefing statement also notified the students that the study has been approved by the Department of Psychology Human Subjects Review Board at California State University, San Bernardino, the focus of the study was on all participants as a group and not on individual responses, and results would be analyzed on a group level. The statement again stated to the students to contact Dr. Michael Lewin if they have any questions or concerns, and that in the unlikely event that that the participant experiences distress from the study to contact Dr. Lewin, the CSUSB Counseling Center, or the Community Counseling Center. The participant was asked to not reveal details about this study to anyone who may be a potential participant, and will thank the individual for participating.

Procedure

Questionnaire packets were assembled with an informed consent letter on top and the debriefing statement at the end. The estimated time to complete the questionnaire packet was 1½ hours.

Prior arrangements were made to hand out questionnaire packets to students enrolled in Social Science classes. Students completed the questionnaire packet at home, and the packets were collected a week later. The participants were thanked for their participation, and extra credit was given if the student so desired.

CHAPTER FOUR

RESULTS

The following chapter contains results from testing whether the self-identified gender hypotheses, the gender role beliefs hypotheses, the gender attributes hypotheses, and the androgyny hypothesis, are predictive of EMS. Also, a social desirability t-test between Latinos and Caucasians was conducted. (Please see Appendixes for means, standard deviations, and correlations.)

Gender (Self-Identified) Hypotheses

All study hypotheses were tested utilizing hierarchical regression analyses with the MCSDS (measuring amount of socially desirable answers) entered in the first step and gender-related variables (dummy coded as females = 0 and males = 1 for the self-identified gender variable) entered in subsequent steps to determine if gender was predictive of the EMS scores of Abandonment/Instability, Dependence/Incompetence, Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Deprivation, Emotional Inhibition, Entitlement/Grandiosity, and Social Isolation/Alienation.

Of all the gender-EMS hypotheses, gender was a significant predictor of only the EMS of Self-Sacrifice

and Dependence/Incompetence. For the EMS Self-Sacrifice, social desirability was not a significant predictor [$F(1, 168) = 0.62, p > .05$], however, gender accounted for 7.0% of additional variance in the EMS of Self-Sacrifice [$F \text{ change}(1, 167) = 12.72, p < .05; \beta = -0.266$] with females scoring higher than males. Likewise, for the EMS Dependence/Incompetence, social desirability was not a significant predictor [$F(1, 168) = 3.16, p > .05$], however gender accounted for 2.6% additional variance in the EMS of Dependence/Incompetence [$F \text{ change} = (1, 167) = 4.53, p < .05; \beta = 0.162$] with males scoring higher than females (contrary to the hypothesis that females would score higher on Dependence/Incompetence).

In step one social desirability was a significant predictor of the EMS of Abandonment/Instability [$F(1, 168) = 6.67, p < .05; \beta = -0.195$] accounting for 3.8% of the variance. Thus those that scored higher in social desirability scored lower in Abandonment/Instability. However contrary to the study hypothesis, in step two gender did not add explanatory variance [$F \text{ change}(1, 167) = 0.37, p > .05$]. A similar pattern of results was found for the EMS of Subjugation and Social Isolation.

Although social desirability accounted for 6.2% of the variance in the EMS of Subjugation [F (1, 168) = 11.12, $p < .05$; $\beta = -0.249$], contrary to hypotheses gender did not predict the EMS of Subjugation [F change (1, 167) = 1.52, $p > .05$]. Again, although social desirability was a significant negative predictor of the EMS of Social Isolation accounting for 4.0% of the variance [F (1, 168) = 7.01, $p < .05$; $\beta = -0.200$], gender did not predict the EMS of Social Isolation [F change (1, 167) = 0.69, $p > .05$].

Neither social desirability nor gender predicted the EMS of Enmeshment/Undeveloped Self (social desirability: [F (1, 168) = 0.18, $p > .05$] and gender [F change (1, 167) = 0.12, $p > .05$]; Emotional Deprivation (social desirability: [F (1, 168) = 0.35, $p > .05$] and gender [F change (1, 167) = 2.42, $p > .05$], Emotional Inhibition (social desirability: [F (1, 168) = 1.61, $p > .05$] and gender [F change (1, 167) = 0.72, $p > .05$]; or Entitlement/Grandiosity (social desirability: [F (1, 168) = 1.07, $p > .05$] and gender [F change (1, 167) = 0.04, $p > .05$].

Gender Role Beliefs (Egalitarianism) Hypotheses

Females Only

Consistent with study hypotheses, in females, gender role beliefs were predictive of the EMS of Enmeshment/Undeveloped Self and Subjugation. Specifically, although social desirability did not account for variance in Enmeshment/Undeveloped Self [$F(1, 88) = 0.39$, $p > .05$], gender role beliefs accounted for 11.2% additional variance in the EMS of Enmeshment/Undeveloped Self [$F \text{ change}(1, 87) = 11.00$, $p < .05$; $\beta = -0.335$]. In particular, females endorsing traditional gender role beliefs were more likely to report higher Enmeshment/Undeveloped Self scores. Likewise, although social desirability did not account for explanatory variance in the EMS of Subjugation [$F(1, 88) = 2.06$, $p > .05$], gender role beliefs accounted for 5.8% additional variance in the EMS of Subjugation [$F \text{ change}(1, 87) = 5.45$, $p < .05$; $\beta = -0.240$]. Thus, females endorsing traditional gender role beliefs were more likely to report higher Subjugation scores.

Contrary to study hypotheses, in females, gender role beliefs were not predictive of the EMS of Abandonment/Instability, Dependence/Incompetence and Self-Sacrifice. Although social desirability accounted for

5.6% of the variance in the EMS of Abandonment/Instability, [$F(1, 88) = 5.19, p < .05; \beta = -0.236$], gender role beliefs did not add explanatory variance for the EMS of Abandonment/Instability [$F \text{ change}(1, 87) = 0.07, p > .05$]. Additionally, social desirability [$F(1, 88) = 0.46, p > .05$] and gender role beliefs [$F \text{ change}(1, 87) = 2.97, p > .05$] did not predict the EMS of Dependence/Incompetence. Likewise, social desirability [$F(1, 88) = 1.04, p > .05$] and gender role beliefs [$F \text{ change}(1, 87) = 0.02, p > .05$] did not predict the EMS of Self-Sacrifice.

Males Only

Contrary to study hypotheses, it was found that in males, gender role beliefs were not predictive of the EMS of Emotional Deprivation, Emotional Inhibition, and Entitlement/Grandiosity. Likewise, social desirability was also not a significant predictor of these EMS for males.

Specifically, social desirability [$F(1, 76) = 0.16, p > .05$] and gender role beliefs [$F \text{ change}(1, 75) = 1.65, p > .05$] did not predict the EMS of Emotional Deprivation. Also, social desirability [$F(1, 76) = 2.50, p > .05$] and gender role beliefs [$F \text{ change}(1, 75) < 0.01, p > .05$] did not predict the EMS of Emotional Inhibition. Likewise, social desirability [$F(1, 76) < 0.01, p > .05$] and gender

role beliefs [F change (1, 75) = 0.11, $p > .05$] did not predict the EMS of Entitlement/Grandiosity.

Gender Attributes (Instrumentality and Expressiveness) Hypotheses

It was also hypothesized that for all participants, the interaction (Interaction terms were the product of the PAQ-I and PAQ-E centered scores) of the PAQ Expressiveness scale (PAQ-E; also known as the feminine scale) and the PAQ Instrumental scale (PAQ-I; also known as the masculine scale) would add explanatory variance above their main effects in the prediction of EMS (i.e., that higher PAQ-E and lower PAQ-I scores would be predictive of the EMS of Abandonment/Instability, Dependence/Incompetence, Enmeshment/Undeveloped Self, Subjugation, and Self-Sacrifice). This turned out not to be the case, though there were some main effects (the PAQ-I and the PAQ-E individually predicted some of these five EMS).

As with all study hierarchical analyses, the MCSDS (social desirability) was entered in the first step. In these analyses, the PAQ-I and PAQ-E were entered simultaneously as a second step, and the interaction between the PAQ-I and the PAQ-E as a third step.

Social desirability accounted for 6.2% of the variance in the EMS of Subjugation in step one

[F (1, 167) = 11.08, $p < .05$; $\beta = -0.249$]. The PAQ-I and PAQ-E variables taken together accounted for an additional 13.6% of the variance of Subjugation in step two [F change (2, 165) = 13.98, $p < .05$], but this was due to the variance accounted for by the PAQ-I ($\beta = -0.389$, $p < .05$ and not the PAQ-E ($\beta = 0.064$, $p > .05$). Thus, lower Instrumental scores predicted higher Subjugation scores. Contrary to the hypothesis, in step three the interaction of the PAQ-I and PAQ-E did not add explanatory variance [F change (1, 164) = 0.02, $p > .05$].

Likewise, in step one social desirability accounted for 3.9% of the variance in the EMS of Abandonment/Instability [F (1, 167) = 6.69, $p < .05$; $\beta = -0.196$]. However, in step two the PAQ-I and the PAQ-E did not add explanatory variance [F change (2, 165) = 0.81, $p > .05$]. Contrary to the hypothesis, in step three the interaction of the PAQ-I and PAQ-E did not add explanatory variance [F change (1, 164) = 0.11, $p > .05$].

In step one, social desirability did not significantly predict the EMS of Dependence/Incompetence [F (1, 167) = 3.17, $p > .05$]. However, in step two both the PAQ-I and PAQ-E accounted for an additional 23.4% of the variance in Dependence/Incompetence

[F change (2, 165) = 25.90, $p < .05$] due to the reliable effects of both PAQ-I ($\beta = -0.443$, $p < .05$) and the PAQ-E ($\beta = -0.217$), $p < .05$]. Thus lower scores on either the PAQ-I or the PAQ-E predicted higher scores of Dependence/Incompetence. Again, contrary to the hypothesis, in step three the interaction of these two scales in predicting Dependence/Incompetence was non-significant [F change (1, 164) = 2.89, $p > .05$].

In step one social desirability was a non-significant predictor of Enmeshment/Undeveloped Self [F (1, 167) = 0.19, $p > .05$]. However, in step two the PAQ-I and PAQ-E accounted for an additional 9.3% of the variance in Enmeshment/Undeveloped Self after taking social desirability into account [F change (2, 165) = 8.51, $p < .05$] due to the reliable effect of the PAQ-I ($\beta = -0.322$, $p < .05$) and not the PAQ-E ($\beta = 0.006$, $p > .05$). Thus, lower scores on the PAQ-I predicted higher scores on the EMS of Enmeshment/Undeveloped Self. Contrary to the study hypothesis, in step three the interaction of the PAQ-I and the PAQ-E did not add explanatory variance [F change (1, 164) = 1.23, $p > .05$].

In step one, the effect of social desirability was non-significant in predicting EMS Self-Sacrifice scores

[$F(1, 167) = 0.61, p > .05$]. However, the PAQ-I and PAQ-E accounted for an additional 8.5% variance after social desirability was taken into account

[$F \text{ change}(2, 165) = 7.72, p < .05$] due to the reliable effect of only the PAQ-E ($\beta = 0.292, p < .05$) and not the PAQ-I ($\beta = -0.135, p > .05$). Thus, higher Expressiveness scores predicted higher scores on Self-Sacrifice. Contrary to the study hypothesis, in step three the interaction of the PAQ-I and the PAQ-E did not add explanatory variance [$F \text{ change}(1, 164) = 0.53, p > .05$].

It was hypothesized that for all participants, the interaction of the PAQ Expressiveness scale (PAQ-E; also known as the feminine scale) and the PAQ Instrumental scale (PAQ-I; also known as the masculine scale) would add explanatory variance above their main effects (i.e., that lower PAQ-E and higher PAQ-I scores would be predictive of the EMS of Emotional Deprivation, Emotional Inhibition, and Entitlement/Grandiosity). As with the PAQ results reported previously, this turned out not to be the case, though there were again some main effects (the PAQ-I and the PAQ-E individually predicted some of these three EMS). Social desirability did not appear to significantly affect these EMS.

In step one social desirability did not predict the EMS Emotional Inhibition [$F(1, 167) = 1.64, p > .05$]. After taking social desirability into account, in step two the PAQ-I and PAQ-E taken together accounted for 12.0% additional variance in the EMS of Emotional Inhibition [$F \text{ change}(2, 165) = 11.40, p < .05$], due to both the PAQ-I ($\beta = -0.178, p < .05$) and PAQ-E ($\beta = -0.306, p < .05$). Thus lower scores on either the PAQ-I and the PAQ-E predicted higher scores for the EMS of Emotional Inhibition. Contrary to the study hypothesis, in step three the interaction of the PAQ-I and the PAQ-E did not add explanatory variance [$F \text{ change}(1, 164) = 0.08, p > .05$].

In step one, social desirability was a non-significant predictor of Emotional Deprivation [$F(1, 167) = 0.36, p > .05$]. In step two the PAQ-I and PAQ-E accounted for an additional 4.4% in the variance in the EMS of Emotional Deprivation [$F \text{ change}(2, 165) = 3.77, p < .05$] due to the reliable effect of only the PAQ-E ($\beta = -0.213, p < .05$) and not the PAQ-I ($\beta = 0.09, p > .05$). Thus, lower Expressiveness scores predicted higher scores for the EMS of Emotional Deprivation. Contrary to the study hypothesis, in step three the interaction of the PAQ-I and the PAQ-E did not

add explanatory variance [F change (1, 164) = 0.85, $p > .05$].

In step one social desirability did not predict the EMS Entitlement/Grandiosity [F (1, 167) = 1.11, $p > .05$]. In step two the PAQ-I and PAQ-E did not add explanatory variance [F change (2, 165) = 0.25, $p > .05$] and contrary to the study hypothesis, in step three the interaction of the PAQ-I and the PAQ-E did not add explanatory variance [F change (1, 164) = 3.0, $p > .05$].

Androgyny Hypothesis

A hierarchal regression was used to determine whether those who score high in both Instrumental and Expressive attributes (also focusing on the interaction between the Expressive and Instrumental scales) scored lower overall on EMS.

In step one social desirability accounted for 4.0% of the variance in EMS in general [F (1, 167) = 6.92, $p < .05$; $\beta = -0.199$]. Thus those that scored higher on social desirability scored lower overall on EMS. In step two the PAQ-I and PAQ-E taken together accounted for an additional 6.0% of the variance in overall EMS [F change (2, 165) = 5.49, $p < .05$] due to the reliable effect of only the PAQ-I ($\beta = -0.208$, $p < .05$) and not the

PAQ-E ($\beta = -0.136$, $p > .05$). Therefore, those who scored lower on the PAQ-I scored higher overall on all EMS. Contrary to the study hypothesis, in step three the interaction of the PAQ-I and the PAQ-E did not add explanatory variance [F change (1, 164) = 2.78, $p > .05$].

Social Desirability T-Test between Latinos and Caucasians

Finally, a t-test was conducted to determine if Latinos had higher scores than Caucasians on social desirability, though no hypothesis was made for the results of this calculation. A t-test revealed no differences in social desirability between Latinos and Caucasians [$t(118) = -0.96$, $p > .05$].

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Overall, the results of this study provided only partial support for the effect of gender related constructs (i.e., self-identified gender, traditional gender role beliefs and gender attributes) upon the report of EMS. Furthermore, consistent with the equivocal results of the literature, the role of self-identified gender appeared to have a very limited effect on the report of EMS. For the first time in the literature, the relationship between traditional gender role beliefs and EMS were examined and results suggest a modest effect of traditional gender role beliefs upon the EMS of Subjugation and Enmeshment/Undeveloped Self for females only. Likewise, for the first time in the literature the relationship between gender attributes (Instrumentality and Expressiveness) and EMS was examined and results suggest that Instrumentality appears to be a more reliable predictor of wellbeing (i.e., EMS) than Expressiveness. However, contrary to study hypotheses, the interaction of Instrumentality and Expressiveness was not predictive of EMS. Thus no support for the notion that Androgynous individuals would report lower levels of EMS was found.

Self-Identified Gender Hypotheses

Although most self-identified gender hypotheses were not supported, support was found for the hypothesis that self-identified gender would be predictive of the EMS of Self-Sacrifice with females scoring higher than males. This result is consistent with the research of Reeves and Taylor (2007), Bendo (2001), Freeman (1998), and Welburn et al. (2002). Bendo (2001) speculates that the observed gender difference for the EMS Self-Sacrifice is due to Western culture's promotion of women to be empathic and emphasizes women's relationships with others as a mode of self-esteem. Likewise, Freeman (1998) argues that women primarily seek gratification through relationships and use more emotional coping strategies. He believes that society teaches women to be less assertive in having their own needs met and putting others' needs before their own. Welburn et al. (2002) agrees that women score higher on Self-Sacrifice because they are taught to put others' needs before their own. These ideas are similar with the nature of the EMS of Self Sacrifice in which persons with this EMS display a disproportionate focus upon meeting the needs of others to the detriment of one's own needs as a means of nurturing others or to mitigate feelings of guilt or selfishness (Young et al., 2003). Moreover, this EMS is

presumed to lead to resentment as the individual's needs are not met. It is therefore recommended that clinicians using the Schema Questionnaire exercise caution when interpreting high scores on the Self-Sacrifice EMS as this may be more normative and related to gender role socialization than a maladaptive schema. Conversely, the predictive nature of self-identified females and the higher EMS of Self-Sacrifice may be indicative of society's promotion of this EMS for females.

The data did not support the hypothesis that gender would be predictive of the EMS of Emotional Deprivation, Emotional Inhibition, and Entitlement/Grandiosity and that males would score higher than females. These findings appear to mirror the equivocal nature of the literature regarding self-identified gender differences and EMS suggesting that the few observed differences in the literature are unreliable and may depend upon the nature of the sample studied (e.g., psychiatric patients, substance abusers, college students, Christians at a religious conference) or that these findings are not universal. For example, Freeman (1998) also found that although females scored higher than males on a few EMS, males did not show higher levels of EMS when compared to females. He theorized that this might be because men are

socialized to play down their emotional difficulties and may underreport EMS, although results from the present study did not find a strong social desirability bias for males and report of EMS. The findings of this study are also contrary to that of Reeves and Taylor (2007), Bendo (2001), Brotchie et al. (2004), and Prince and Lewin (2008) who found that males scored higher than females on the EMS of Emotional Inhibition. Reeves and Taylor (2007) and Stallard (2007) who found that males scored higher on the EMS of Emotional Deprivation, and Stiles (2005) and Prince and Lewin (2008), who found that males scored higher than females on the EMS of Entitlement/Grandiosity.

Finally, self-identified gender accounted for unique explanatory variance of the EMS Dependence/Incompetence with males scoring significantly higher than females on this EMS. This finding is contrary to the study hypothesis that females would score higher than males on this EMS. This finding could be a statistical aberration, as this finding is the opposite of what was predicted and is not supported anywhere in the literature. Another possible explanation may be due to the cultural diversity of the sample with a larger Latino population compared to other studies. Latinos are more likely to hold a collectivistic view of relationships (Marin & Triandis, 1985, as cited in

Singelis, Triandis, Bhawuk & Gelfand, August 1995) and rely upon family and others for support more than other cultural groups. This would be consistent with the EMS of Dependence/incompetence where one believes he/she is not capable to meet daily responsibilities without a large amount of guidance from others (Young et al., 2003). A post-hoc T-test revealed significant differences between Latinos and Caucasians in the EMS of Dependence/Incompetence, with Latinos scoring higher on this EMS [$t(118) = 2.191, p < .05$] However, a post-hoc T-test for males only showed no significant differences between Latino and Caucasian men on the EMS of Dependence/Incompetence [$t(51) = -.890, p > .05$], thus not lending support for the theory that Latino males adhere to a more collectivistic viewpoint than Caucasian males. Future research may examine the interactive role of gender and ethnicity upon report of EMS.

In summary, consistent with the equivocal literature regarding self-identified gender and EMS, self-identified gender accounted for variance in the EMS of Self-Sacrifice with females scoring higher than males. This latter finding appears to be the only reliable self-identified gender difference in the literature (Reeves & Taylor, 2007; Bendo, 2001; Freeman, 1998; Welburn et al., 2002)

Gender Role Beliefs Hypotheses

Results of analyses examining the predictive relationship between traditional gender role beliefs and EMS revealed that for females, traditional gender role beliefs predicted the EMS of Enmeshment/Undeveloped Self and Subjugation only. This finding could be due to a primary focus on family and significant others at the cost of one's own individuality and needs that may be more common in women with traditional gender role beliefs: specifically, the EMS of Enmeshment/Undeveloped Self (where one feels dependent on others; Young et al., 2003) and Subjugation (surrendering control of one's life because one feels intimidated; Young et al., 2003). For example, in the SRES-KK, there is a question of level of agreement that "marriage will be more successful if the husband's needs are considered first" (scored in as a more traditional gender role belief). Additionally, this finding has limited indirect support in the literature where traditional gender role beliefs in women were associated with lower levels of well-being related constructs (Al-Darmaki, 1999; Logan & Kaschak, 1980; Kingery, 1985). However one study found no relationship between well-being and traditional gender role beliefs (Jackson et al., 1994). Hunt (2006) asserts that those

with traditional gender role beliefs may feel at odds with modern society, thus having lower levels of well-being.

Contrary to hypotheses, analysis of the data failed to demonstrate that traditional gender role beliefs in males were predictive of the EMS of Emotional Deprivation, Emotional Inhibition, and Entitlement/Grandiosity. This lack of support could be due to the speculative nature of these gender role belief hypotheses as there is no literature examining these constructs directly. Specifically, these hypotheses were generated based upon the equivocal self-identified gender findings in the literature. These results are consistent with Kingery (1985) in which a positive relationship between traditional gender role attitudes and depression was found in women but not men. However, Kingery (1985) explained her lack of findings in men may have been due to limited variability of men's traditional attitudes toward women. However, Orlofsky and O'Heron (1987) believe that gender role attitudes are independent of well-being. Jackson et al. (1994) agree with Orlofsky and O'Heron (1987) and propose that gender role attitudes and attitudes about the self are largely unrelated. Baker and Terpstra (1986) also found that well-being and gender role attitudes were unrelated. These equivocal results in the literature may

explain why only two EMS were related to traditional gender role beliefs of a total of eight that were hypothesized.

Gender Attributes Hypotheses

For all participants, the interaction of high PAQ-E scores and low PAQ-I scores were not predictive of the EMS of Abandonment/Instability, Dependence/Incompetence, Enmeshment/Undeveloped Self, Subjugation, and Self-Sacrifice. However, PAQ-I and PAQ-E main effects were found to be predictive of some of these EMS. Specifically, the PAQ-I and PAQ-E both were found to be negative predictors of the EMS of Dependence/Incompetence, where one feels helpless and unable to make everyday decisions (Young et al., 2003). The PAQ-I includes such negatively scored Instrumental item characteristics such as "Not at all independent", but the PAQ-E does not include adjectives relative to a negative prediction of Dependence/Incompetence. This study's results are similar to that of Spence, Helmreich, and Stapp (1975), where Instrumental and Expressive scores were positively related to self-esteem in both men and women. They conclude that having higher Instrumental and Expressive traits were culturally desirable, thus leading to higher self-esteem.

The PAQ-I by itself negatively predicted Enmeshment/Undeveloped Self (where one feels dependent on others; Young et al., 2003) and Subjugation (surrendering control of one's life because one feels intimidated; Young et al., 2003) as well. These two EMS are the opposite of the PAQ-I positively scored characteristics of "Very Independent" and "Can make decisions easily", for example. This result is consistent with the results of O'Connor et al. (1978), who found that high Instrumentality scores were positively related to self-esteem among men and women. This was also found in men and women by Johnson et al. (2006), who cited Aube et al.'s (1995) and Hunt's (1993) arguments that possessing Instrumental traits are more adaptive in today's society because they provide a more "can-do" outlook on life and soften the impact of stressful experiences.

Woo and Oei (2006) also found a link between higher Instrumental scores in men and women and well-being. They postulate that masculine attributes are more valued in today's society, especially in Western society, thus leading to higher levels of adjustment. Likewise, Jones et al. (1978) also explained his findings in men and women by stating that those showing Instrumental attributes gain social acceptance, while Expressive attributes are

devalued in society. Hunt et al. (2006) in their study of men and women also postulate that having Instrumental attributes is associated with more self-mastery and an enhanced sense of being in control of one's life. Whitley's (1984) meta-analysis of Instrumental and Expressive in men and women also found that high Instrumental attributes regardless of levels of Expressiveness was associated with well-being. Whitley (1984) explained that Instrumental attributes are likely associated with strong self-efficacy beliefs and thus enhance well-being. Orlofsky and O'Heron (1987) also found that Instrumental attributes were positively related to self-esteem and adjustment rather than Expressiveness attributes in men and women.

The PAQ-E significantly and positively predicted Self-Sacrifice (meeting others' needs at to the detriment of one's own; Young et al., 2003). An example item characteristic in the PAQ-E (scored positively) is "Able to devote self completely to others". This finding supports the research of Johnson et al. (2006), in men and women who found that Expressiveness was negatively associated with reports of well-being in subjects. Aube et al. (1995, as cited in Johnson et al., 2006) and Hunt (1993, as cited in Johnson et al., 2006) argue that

feminine traits are more emotional, and that individuals with a more Expressive orientation may focus more on negative emotions, thus experiencing lower adjustment and well-being (Conway, 2000, as cited in Johnson et al, 2006).

The interaction of high PAQ-I scores and low PAQ-E scores did not predict the EMS of Emotional Deprivation, Emotional Inhibition, and Entitlement/Grandiosity, though both these two individual scales did have an a main effect on Emotional Deprivation and Emotional Inhibition. The PAQ-E was a significant negative predictor of the EMS of Emotional Deprivation, the feeling that others will not provide emotional support (Young et al., 2003). An example of a positively scored characteristic on the PAQ-E is "Very aware of feelings of others". The findings of Spence, Helmreich, and Stapp (1975) partially support this study's results, in that they found Expressive scores were positively related to well-being in men and women, though they say there is a stronger relationship between Instrumental scores and well-being than between Expressive scores and well-being. These authors state that having both Instrumental and Expressive attributes are socially desirable. O'Connor et al. (1978), in his study on men and women found that Expressiveness was positively correlated

with well-being, but only among women. Spence, Helmreich and Hollahan (1979) also found a significant and positive relationship between Expressive attributes and well-being in men and women, but not as significantly positive as the relationship between Instrumental attributes and well-being.

Both the PAQ-I and the PAQ-E had a significant and negative relationship to the EMS of Emotional Inhibition, the inhibition of emotions and expressions (Young et al., 2003). This is similar to the PAQ-E item "Not at all emotional" (negatively scored). However, no items in the PAQ-I consistent with the definition of Emotional Inhibition are found. Again, this study's results are similar to that of Spence, Helmreich, and Stapp (1975); and Spence Helmreich and Hollahan (1979), where Instrumental and Expressive scores were positively related to self-esteem. They conclude that having higher Instrumental and Expressive traits were culturally desirable, thus leading to higher self-esteem.

Androgyny Hypothesis

It was hypothesized that Androgynous individuals (those with high scores on both the PAQ-I and the PAQ-E scales) would have lower EMS scores in total. The data do

not support this interaction hypothesis, however, the PAQ-I had a significant negative relationship to total EMS. The PAQ-I in general has many positive characteristics, so scoring low on the PAQ-I logically would lead to having higher total EMS. This partially supports the findings of Spence, Helmreich and Stapp (1975), however, it contradicts their supposition that Androgyny leads to higher well-being.

The results of this study are supported by Johnson et al. (2006), Woo and Oei (2006), Jones et al. (1978), Logan and Kaschak (1980), Orlofsky and O'Heron (1987), Hunt et al. (2006), and Whitley (1984). The majority of the literature indicates that Instrumentality is a strong predictor of psychological well-being, however, Expressiveness and Androgyny only have limited and equivocal support.

Social Desirability

The only EMS scales that were negatively related to social desirability were Abandonment/Instability, Subjugation, Social Isolation and total EMS. People seem to have a hard time admitting that they need others and are afraid of losing them. A sample question for the EMS

of Abandonment/Instability is "I find myself clinging to people I'm close to, because I'm afraid they'll leave me".

The EMS of Subjugation also negatively affected by social desirability. This sample was reticent about admitting they might be surrendering of control to others under perceived coercion. A sample question of the EMS of Subjugation is "I feel that I have no choice but to give in to other people's wishes, or else they will retaliate or reject me in some way".

In addition, the EMS of Social Isolation was also negatively affected by social desirability. People don't want to see themselves as not fitting in with others. An example of the EMS of Social Isolation is "I don't belong; I'm a loner".

The entire 15-tested EMS were negatively affected by social desirability as well. This is understandable, because many of the EMS test questions are maladaptive in nature, and not something people would like to admit.

Also tested were possible social desirability differences in Latinos and Caucasians. Latinos and Caucasians had no significant differences in social desirability scores. This result is supported by that of Marin and Marin (1991). This finding is contrary to Booth-Kewley, Rosenfeld, and Edwards (1992); Ross and

Mirowsky (1984); and Shultz and Chavez (1994). The lack of difference in social desirability scores between Latinos and Caucasians could be explained by the possible homogeneity of this sample (college student sample with similar ages, concern about appearances, values, etc.).

Conclusions, Limitations, and Further Research

Although social desirability appears to minimize the report of EMS in general and a few EMS specifically, the strength of the effect was modest and likely consistent with the effect of social desirability upon the report of psychological symptoms in general. The YSQ also appears to have a relatively limited gender bias. This implies that schema therapists and researchers can be confident that the YSQ is relatively free of gender and social desirability bias. The YSQ thus appears to be a promising scale for clinical groups with little evidence of reliable gender differences and thus appropriate for use with patients.

Some limitations of this study include the possible homogeneity of the sample (college students) which might limit generalizability to the community at large or clinical samples. Another limitation would be the reliance on self-report exclusively, which limits individual

recollection accuracy with no additional behavioral observations or other collateral sources of data which may have provided supplementary and valuable information.

Further research could study different or more heterogenic populations, larger samples, and/or include testing whether there are gender differences in EMS as a result of cultural and/or parental socialization practices versus a gender bias in the YSQ-SF scale. Also, additional research could investigate whether other attributes are linked to EMS or psychological well-being, such as ethnicity, or whether gender self-identification, gender attributes, and gender role beliefs vary by ethnicity. Other research could examine the effect of gender attributes on EMS in males versus females.

APPENDIX A

DESCRIPTIVE STATISTICS FOR SAMPLE MEN AND WOMEN

Descriptive Statistics for Sample Men and Women

Scale	Women			Men		
	n	mean	SD	n	mean	SD
A/I	91	10.56	6.29	79	9.86	4.87
SI	91	9.42	4.82	79	9.84	4.15
D/I	91	7.99	3.07	79	9.13	4.45
E/U	91	9.64	5.23	79	9.33	5.26
SUB	91	10.05	4.88	79	9.07	3.62
SS	91	17.78	6.38	79	14.73	4.79
ED	91	8.84	5.12	79	10.13	6.07
EI	91	10.78	5.43	79	11.43	6.03
E/G	91	13.92	5.53	79	14.03	5.36
PAQ-I	90	19.92	4.10	79	21.89	4.60
PAQ-E	90	24.30	4.10	79	22.10	4.66
SRES-KK	90	107.71	10.48	78	99.50	14.79
MCSDS	91	16.69	5.12	79	17.59	6.04
EMSTOTAL	91	166.25	45.57	79	166.87	46.09

SD = Standard Deviation, A/I = Abandonment/Instability, SI = Social Isolation, D/I = Dependence/Incompetence, E/U = Enmeshment/Undeveloped Self, SUB = Subjugation, SS = Self-Sacrifice, ED = Emotional Deprivation, EI = Emotional Inhibition, E/G = Entitlement/Grandiosity

APPENDIX B
FEMALE MEASURE CORRELATIONS

Female Measure Correlations

Measure	A/I	D/I	E/U	SUB	SS	ED	SI	EI	E/G	PAQ-I	PAQ-E	SR	MC
A/I	-	.11	.00	.44*	.38*	.43*	.37*	.17	.26*	-.10	-.04	.04	-.24*
D/I	.11	-	.56*	.59*	.20	.25*	.11	.18	.07	-.40*	-.05	-.18	-.01
E/U	.00	.56*	-	.45*	.32*	.29*	.24*	.30*	.16	-.24*	.10	-.34*	.13
SUB	.44*	.59*	.45*	-	.45*	.18	.18	.31*	.29*	-.39*	.09	-.23*	-.11
SS	.38*	.20	.32*	.45*	-	.27*	.27*	.29*	.37*	.01	.26*	.01	.14
ED	.43*	.25*	.29*	.18	.27*	-	.38*	.26*	.15	.06	-.27*	.04	-.07
SI	.37*	.11	.24	.18	.27*	.38*	-	.40*	.19	-.12	-.25*	.09	-.25*
EI	.17	.18	.30*	.31*	.29*	.26*	.40*	-	.28	-.11	-.27*	-.09	.02
E/G	.26*	.07	.16	.29*	.37*	.15	.19	.28*	-	.05	-.08	-.06	-.17
PAQ-I	-.10	.40*	-.24*	-.39*	.01	.06	-.12	-.11	.05	-	-.05	.19	.19
PAQ-E	-.04	-.05	.10	.09	.26*	-.27*	-.25*	-.27*	.08	-.05	-	.04	.33*
SR	.04	-.18	-.34*	-.23*	.01	.04	.09	-.09	-.06	.19	.04	-	-.06
MC	-.24*	-.01	.13	-.11	.14	-.07	-.25*	-.02	-.17	.19	.33*	-.06	-

A/I = Abandonment/Instability, D/I = Dependence/Incompetence, E/U = Enmeshment/Undeveloped Self, SUB = Subjugation, SS = Self-Sacrifice, ED = Emotional Deprivation, SI = Social Isolation, EI = Emotional Inhibition, E/G = Entitlement/Grandiosity, SR = Sex Role Egalitarianism Scale, MC = Marlowe Crowne Social Desirability Scale

* = $p < .05$

APPENDIX C
MALE MEASURE CORRELATIONS

Male Measure Correlations

Measure	A/I	DI	E/U	SUB	SS	ED	SI	EI	E/G	PAQ-I	PAQ-E	SR	MC
A/I	-	.41	.37*	.52*	.08	.55*	.36*	.39*	.33*	-.20	-.16	-.35*	-.14
DI	.41*	-	.57*	.63*	.12	.17	.40*	.45*	.14	-.59*	-.39*	-.46*	-.25
E/U	.37*	.57*	-	.55*	.21	.26*	.51*	.47*	.38*	-.36*	-.19	-.23*	-.19
SUB	.52*	.63*	.55*	-	.23*	.31*	.47*	.58*	.17	-.46*	-.34*	-.18	-.44*
SS	.08	.12	.21	.23*	-	-.05	.21	.27*	.19	-.06	.18	.23*	.02
ED	.55*	.17	.26*	.31*	-.05	-	.65*	.36*	.31*	-.01	-.10	-.15	-.05
SI	.36*	.40*	.51*	.47*	.21	.65*	-	.59*	.17	-.27*	.27*	-.06	-.16
EI	.39*	.45*	.47*	.58*	.27*	.36*	.59*	-	.38*	-.35*	-.36*	-.04	-.18
E/G	.33*	.14	.38*	.17	.19	.31*	.17	.38*	-	.00	.05	-.04	.01
PAQ-I	-.20	-.59*	-.36*	-.46*	-.06	-.01	-.27*	.35*	.00	-	.53*	.38*	.40*
PAQ-E	-.16	-.39*	-.19	-.34*	.18	-.10	-.27*	-.36*	.05	.53*	-	.45*	.42*
SR	-.35*	-.46*	-.23	-.18	.23*	-.15	-.06	-.04	-.04	.38*	.45*	-	.21
MC	-.14	-.25*	-.19	-.44*	.02	-.05	-.16	-.18	.01	.40*	.42*	.21	-

A/I = Abandonment/Instability, DI = Dependence/Incompetence, E/U = Enmeshment/Undeveloped Self, SUB = Subjugation, SS = Self-Sacrifice, ED = Emotional Deprivation, SI = Social Isolation, EI = Emotional Inhibition, E/G = Entitlement/Grandiosity, SR = Sex Role Egalitarianism Scale, MC = Marlowe Crowne Social Desirability Scale

* = $p < .05$

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