SELF CONSTRUAL AS A MODERATOR BETWEEN DIFFERENTIATION OF SELF AND TRAIT ANXIETY

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SELF CONSTRUAL AS A MODERATOR BETWEEN DIFFERENTIATION OF SELF AND TRAIT ANXIETY

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Bowen’s differentiation of self theory emphasizes differentiation of self as an important indicator of healthy functioning. This may depend, however, on culturally based variations in self construal as independent and interdependent. A sample of 368 ethnically diverse college students completed the Differentiation of Self inventory, the Self Construal Survey, and the State/Trait Anxiety Inventory. Four 2 X 2 analyzes of variance did not support an interaction effect. Means varied significantly by ethnicity ($p < .01$) and gender ($p < .01$), but not by self construal. Emotional cutoff and fusion with others, as aspects of differentiation of self, both had significant main effects on anxiety, so that higher scores indicated less anxiety (both $p < .01$). Independence also unexpectedly reduced anxiety ($p < .01$). Independence also correlated with emotional cutoff ($r = .19$) and fusion with others ($r = .28$). Other findings and suggestions for future research are discussed.
DEDICATION

To my three “perfect” children who spent a lot of time without a mother. They are my motivation for everything. I hope this time as thesis orphans teaches them to value education and hard work for themselves.
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Thank you to my mom who asked me every week if this was the semester I would finish, and my dad, who had no idea what he was getting into when he agreed to fund the whole thing.

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Traditional models of psychology advocate psychological separation and individuation as the primary developmental tasks an individual must accomplish to become an adult and healthy member of society (Erikson, 1950; Sampson, 1985; Freud, 1960; Hoffman, 1984). However, such emphasis on separation and individuality, often advocated in mental health treatment, is unique to the Western modern world. Other cultures, particularly Asian, do not view autonomy as such a desirable goal (Markus & Kitayama, 2003). Murray Bowen’s family systems theory differs from previous concepts of mental health, because he views the family structure as the emotional unit rather than the individual. This approach to therapy may be more applicable to clients of ethnic minority groups which highly value family and group identification. Research regarding cross cultural generalizability of family systems theory is sparse.

Bowen Family Systems Theory

Murray Bowen was a psychiatrist trained in psychoanalysis. He noticed similarities in the families of his schizophrenic patients. They contained an emotional intensity resulting in symbiosis of the family members. Rather than taking the traditional psychoanalytic view that behavior is driven by unconscious conflict between the id and superego, he maintains individuals must balance the forces of family togetherness with
individual autonomy. He labeled this process *differentiation of self* (Goldenberg & Goldenberg, 2004).

Bowen is among the first theorists to conceptualize the family, rather than the individual, as the emotional unit (Bowen, 1994). This approach looks at behavior as circular rather than linear (Sciara, 2001); therefore, it is more complex than the action-reaction relationship as proposed in behaviorism. Family systems theory views each behavior in relation to the individual’s role within the family and relationship to each other member of the system. It interprets behavior from a functionalist perspective, in which behavior is interpreted for its adaptive value in the context of the family, which functions in the context of the environment and the culture. Often, behavior that seems contradictory or destructive at the individual level can be constructive in the context and functioning at the family level. Some behavior may serve to regulate and protect the family system (Sciara, 2001). Thus, in family therapy, the identified patient represents a problem in the larger family system and treatment must be oriented toward that system and not solely the individual (Sampson, 1977).

Family is more complicated than a group of individuals. Sabatelli and Bartle (1995) define a family from the framework of family systems as: “a complex structure consisting of an interdependent group of individuals who (a) have a shared sense of history, (b) experience some degree of emotional bonding, and (c) devise strategies for meeting the needs of individual family members and the group as a whole” (p. 1027). The family structure consists of hierarchy, subsystems, boundaries and coalitions. Family
boundaries can be rigid, clear, or diffuse. Relationships between family members may be disengaged, normal, or enmeshed (Sciara, 2001).

Family systems theory describes family functioning in terms of eight interdependent concepts: differentiation of self, triangulation, nuclear family emotional system, family projection process, emotional cutoff, multigenerational transmission process, sibling position, and societal regression (Bowen, 1994). Each concept theoretically influences the others; however, research has shown more support for some of the concepts than others (Miller, Anderson, & Keala, 2004).

Anxiety is central to each of these concepts, functioning both as a product and creator of family imbalance (Bowen, 1994). Failure to balance the family’s needs for connection with the members’ needs for autonomy creates chronic anxiety in the system (Bowen, 1994). In contrast to acute anxiety, which generally occurs in response to real threats and is experienced as time-limited, chronic anxiety generally occurs in response to imagined threats and is not experienced as time-limited. People usually adapt to acute anxiety fairly successfully. Chronic anxiety often strains or exceeds people’s ability to adapt to it. According to Kerr and Bowen (1988), “acute anxiety is fed by fear of what is; chronic anxiety is fed by fear of what might be” (p. 113).

The central premise of Bowen theory is that psychological health and maturity is achieved through the resolution of all emotional issues with the family of origin. Low anxiety in the family, differentiation of family members, and good connections with family members leads to high functioning (Kerr & Bowen, 1988). Each family must seek
the appropriate balance between the autonomy and the connectedness of each family member. Failure to do so results in anxiety if family members become fused. Increased togetherness allows anxiety to flow freely from one family member to another (Bowen, 1994). Often this occurs in the form of triangulation in which undifferentiated family members draw in a third person to reduce anxiety in the dyad (Sciara, 2001).

**Differentiation of Self**

Though often classified as an approach to family therapy, one of Bowen’s eight concepts refers to the functioning of the individual. Differentiation of self represents the functioning of an individual within the family unit. Systems theory can be expanded to treat the individual based on the role in the family system (Sciara, 2001). While the other concepts relate to the functioning of the family, differentiation of self describes how the individual functions as a product of the family unit (Bowen, 1994). Family systems theory predicts the success and happiness of the individual based on the family’s level of cohesiveness and adaptability (Sciara, 2001). People who are poorly differentiated are overwhelmed by emotionality in their family relationships. This results in fusion or emotional cutoff. They remain stuck in their family of origin and have few firmly held convictions. They seek approval and acceptance over all other goals (Bowen, 1994). The level of differentiation of self determines the psychological, relational, and physical health of the individual. High differentiation of self is the optimal balance between the autonomy from the family and emotional connection to the family (Kerr & Bowen, 1988).
Differentiation of self operates as both a process and a personality trait. The process refers to the emergence of oneself from a multi-generational family system characterized by various levels of emotional attachments and projections of anxiety (Jenkins, Bulboltz, Schwartz, & Johnson, 2005). As a personality trait, differentiation occurs at varying levels of *intrapsychic* and *interpersonal* characteristics (Kerr & Bowen, 1988). The interpersonal level of differentiation of self can be further broken down into the *functional* and *basic* level of differentiation. The functional level varies according to circumstances. The Basic level is stable across relationships and circumstances (Kerr & Bowen, 1988).

High differentiation of self at the intrapsychic level indicates the ability to distinguish between thoughts and feelings and to make an explicit choice to be guided by one’s thoughts or emotions, rather than being emotionally reactive (Bowen, 1994). While differentiation is an intrapsychic concept, it differs from Freudian theory in the belief that conflicts exist in the family system between the value of the family as a whole and the needs of the individual, rather at the individual level between the conscious desires and unconscious desires (Kerr & Bowen, 1988). People who are highly differentiated at the intrapsychic level are able to shift between strong affect and calm, logical reasoning as needed. They are more flexible and cope better with stress because they operate equally well at both the emotional and rational levels. More differentiated persons are capable of taking an *I Position* in relationships. They maintain a clearly defined sense of self and thoughtfully adhere to personal convictions when pressured by others to do otherwise.
(Kerr & Bowen, 1988). In contrast, people who are poorly differentiated tend to be emotionally reactive and are unable to remain calm in response to the emotions of others. Their thoughts and emotions are fused (Bowen, 1994).

At the interpersonal level, differentiation refers to the ability to experience both intimacy and independence in relationships. There are two different ways people cope with low differentiation. In some cases high emotional needs of the family and insecurity prevent the development of individuality, which results in fusion with others (Kerr & Bowen, 1988). In other cases, the individual responds by withdrawing from the family. Complete lack of emotional connection to family results in emotional cutoff. These unresolved issues affect functioning in other relationships. According to this reasoning, independent individuals do not thrive without the correct amount of connection with others. While independence is hailed as a necessity of psychological health according to many views, research reveals possible negative outcomes such as alienation, (Gough, 1977), narcissim (Lasch, 1978), isolation (Bellah, 1985), and over consumption (Borgmann, 1992).

Empirical research on the importance of college students' attachment to parents also demonstrates that advanced development should include adaptive forms of connectedness. Lapsley, Rice, and Fitzgerald (1990) found that secure attachments in parent-adolescent relationships were predictive of adjustment to college. Two other studies (Quintana & Lapsley, 1987, 1990) showed that adolescents who were securely attached to parents and who received support from parents had advanced development in
ego identity. One exception to this trend was Rice, Cole, and Lapsley's (1990) finding that family cohesion was not significantly related to college adjustment. However, Rice et al. (1990) also found that while independence from parents was not related to college adjustment, positive separation feelings in parent and nonparent relationships were associated with adjustment.

Rather than independence, Quintana and Kerr (1993) found that student success in college was predicted by level of parental support, including needs for separateness, rather than level of independence. Women, in particular, were more likely to suffer symptoms of depression in response to independence resulting in isolation and lack of emotional support. Although indexes of connectedness and separateness may seem to be inversely related, Quintana and Lapsley (1990) have shown that supportive forms of connectedness and satisfying forms of separateness are positively interrelated. Instead of benefiting from independence over dependence, students appear to benefit from positive forms of separateness and positive forms of connectedness. The ideal arrangement appears to be a secure attachment to parents in which there is mutual trust, communication, and little conflict. In addition, students feel that their separateness and individuality are mirrored, acknowledged, and supported by their parents.

Differentiated individuals have flexible boundaries that allow intimacy without fear of loss of self (Bowen, 1994). At the lowest levels of differentiation individuality and togetherness are rigid so that togetherness resembles total fusion and individuality becomes total emotional cutoff. At the higher levels of differentiation togetherness
represents teamwork and individuality looks more like specialization (Home & Hicks, 2002). When overwhelmed by emotionality in their family relationships, poorly differentiated individuals tend to engage in fusion with others or emotional cutoff (Kerr & Bowen, 1988).

According to Bowen theory, highly fused individuals remain emotionally "stuck" in the position they occupied in their families of origin, have few firmly held convictions and beliefs, are either dogmatic or compliant, and seek acceptance and approval above all other goals (Bowen, 1994). Emotional cutoff is personified by the reactive emotional distancer, who appears aloof and isolated from others, tends to deny the importance of family, often boasts of his or her emancipation from parents, and displays an exaggerated facade of independence (Kerr & Bowen, 1988). Whereas the fused person tends to experience separation as overwhelming, the emotionally cutoff person finds intimacy profoundly threatening. Yet both individuals are poorly differentiated, basing self-esteem largely on the approval of others and generally conforming to those around them.

Theoretically, one's level of differentiation has a number of important consequences for an individual. Foremost, Bowen (1978) proposed that less differentiated individuals experience greater chronic anxiety: "The average level of chronic anxiety of a person and of a . . . family parallels the basic level of differentiation of that individual and family [and] the lower the level of basic differentiation, the higher the average level of chronic anxiety" (Kerr & Bowen, 1988, p. 115). According to Bowen, less differentiated individuals also become dysfunctional under stress more
easily and thus suffer more psychological and physical symptoms, such as anxiety, somatization, and depression (Kerr & Bowen, 1988).

Supporting Research

Considerable research supports the theory of differentiation of self. Larson and Wilson (1998) found anxiety regulates the impact of fusion in the family of origin on current career decision-making problems in young people. Griffin and Apostal (1993) tested the effect of relationship enhancement training on differentiation of self in a convenience sample of 20 couples and found training increased functional level of differentiation but not the basic level of differentiation. They found negative correlation between differentiation of self and anxiety.

Hanson (1998) found differentiation of self positively correlated with spiritual, physical, and psychological well being and negatively correlated with high levels of stress. Smith, Ray, and Weschler (1988) found that in a convenience sample of 106 undergraduate students, disabled students were more fused with their families of origin than non disabled students and students who scored high on fusion had poorer college adjustment regardless of the presence of a disability. Wichstrom and Holte (1995) compared 17 couples with schizophrenic children to 14 couples with non-schizophrenic children and 14 couples with children without any psychiatric disorders. They found parents of schizophrenics were more likely to be fused with their offspring.

A substantial amount of research supports Bowen theories but these studies rarely report ethnic demographics or properly represent minorities. Very little research has
explored whether ethnicity and culture affect the relationship between differentiation of self and anxiety. In a review of eight studies, Charles (2001) found considerable support for Bowen’s theories, especially the link between low differentiation of self and high chronic anxiety and low marital satisfaction. Each of these studies found support for Bowen theory, but lacked cultural diversity. Even the ethnic demographics of the sample used to develop the Differentiation of Self Inventory ranged from 82% to 90% Caucasian (Skowron & Friedlander, 1998).

Gender and Ethnic Differences in Differentiation

While some theorists accept family systems theory as universal, others claim there is insufficient evidence to support such a claim. Sciara (2001) argues the family systems approach strives to comprehend the individual in the context of the family but has failed to extend the perspective to the context of culture. Bowen theory is also criticized for embracing a conservative political agenda oppressive to women and minority groups, as evidenced by issues such as mother blaming and ascribing healthy attributes only to characteristics for which males are socialized (Knudson-Martin, 1994). Bowen argued that his theory was universal (Bowen, 1978). He stated that it applied "in all families and in all cultures" (Kerr & Bowen, 1988, p. 202). One issue of universality is the ability of the theory to explain family emotional processes that are appropriate for both males and females. Others have criticized his theory for "overvaluing stereotypically male characteristics" (Knudson-Martin, 1994, p. 35).
Several studies have compared men's and women's levels of differentiation, but the results have been inconsistent. Haber (1993), using the Level of Differentiation of Self Scale, found no gender differences in mean levels of differentiation. Research examining gender differences with the DSI also found no differences in the overall level of differentiation (Elieson & Rubin, 2001; Skowron & Friedlander, 1998), but women had higher levels of emotional reactivity (Skowron & Friedlander, 1998; Skowron & Schmitt, 2003), and were less able to take an I position (Skowron & Schmitt, 2003). There were no differences in fusion with others (Skowron & Schmitt, 2003). These results provide preliminary evidence that, although there are gender differences in some components of differentiation, there are no differences in the overall levels of differentiation.

As Bowen predicted, both males and females with low levels of differentiation are more likely to experience psychological problems and marital distress. Several studies have found that the influence of differentiation on marital distress is significant for males and females (Haber, 1990; Skowron, 2000). Likewise, the psychological well-being of males and females is affected by levels of differentiation (Skowron & Friedlander, 1998).

Very little research has examined cultural or ethnic differences in differentiation. While considerable research supports the college years as a crucial transition toward autonomy and an independent identity as an adult (e.g. Gushue & Constantine, 2003), these studies are often conducted with predominantly Caucasian samples (Miller,
Anderson, & Kaela, 2004). Studies with Asian populations have not produced the same findings (e.g. Ying, Coombs, & Lee, 1999; Stewart, Bond, Deeds, & Chung, 1999). This research suggests the process of individuation may be different in Confucian-based collectivist cultures, such as China and Japan, due to the emphasis on family ties, conformity and interdependence. These cultures do not place the same value on separation from family of origin (Tang, 1992). Many of these views are maintained and passed down in families with collectivist values. Tang (2002) found many Asian Americans derive a greater sense of psychological security from their obedience to and dependence on parents, rather than independence.

Triandis (1989) recognizes that people of different cultures view themselves differently and classifies cultures as either individualistic or collectivistic. He argues each person consists of three aspects of the self: the private self, the public self and the collective self. The private self involves cognitions in relation to traits, states, or behaviors of the individual. The public self represents a generalized other’s view of the individual. Finally, the collective self comprises a view of self that exists in a collective.

Everyone contains these three aspects of self. However, the degree to which an individual draws from each aspect, and under which circumstances, varies by culture. Cultures in which the people tend to draw primarily from the private self tend to be individualist in nature. Meanwhile, cultures in which the people tend to draw primarily from the collective self tend to be more collectivist in nature (Singelis, 1994).
These conceptualizations of self are deeply imbedded in the history, religion, and traditions of the people. Asians cultures exemplify collectivism. For example, the Chinese virtue of *jen* emphasized in Confucian teachings, implies the ability to interact with fellow beings in a way that is sincere, polite and decent. In Japan, the word for self is *jibun* which defines one’s portion of the communal life space (Chao & Tseng, 2002). It is imperative not to disturb the *wa*, which is the continual ebb and flow of interpersonal relationships. In Thailand, self-effacement, humility, deference, and harmony with others are considered virtues.

Significant variation has been reported across ethnic minority and White cultural groups regarding the relative balance of intimacy and autonomy among late adolescents’ relations with their parents (Skowron, 2004). Kenny and Perez (1996) found that parental attachment characterized by both the experience of positive affect and sufficient support for autonomy predicted fewer psychological symptoms in African, Asian, and Latino/a American college students, than in Caucasian students.

Autonomy expectations among Asian adolescents and their mothers residing in China appear much later than those of mother-adolescent pairs who are White (Stewart et al., 1999). Asian American adolescents continue to value deference and respect toward parents over strivings for separation and individuation (Ying et al., 1999). In Japan, parents try to teach *sunao*, which involves suppressing autonomy for the sake of cooperation. Rather than a denial of the self or weakness, cooperation is highly valued as a sign of tolerance, self control, and maturity. The self is realized in relation to such
interactions with others (Jose, Huntsinger, Huntsinger, & Liaw, 2000). While Americans say “the squeaky wheel gets the grease,” in Japan, “the nail that sticks out gets pounded down” is a common expression (Markus & Kitayama, 1991, p. 224).

Other cultures also uphold high collectivist values. Hispanics place a high value on *simpatico*, sharing and respecting the feelings of others (Triandis, Marin, Lisansky & Betancourt, 1984). Indians regard responsiveness to the needs of others as an objective moral obligation (Miller, Bersoff, & Harwood, 1990). The Hindu religion advocates interpersonal fusion and defines separation from others as a personal sense of hell (Marriot, 1976). Many African tribes view themselves in connection with nature and each other (Beattie, 1980). Giordano, Cernkovich, and DeMaris (1993) found late adolescent African Americans reported higher levels of intimacy with their parents than their White peers.

Not all of the cultural research on differentiation of self has found cultural group differences. Tuason and Friedlander (2000) studied a Philippine sample in an attempt to replicate Skowron and Friedlander’s (1998) findings regarding the relationship between differentiation of self and psychological distress. They hypothesized that Filipino values that emphasize the importance of family are seemingly contradictory to Bowen’s construct of differentiation and would likely result in fusion with others being less predictive of psychological distress. Rather, fusion with others may be a source of strength in Filipino culture due to its roots in collectivism. This hypothesis was not supported. They found no significant differences between the scores and relationships in
the Filipino sample from the primarily Caucasian sample used by Skowron and Friedlander. They concluded that despite higher collectivist values, Filipinos must also achieve a healthy level of differentiation very similar to that of Caucasians.

This belief is supported by the work of Gushue and Constantine (2003), who found that African American women who scored higher in individualism, had higher $I$ positions, lower emotional cutoff and less chronic anxiety. The women who scored higher in collectivism had lower scores of emotional reactivity and fusion. While Bowen’s theories were supported by the fact that these women exhibited the same relationship between anxiety and differentiation of self, the presentation of the relationship was unique to this population. Collectivist values increased fusion in this population, however, it did not result in the same levels of anxiety as reported in individualists.

In 2004, Skowron conducted a study to explore the relationship between Differentiation of Self and personal adjustment in ethnic individuals. She compared the Differentiation of self scores from a sample of 61 undergraduate and graduate students enrolled at a large, urban university to the results of students of European American students from a concurrent study by Skowron, Wester, and Azen, (2004). She found no significant difference in scores between the two samples. Findings support the generalizability of family systems concepts across ethnic groups.

Skowron’s (2004) study also showed a relationship between ethnic identity and differentiation of self in which greater feelings of belonging to one’s ethnic group
correlated positively with scores of differentiation of self. Additionally, people with more positive attitudes toward, and stronger ties with their own ethnic group were less emotionally cut-off in their relationships. People with the greatest psychological adjustment were least emotionally cut-off and more comfortable with connections to family and important others, regardless of ethnicity. They were also more able to take I positions in important relationships (Skowron, 2004).

*Cultural Issues in the Delivery of Therapy Services*

Despite the growing body of psychological and anthropological evidence that people hold divergent views about the self, clinical and counseling psychology has not kept pace with the alternate views of self held by psychotherapy clients (Leong & Ponterotto, 2003). Mental health is based in Western medicine. The first forms of biological psychiatry, in the mid-19th century, and the beginning of psychotherapy, at the end of that century, both originated in Europe (Benjamin, 2001). Therapists, regardless of ethnicity and culture, are trained to treat clients according to theories developed and validated on predominantly male Western populations. The process of socialization proceeds from embeddedness in the family, peers, and other collective settings toward development of autonomy (Sampson, 1977). Thus, most clients of psychotherapy are treated according to the view an individual should be independent, self contained, and autonomous (Markus & Kitayama, 1991).

Meanwhile, a decreasing proportion of the United States population shares this European origin. Racial and ethnic minorities in the United States are underrepresented
in most mental health services, predominantly because they are less likely than Whites to seek mental health treatment (Benjamin, 2001). Zhang, Snowden, and Sue (1998) found only 3.76% of Asians surveyed had spoken to a mental health specialist in the past six months compared to 25.66% of Caucasians.

The primary barriers to mental health services include the cost of care, societal stigma, and the fragmented organization of services. Additional barriers include clinicians’ lack of awareness of cultural issues, bias, or inability to speak the client’s language, and the client’s fear and mistrust of treatment. More broadly, disparities stem from minorities’ historical and present day struggles with racism and discrimination, which affect their mental health and contribute to their lower economic, social, and political status (Sue, 2003).

When members of an ethnic minority group seek treatment they frequently have much higher attrition rates than Whites. A lack of cultural sensitivity may lead minorities to feel misunderstood by therapists, leading to early termination. Many therapists are unaware of ethnic differences and unprepared for treating clients with diverse backgrounds (Sue & Sue, 2003; Sue, Bingham, Porche-Burke, & Vaquez, 1999; Alvidrez, Azocar, & Miranda, 1996; Hohmann & Parron, 1996). Many therapists do not understand how frequent components of mental health may vary among clients. While elements of mental health may be identifiable, mental health itself is not easy to define more precisely because any definition is rooted in value judgments that may vary across individuals and cultures.
Despite the increasing variety of family structures and the increase in culturally diverse immigrants to the United States, little research has examined self construal and differentiation of self in these populations. While ethnicities may be classified as promoting a culture that is either independent or interdependent, individuals, as members of an ethnic group, vary in their self construal (Markus & Kitayama, 1991).

People of all nationalities need to develop a sense of the self. Given that these messages vary greatly by culture, culture has a significant influence on different concepts of the self. Markus and Kitayama (1991) propose the individual is shaped in accord with cultural concepts and social situations. They label these differences self construal.

**Self Construal**

Self construal refers to the way individuals view themselves in relation to others (Kitayama & Markus, 1995). People differ, often according to ethnic group, in the extent to which they view themselves as separate from others versus connected with others. The self is made up of a combination of messages regarding behavioral norms, assumptions, beliefs, and ideas of how to live a good life, how to be a moral being, or simply, how to exist (Markus & Kitayama, 1991).

In general, people of American and Western European cultures are primarily independent in self construal. The self is viewed as an independent entity with considerable unique features and existing separately from context (Markus & Kitayama, 1991). Focus is directed toward one’s internal attributes, preferences, traits, and abilities. A healthy person expresses ones unique qualities, strives for personal self actualization
and promotes ones individual goals (Kitayama & Markus, 1995). While relationships are important in the independent self construal, they serve to evaluate and praise the self rather than existing as part of the self. Therefore, autonomy from family of origin is an essential indicator of healthy development into adulthood.

In contrast, interdependent self construal is characteristic of Asian, African, Latin and southern European cultures. The interdependent view considers the individual in context with others. The hallmark of healthy growth is the fundamental connectedness of human beings (Kitayama & Markus, 1995). A healthy interdependent individual must adjust oneself to fit in and maintain balance within a group. Focus is on duties, obligations, and social responsibilities. Markus and Kitayama (1991), define interdependence as “seeing oneself as part of an encompassing social relationship and recognizing that one’s behavior is determined, contingent on, and, to a large extent organized by what the actor perceives to be the thoughts, feelings, and actions, of others in the relationship” (p. 227). Unlike an independent self construal where an individual is motivated by the need to express internal attributes of the self, people with this view seek to fulfill and create obligation in various interpersonal relationships. Levels of separation and independence valued in independent individuals are likely to provoke anxiety in individuals raised to value the psychological bond of interdependence (Choi, 2002).

Self construal can be viewed as a cultural schema that occurs as a result of socialization in a particular culture. It serves as a frame of reference to how each culture operates. Thoughts, feelings, and behavior are all organized in reference to the individual
or others. The cultural schema of independence fosters the elaboration of internal attributes and the sense that one is different and better than others, whereas the schema of interdependence fosters the sense of one’s similarity and connection to others (Kitayama & Markus, 1995).

Research by Trafimow, Triandis, and Goto (1991) found support for different views of self. On a sentence completion task, Chinese students responded with more collective responses than North American Students. They also suggest collectivists are more apt at alternating between the two types of self. When primed with an individualistic stimulus, Chinese students gave more individualistic responses than those who received a collectivist prime.

Most commonly an individual’s self construal corresponds to the values of their society. People in collectivist cultures tend to be higher in interdependent self construal; people in individualist cultures tend to be higher in independent self construal (Markus & Kitayama, 2003). But self construal is different than culture or collectivism, because it refers to the degree to which the individual, rather than the group, views the self (Markus & Kitayama, 1991). Individuals within a culture can vary greatly in self construal.

**Consequences of Self Construal**

Construal of the self, of others, and of the relationship between self and others may have a powerful influence on the nature of the individual experience (Grace & Kramer, 2003). Therefore, cognition, and motivation are all influenced by construal of the self. Interdependent self construal results in cognition that is more attentive and
sensitive to others and is more attuned to the specific social context, both of which affect cognitive activities such as categorizing and counterfactual thinking (Markus & Kitayama, 1991).

These different views affect causal attribution. Shikanai (1984), found college students in the United States are most likely to attribute success to internal attributes such as ability and effort, but attribute failures to external factors such as difficulty or absence of luck. This attributional pattern works to enhance self-esteem. In contrast, college students in Japan tend to attribute success to external factors such as ease or luck, and contribute failures as lack of effort.

These different schemas also result in differences in social comparison. Global self evaluation among Whites is strongly influenced by a desire to maintain a positive self concept. For example, Alicke (1995) completed a series of seven studies which found the majority of participants rated themselves as more intelligent, dependable, polite, grateful, responsible, rational, cooperative, mature, humorous, and well adjusted than their peers. In another social comparison study, Schwartz and Smith (1976) asked participants in the United States to rate the validity of an intelligence test. Subjects received feedback about their own performance and the performance of another subject. The direction of the self-other difference and the magnitude were systematically varied. Subjects showed rated the validity much higher when the comparison was favorable and questioned the validity when the comparison was unfavorable. Takata (2003) replicated this study with Japanese participants and found the opposite results. The respondents
rated the test positively if feedback on their performance was unfavorable, but requested more information regarding the test and the results if they performed better than the rival. Takata labeled this tendency *self harmonizing* and concluded both groups of students were more inclined to accept information consistent with their values of the self.

Several studies have reported lower self esteem in Japanese students than American students. Singelis, Bond, Sharkey, and Lai (1999), found that regardless of ethnicity, students in Hong Kong, Hawaii, and the mainland United States who scored higher in interdependent self construal also scored higher in embarassability and lower in self esteem. Independent self construal had the opposite outcome. Ethnicity also contributed to embarassability and self esteem, but self construal had a significant impact on its own.

Gaertner, Sedikides, and Chang (2008), argue that self enhancement is a universal phenomenon, but, like many concepts, differs cross culturally. People with interdependent self construal maybe less likely to argue that they are smarter, more attractive, or more capable than their peers, but they are more likely to view themselves as more cooperative, more considerate, or more modest. Further, they find the same relationship between self enhancement and psychological adjustment. The same relationship exists, but varies cross culturally by which traits are considered valuable.

Self construal also influences emotion, particularly the degree to which one experiences ego focused emotions versus other focused emotions. Ego focused emotions, such as anger, frustration, and pride, refer to the goals, desires, needs and abilities of the
individual. These emotions are often expressed publicly, confirmed in private, and serve as a source of motivation for behavior. Other focused emotions, such as sympathy, communion, and shame, refer primarily to the other, or the in group. While such emotions are often viewed negatively by individuals with independent self construal, expression of these emotions among people with interdependent self construal indicates good intentions, and leads to cooperative behavior, which further validates the interdependent self.

The study of motivation has long assumed people initiate, terminate and persist in specific actions in particular circumstances due to some internal need or motive. However, an individual with an interdependent self construal is more likely to be motivated in reference to the other or the social. While independent individuals will be experienced in expressing internal attributes and withstanding social pressures, interdependent individuals are more likely to be receptive to others, adjust to the situation, and restrain their own internal needs and desires (Cross & Madison, 1997).

However, the self is not only an important influence on social behavior but also largely a social product. The self continually and dynamically takes form through one's interactions with close others and the social world. In families, schools, workplaces, and other social environments, individuals are told who they are, who they should be, and how to create an identity. Individuals actively construct a self as they participate in their social environments; the self, in turn, facilitates engagement in and adaptation to these environments (Cross & Madson, 1997). In short, the self negotiates the interaction
between the person and society. However, viewpoints about the nature of the self vary substantially around the world, resulting in very different models of the self.

In addition to variation by culture, self construal may vary by gender. Some have argued that the independent self construal describes men in U.S. culture better than many U.S. women (e.g., Gilligan, 1982; Sampson, 1988). Multiple social influences promote independent ways of thinking, feeling, and behaving for men and relational ways of thinking, feeling, and behaving for women. For example, parents discuss emotion more with their preschool daughters than with their preschool sons, so they may differentially emphasize the importance of sensitivity to the feelings of others to their daughters and sons (Dunn, Bretherton, & Munn, 1987).

In later childhood, parents' beliefs about gender roles influence their choice of household tasks for their children: Girls are more often assigned to child care than are boys, whereas boys are more often assigned to tasks that take them out of the house and allow them more freedom and independence. After childhood, women and men continue to participate in cultural gendered social roles, experiences, and occupations, reinforcing the different skills and abilities developed by women and men. For example, women in U.S. society are more likely to be responsible for raising children and more often found in care giving positions than are men. Women, therefore, tend to develop nurturance and relatedness, provide more social support to others and are more often viewed as responsible for maintaining relationships (Cross & Madson, 1997). In other words, men and women live within contexts of independence or interdependence, respectively.
Consequently, their goals, activities, plans, interactions, values, and self-systems are continually shaped by these contexts.

*Relationship between Independent and Interdependent Self Construal*

Independence and interdependence are not categorical. Nor do they form a singular bipolar dimension. Rather, each exists on its own continuum. This model does not presuppose the development of oneself to the exclusion of the other. Circumstances, such as having parents from different cultures or moving between two cultures, may contribute to the development of the two selves (Singelis, 1994). Bhawuk and Brislin (1992) argue that the ability to modify behavior according to context is evidence of the exclusivity of the constructs. Cross and Markus (1991) found East Asian students had more developed interdependent self construal than their American counterparts, but were similar in their independent self construal. They also found that the students who scored high in both views reported less stress. Thus, each scale is independent from the other. An individual can score high or low on one or both aspects (Yamada & Singelis, 1999). He or she can choose which self to select from according to the situation.

*Impact of Self Construal*

Isomorphic attribution refers to the ability to interpret behavior according to the same cultural assumptions (Singelis, 1994). This is practically an automatic task when the two individuals are similar in self construal, but this is rarely the circumstance. Lack of isomorphic attribution can lead to misinterpretations of behavior (Markus & Kitayama, 2003). For example, people of Asian descent have been accused of lacking significant
agency, personal desire, intentionality, individuality, and self esteem. However, in collectivist cultures individuals view the ability to assign individual goals as secondary. Interdependent selves contain the same personal attributes as independent selves, but these attributes are considered less important in regulating behavior and not particularly diagnostic of the self. Control of the inner attributes and ability to maintain connections with others is a sign of maturity in such selves (Markus & Kitayama, 1991). If the United States had historic and cultural basis that was more interdependent in nature, high individuality might be seen as alienating and opposed to social integration (Sampson, 1977).

An interdependent sense of self does not entail a merging with others. Nor does it imply the people do not have a sense of personal agency or cannot function independently. Instead, it portrays a powerful self control to adapt one’s behavior in accordance with situations and the needs of others (Markus & Kitayama, 1991). This is not to say independence does not exist in these cultures. Instead, independence when practiced in Japan will necessarily be different from independence in the United States.

Current Study

Bowen suggested that high differentiation of self is the result of maintaining the optimal balance between autonomy and connection (Bowen, 1994). While the concept of differentiation of self was initially formulated from the experience of European American families, it appears this approach may also be applicable to other cultural groups that hold alternate views of the self. Whether these theories are applicable and how they
present in people of different world views can only be confirmed through assessments with culturally diverse participants. However, previous studies that relied on ethnic group comparisons did not take into account the intragroup variability that exists in cultural beliefs and self construal, which may have a moderating effect on the relationship between differentiation of self and anxiety.

Differentiation of self represents the optimal balance between connection and autonomy, but levels of connection and autonomy vary by ethnicity and among individuals. The interpersonal effects of emotional cutoff and fusion with others will, possibly, affect individuals differently depending on whether they view themselves as independent or interdependent. Specifically, emotional cutoff may cause less anxiety in individuals with independent self construal but cause more anxiety in people with interdependent self construal. Conversely, fusion may cause more anxiety in individuals with independent self construal but cause less anxiety in those with interdependent self construal.

The purpose of the current study is to explore the moderating effect of self construal on the relationship between aspects of the differentiation of self and anxiety. Previous studies that found differences in interpersonal patterns and construal of the self, as well as correspondence between cultural values and self construal to be adaptive (e.g. Nezlek, Kafetsios, & Smith, 2008; Choi, 2002). I believe interpersonal patterns consistent with self construal will provoke less anxiety.
Specifically, it is expected that the relationship between emotional cutoff and trait anxiety will be stronger for participants with high interdependent self construal and low independent self construal (Hypothesis 1). It is also expected that the relationship between fusion with others and trait anxiety will be stronger for participants with high independent self construal low interdependent self construal (Hypothesis 2).
Participants

Participants consisted of 368 adults who are students recruited from the Psychology Department subject pool at an urban public university in northern California. The students received credit in their psychology classes for participation in research. Of the 368 participants, 104 were male (28.3%) and 263 were female (71.5%). The sample was reasonably ethnically diverse, with 34 African American participants (9.2%), 71 Asian/Pacific Islander (19.3%), 179 Caucasian (48.6%), 48 Hispanic (13%), 3 Arab (.8%) and 2 Native American (.5%). The remaining 31 participants classified themselves as multiethnic (8.4%). Table 1 shows a demographic summary of study participants.

Table 2 presents descriptive information about the distribution of the age of the participants. The mean age of participants was 21.99 years ($SD = 6.06$), with a minimum of 17 and maximum of 70. The median age of participants was 20 and the mode was 19. Skewness was 4.23 and kurtosis was 23.26. The exceptionally high kurtosis value indicates that the ages of the bulk of the participants are within a very narrow range around the mean and median, but the positive skew reflects the presence of some relatively older participants.
Table 1

**Demographic Characteristics of Participants (N = 368)**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
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</thead>
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<tr>
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<td>8.4</td>
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<td></td>
</tr>
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<tr>
<td>Female</td>
<td>263</td>
<td>71.5</td>
</tr>
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</table>

*Three Arab participants and two Native American participants were excluded from ethnic analysis due to insufficient sample size.

**One person did not indicate gender and was excluded from gender analysis.
### Table 2

**Age Descriptives**

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<tr>
<td>Mean</td>
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<td>Mode</td>
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</tr>
<tr>
<td>Minimum</td>
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</tr>
<tr>
<td>Maximum</td>
<td>70</td>
</tr>
<tr>
<td>Skewness</td>
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</tr>
<tr>
<td>Kurtosis</td>
<td>23.26</td>
</tr>
</tbody>
</table>
Measures

Demographics

Participants categorized themselves according to race, ethnicity, gender, and age (See Appendix). Information was used for exploratory analyses of racial category, gender and age.

Differentiation of Self Inventory Revised (DSI-R)

The Differentiation of Self Inventory Revised (DSI-R) as developed by Skowron and Friedlander (1998) and revised by Skowron and Schmitt (2003), was used to assess scores of emotional cutoff and fusion with others as well as an overall score of differentiation. Skowron and Friedlander (1998) developed, tested, revised and retested a measure of differentiation of self, the Differentiation of Self Inventory (DSI), using convenience samples of university students, faculty, and staff. Psychometric tests found significant a relationship between the DSI and State-Trait Anxiety Inventory. All four subscales were supported by factor analyses. Higher DSI scores were associated with lower symptomatic distress, and higher marital satisfaction.

The DSI is a 46-item, Likert-type (1= not at all true of me, 6= very true of me) instrument that assesses respondents’ perceptions of their ability to experience intimacy with and independence from significant others, including family of origin. The DSI consists of four subscales. The first subscale is Emotional Reactivity. It consists of 11 items designed to measure the extent to which individuals respond to environmental stimuli with hypersensitivity, emotional flooding, or emotional labiality. The I Position
subscale also consists of 11 items and assesses an individual’s ability to clearly define a sense of self and stand by one’s own convictions despite external pressures. The Emotional Cutoff scale consists of 12 items that reflect feeling threatened by intimacy, fears of engulfment, and cutting off thoughts of feelings. The Fusion with Others subscale consists of 12 items and assesses emotional over involvement and over identification with others, particularly parents. This scale was revised from the original form in 2003 to increase internal consistency and reliability and construct validity (Skowron & Schmitt, 2003). Each subscale is scored so that higher scores on each of these scales indicate a greater degree of differentiation.

Internal consistency reliabilities on the revised scale as calculated by Skowron and Schmitt (2003) are fairly high. The Cronbach’s alpha for Fusion with Others is .86, .89 for Emotional Reactivity, .81 for I Position, and .84 for Emotional Cutoff. The Cronbach’s alpha for the full scale is .92. Intercorrelations among scales are low to moderate, ranging from .24 to .66. Subscale correlations with the full scale are moderate to high, ranging from .62 for Emotionally Cutoff to .86 for Emotional Reactivity. Predictive validity is strong with significant correlations with chronic anxiety, psychological distress and marital satisfaction (Miller, Anderson, & Keala, 2004). The inventory also correlates with similar inventories such as the Personal Authority in the Family System Questionnaire (r = .43; Skowron, Holmes, & Sabatelli, 2003) and the Level of Differentiation of Self Scale. Cronbach’s alphas in this study were .792 for 12
Emotional Cutoff items and .739 for Fusion with others. For the entire 40 questions of the Differentiation of Self Inventory $\alpha = .808$.

*State/Trait Anxiety Inventory (STAI) Form Y*

The STAI was used to assess levels of trait anxiety (Speilberger, 1983). The STAI is composed of State and Trait subscales. State anxiety (A-State) refers to a temporary emotional state characterized by subjective, perceived feelings of tension and apprehension, and heightened autonomic nervous system activity. Trait anxiety (A-Trait) refers to relatively stable individual differences in anxiety proneness and the tendency to perceive situations as threatening. Both the State and Trait subscales consist of 20 items, some of which are positively worded (i.e., anxiety-absent) and the remaining negatively worded (i.e., anxiety-present).

Support for the psychometric properties of the STAI has been extensive (e.g., Spielberger, 1983; Spielberger & Diaz-Guerrero, 1986; Van Der Ent, Smorenburg, & Bonke, 1987) and the STAI has received favorable reviews. Spielberger (1983) reports a median Cronbach alpha of .90 for the A-Trait scale and .93 for the A-State scale. Concurrent validity for the scale is also high with correlations with the IPAT anxiety scale ranging from .73 to .85; high correlations with the Taylor Manifest Anxiety Scale ranging from .79 to .80; and moderate correlations with the Zuckerman Affect Adjective Checklist ranging from .52 to .58. Correlations between STAI and the Jackson’s Personality Research form reveal good divergent validity in that only correlations with
the aggression, impulsivity and social recognition scales were slightly significant (Spielberger, 1983).

The STAI (Form Y; Spielberger, 1983) was utilized as the measure of anxiety symptoms. For the 20 State items, the participants were asked to, “Circle the number that best describes how you feel now” with the following four-point intensity scale: 1 (not at all), 2 (somewhat), 3 (moderately so), and 4 (very much so). For the 20 Trait items, the participants were asked to, “Circle the number that best describes how you generally feel” with the following four-point frequency scale: 1 (almost never), 2 (sometimes), 3 (often), and 4 (almost always). All anxiety-absent (positively worded) items were reverse scored. To make the item ratings range from 0 to 3, 1 was subtracted from all ratings.

A major factor of consideration is whether anxiety inventories can be used as screening devices for different cultures. Although anxiety is said to be universal across all cultures (Spielberger & Diaz-Guerrero, 1986), the contexts in which it is experienced, the interpretations of its meaning, and the responses to it are, like those of other emotions, strongly influenced by cultural beliefs and practices (Xie, Leong, & Feng, 2008).

Despite subtle differences in the expression of anxiety, STAI has been validated with multiple Asian groups and is the most frequently used anxiety inventory (Hishinuma et al., 2000). Hishinuma et al. (2001) found no significant differences between scores among Asian/Pacific Islander adolescents and standard reported scores. Iwata and Higuchi (2000) had similar findings with Japanese college students, while Shek (1988)
validated the inventory with Chinese high school students. Cronbach’s alpha for the 20 items in this study was .918.

*Self Construal Scale*

The SCS was used to determine self construal (Singelis, 1994). Participants were asked to rate their agreement with the 30 items on a Likert-type scale (1 = strongly disagree, 7 = strongly agree). Fifteen items assess independence and fifteen assess interdependence. Negatively scored items were removed during test development due to poor loading, so all items are positively scored. Agreement acquiescence is evident by agreement with both an item and its own negation (e.g., “happy” and “not happy”).

The SCS has been shown to possess adequate internal reliability, construct validity, and predictive validity. Singelis (1994) reported factor loadings from .42 to .63 for the independent items and factor loadings from .35 to .58 for interdependent items. In a study of a U. S. sample, Singelis reported Cronbach’s alphas of .70 and .74 for the independent and interdependent variables, respectively. A validation study by Grace and Cramer (2003) found Cronbach’s alphas of .76 for independent and .75 for interdependent subscales. Construct validity for the SCS has been demonstrated by repeated studies showing White Americans score much higher in independence than Asian Americans and Asian Americans score higher in interdependence than White Americans (Singelis, 1994; Singelis et al., 1999; Bresnahan et al., 2005; Grace & Cramer, 2003).
Sato (2007) found evidence for convergent validity in high correlations between family allocentrism and interdependent self construal and a negative correlation between family allocentrism and independent self construal. The SCS has also found relationships between high interdependent self construal and social appraisal (Suh, Diener, & Updegraff, 2008) and embarassablity (Sharkey & Singelis, 1995). Cronbach’s alpha in the current study was only slightly lower than that reported by Grace and Cramer (α = .728 for Independent; α = .711 for Interdependent)

Procedure

The study was conducted according to the Psychology Department Human Subject Committee guidelines. When students entered the research room and were seated, the researcher distributed consent forms to sign. After signing and returning them to the researcher, the consent forms were placed together in a separate envelope to ensure that they could be traced back to the questionnaire materials of particular participants. Following that, the packet of materials was provided to the participants who were instructed not to place their name or any other identifying mark on the materials. Each packet was assigned a number using a random number generator and distributed in random order. The first page of the packet was the demographic sheet; the order of the following three inventories was determined by a randomized block process: the Differentiation of Self Inventory, the Self Construal Scale, and the trait scale of the State Trait Anxiety Inventory. After participants had completed the tasks, the packets were collected and placed together in a different envelope from the one containing the consent
forms to ensure that the packets could not be linked to specific participants. The researcher orally debriefed the participants, answered any questions they may have had at that time, and handed out the debriefing page for participants to keep. Everyone was thanked for their participation and dismissed.
Chapter 3
RESULTS

Once all of the data were collected, participants were scored on the Emotional Cutoff and Fusion with Others scales of the DSI, the Independent and Interdependent scales of the SCS, and the Trait scale of the STAI. Both scales of the DSI are reverse scored so that a low emotional cutoff score represents low differentiation and thus, is actually high in emotional cutoff. A high fusion with others score symbolizes high differentiation of self and little fusion.

To obtain a very global assessment of the interaction effects that were hypothesized, four 2 x 2 ANOVAs were performed using trait anxiety as a dependent variable and emotional cutoff, fusion with others, independent self construal, and interdependent self construal as the independent variables. For these analyses, emotional cutoff, fusion with others, independent self construal, and interdependent self construal were dichotomized based on a median split as shown in Table 3.

Emotional cutoff has a normative mean and standard deviation of 4.92 and .80, respectively (Skowron & Schmitt, 2003). The current split is slightly lower, with an item mean of 4.26 and standard deviation of .82. The revised fusion with others scale has a normative mean of 3.18 and a standard deviation of .61(Skowron & Friedlander, 1998). The current split was higher than this, with an item mean of 3.7 and standard deviation of .77. Independent self construal has a normative mean and standard deviation of 4.75 and
Interdependent self construal has a normative mean and standard deviations of 4.80 and 0.76 (Singelis, 1994). The current mean split is slightly lower, with an item mean of 4.72 and standard deviation of 0.66. Trait anxiety scores were analyzed by means of a two way between subjects ANOVA with two levels of emotional cutoff scores (high, low) and two levels of independent self construal scores (high, low). Consistent with expectations, results yielded a significant main effect for emotional cutoff, \( F(1, 346) = 41.67, p < .05, \eta^2 = .10 \). Mean anxiety scores were higher for the low emotional cutoff group (\( M = 44.033, SD = 11.549, n = 184 \)) than the high emotional cutoff group (\( M = 36.22, SD = 9.53, n = 166 \)). Independent self construal also had an individual impact on anxiety, \( F(1, 346) = 20.30, p < .05, \eta^2 = .05 \). Counter to Hypothesis 1, there were no significant interaction effects based on this global way in which the interaction was evaluated, \( F(1, 346) = .04, p > .05 \).

Mean anxiety scores were again compared using the second analysis of variance with the independent variables of interdependent self construal (high, low) and emotional cutoff (high, low). Again, emotional cutoff had a significant main effect, \( F(1, 339) = 43.51, p < .05, \eta^2 = .11 \), so that mean anxiety scores were higher for the low emotional cutoff group (\( M = 43.90, SD = 11.54, n = 179 \)) than the high emotional cutoff group (\( M = 36.24, SD = 9.55, n = 164 \)). Interdependent self construal had no effect on anxiety, \( F(1, 339) = 1.36, p > .05 \), and there was no significant interaction effect, \( F(1, 339) = .624, p > .05 \). Thus, Hypothesis 1 was not supported by this type of analysis (see Table 4).
Table 3

*Mean Splits for Independent Variables*

<table>
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<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
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<th>Split</th>
<th>Mean</th>
<th>SD</th>
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<td>Low</td>
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<td>25-51</td>
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<tr>
<td>Fusion with Others</td>
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Another series of 2 X 2 ANOVAs were conducted using trait anxiety as the dependent variable to test Hypothesis 2 that the relationship between fusion with others and trait anxiety is higher for participants with independent self construal than for participants with interdependent self construal. The first analysis compared mean anxiety scores based on independent variables of self construal (high, low) and fusion with others (high, low). Consistent with expectations that higher fusion causes higher anxiety, results also yielded a significant main effect for fusion with others, $F(1, 340) = 39.47, p < .05, \eta^2 = .10$. The mean anxiety scores of the low fusion with others group ($M = 43.59, SD = 11.75, n = 193$) was higher than the mean anxiety scores of the high fusion with others group ($M = 35.36, SD = 8.508, n = 151$). Unexpectedly, independent self construal also had an impact on anxiety, $F(1, 340) = 14.43, p < .05, \eta^2 = .04$. The high independent group had lower mean anxiety scores ($M = 36.63, SD = 10.02, n = 153$) than the low independent group ($M = 42.66, SD = 11.41, n = 191$). There was no significant interaction effect, $F(1, 340) = .65, p > .05$.

Mean anxiety scores also varied significantly according to interdependent self construal (high, low) and fusion with others (high, low). Fusion with others, again, significant main effect for fusion with others as described above, $F(1, 334) = 49.47, p < .05, \eta^2 = .13$. Mean anxiety scores were higher for the low fusion with others group ($M = 43.48, SD = 11.81, n = 190$) than the high fusion with others group ($M = 35.18, SD = 8.14, n = 148$). Interdependent self construal had no effect on anxiety, $F(1, 334) = 8.18, p > .05$. There was no significant interaction effect between fusion with others and
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Table 5

Means and Standard Deviations of Trait Anxiety as a Function of Self Construal and Fusion with Others

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interdependent self construal, $F(1, 334) = .33, p > .05$, showing no support for Hypothesis 2 based on this global way in which the interaction was evaluated. The statistics are summarized in Table 5.

In order to completely rule out an interaction, a third set of two-way between subjects ANOVA was run to see whether the relationship between overall differentiation of self and anxiety was affected by self construal. The differentiation of self score and independent self construal score yielded significant main effects, $F(1, 307) = 110, p < .05, \eta^2 = .26$; and $F(1, 307) = 12.23, p < .05, \eta^2 = .04$, respectively. Higher differentiation of self produced the expected decrease in anxiety ($M = 33.73, SD = 7.83, n = 154$), while mean anxiety scores were higher for the low differentiation of self group ($M = 46.20, SD = 10.87, n = 157$). Again, it was unexpected the higher anxiety occurred in the low independence group ($M = 42.69, SD = 11.55, n = 178$) compared to the high independence group ($M = 36.47, SD = 10.06, n = 133$). The interaction effect was still not significant $F(1, 307) = 1.72, p > .05$.

The final ANOVA found differentiation of self scores also yielded a significant effect on anxiety, $F(1, 302) = 124.49, p < .05, \eta^2 = .29$, so that low differentiation of self consistently resulted in higher anxiety ($M = 46.04, SD = 10.86, n = 153$) than high differentiation of self ($M = 33.78, SD = 7.83, n = 153$). Interdependent self construal had no significant effect, $F(1, 302) = .17, p > .05$. There was no interaction effect between overall differentiation of self score and interdependent self construal, $F(1, 302) = .12, p >$
.05. Data was further divided into quartiles and reanalyzed in order to rule out a smaller effect. Similar results emerged with no interaction effects and eta squares less than .01.

With no interaction effects even trending toward statistical significance based on the ANOVA results, the four quantitative variables of emotional cutoff, fusion with others, independent self construal, and interdependent self construal were entered into a standard multiple regression analysis. The intercorrelations of the variables are presented in Table 6. As expected, fusion with others and emotional cutoff both correlated with anxiety validating the DSI. However, independence also correlated with anxiety. High scores on these three variables predicted lower anxiety.

Three of the four independent variables (emotional cutoff, fusion with others, and independent self construal) contributed significantly to the prediction of lower anxiety ($p < .05$). Interdependent self construal was the only variable with a positive relationship, but the contribution to anxiety was not significant ($p > .05$).

Emotional cutoff, fusion with others, independent self construal and interdependent self construal were used in a standard regression analysis to predict trait anxiety. The correlations of the variables are shown in Table 6. As can be seen, all correlations except for the one between interdependent self construal and anxiety were statistically significant.

The prediction model was statistically significant, $F(4, 325) = 39.18$, $p < .05$, and accounted for approximately 30% of the variance in anxiety ($R^2 = .33$, Adjusted $R^2 = .32$). The raw and standardized regression coefficients of the predictors together with
their correlations with anxiety, their squared semi-partial correlations and their structure coefficients, are shown in Table 7. Fusion with others received the strongest weight in the model followed by emotional cutoff and independent self construal. Interdependence did not contribute much. With the sizeable correlations between the predictors, the unique variance explained by each of the variables indexed by the squared semi-partial correlations, was quite low. However, the structure coefficients were still sizable indicating good predictors of anxiety. All three had negative relationships with anxiety, so that higher scores in each measure corresponded to lower levels of trait anxiety. The high correlations between independence and the differentiation of self inventory subscales of emotional cutoff and fusion with others, and its corresponding ability to predict anxiety, suggests differentiation of self may have a bias toward independent self construal.

To explore possible ethnic and racial differences in these measures, a multivariate analysis of variance (MANOVA) was conducted comparing mean scores. The four scales (independent self construal, interdependent self construal, emotional cutoff, and fusion with others) by gender (male, female) and the five ethnic groups used in this study (African American, Asian/Pacific Islander American, Caucasian, Hispanic American, and Multi-ethnic). Data from 2 Native American and 3 Arab American participants were omitted from analysis due to insufficient sample size.
Using Wilk’s criterion, the interaction effect was not significant $F(9, 317) = .46$, $p > .05$, thus allowing for evaluation of the two main effects. Gender was statistically significant, $F (1, 317) = 3.52$, $p < .05$. Univariate analyses were evaluated against a Bonferroni corrected alpha level of .0125 (.05/4 dependent variables), and the results showed that the dependent variable of fusion with others was significant $F (1, 317) = 13.46$, $p = .00$. Females scored significantly lower in fusion with others ($M = 42.79$, $SD = 9.56$, $n = 235$) than males ($M = 48.43$, $SD = 7.25$, $n = 92$).

The univariate effect of Ethnic category was also statistically significant, $F (4, 317) = 1.74$, $p < .05$. Univariate analyses were evaluated against a Bonferroni corrected alpha level of .0125 (.05/4 dependent variables), and the results showed that the dependent variable of independent self construal was significant $F(4, 317) = 3.34$, $p < .05$. Tukey HSD post hoc analysis revealed African Americans ($M = 81.87$, $SD = 9.30$, $n = 30$) scored higher on independent self construal as compared to Caucasians ($M = 74.74$, $SD = 10.07$, $n = 164$), Asian/Pacific Islander ($M = 75.02$, $SD = 10.42$, $n = 63$), and Hispanic ($M = 75.68$, $SD = 8.61$, $n = 41$). The multi-ethnic group scored just below the African American group, but not significantly different than any other ethnic group ($M = 77.17$, $SD = 10.21$, $n = 29$).

Pair wise comparisons also revealed African Americans ($M = 47.67$, $SD = 10.32$, $n = 30$) were significantly higher in fusion with others than Hispanic Americans ($M = 42.27$, $SD = 10.61$, $n = 41$). Neither ethnic group was significantly different from the other ethnic groups. The remaining measures, interdependent self construal, fusion with
Table 6

Correlations of Variables in the Analysis (N = 329)

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*p < .05; **p < .01.
Table 7

*Standard Regression Results*

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* $p < .05$; ** $p < .01$. 
others, and emotional cutoff, did not differ significantly by ethnic group. However, they
all displayed similar patterns. Means, standard deviations, and sample size of each
measure by ethnic group are summarized in Table 8.

Mean scores on emotional cutoff were not significantly different by ethnic group.
Multi-ethnic Americans were the least emotionally cutoff, \( (M = 52.50, SD = 9.77, n = 30) \), followed by Caucasians \( (M = 52.49, SD = 9.29, n = 173) \), African Americans \( (M = 52.70, SD = 31.21, n = 33) \), Asian/Pacific Islanders, \( (M = 48.57, SD = 10.33, n = 67) \). Hispanic Americans scored the lowest on emotional cutoff, \( (M = 47.17, SD = 10.32, n = 46) \).

African Americans were the least fused \( (M = 46.61, SD = 10.44, n = 33) \), followed by Multi-ethnic \( (M = 45.00, SD = 7.65, n = 29) \), Caucasians \( (M = 44.90, SD = 9.02, n = 172) \), Asian American \( (M = 42.78, SD = 8.80, n = 67) \). Hispanic Americans scored the lowest on fusion with others \( (M = 42.69, SD = 10.83, n = 42) \). Post hoc pair wise comparisons suggest the African American mean scores on fusion were significantly different from the Hispanic American mean scores.

Overall differentiation of self scores varied insignificantly by ethnicity as well, but showed a similar pattern to fusion with others. African Americans scored the highest again \( (M = 47.16, SD = 7.80, n = 30) \), followed by Caucasian \( (M = 45.4, SD = 6.45, n = 151) \), Multi-ethnic Americans \( (M = 44.77, SD = 6.86, n = 26) \), and Asian Americans \( (M = 44.08, SD = 7.27, n = 62) \). Hispanics scored the lowest again \( (M = 42.01, SD = 6.55, n = 41) \).
Mean anxiety scores also mimicked this pattern. African Americans had the least trait anxiety ($M = 36.79$, $SD = 9.01$, $n = 34$), followed by Caucasians ($M = 39.12$, $SD = 11.31$, $n = 176$), Multi-ethnic Americans ($M = 40.83$, $SD = 9.70$, $n = 30$), and Hispanic Americans ($M = 42.00$, $SD = 11.11$, $n = 48$). Asian Americans scored the highest on trait anxiety ($M = 43.59$, $SD = 11.95$, $n = 71$).

Mean scores on interdependent self construal revealed a similar pattern according to ethnic group. Hispanic Americans scored the highest on interdependence ($M = 73.54$, $SD = 9.01$, $n = 48$), followed by Multi-ethnic ($M = 73.00$, $SD = 10.82$, $n = 30$), Asian/Pacific Islander Americans ($M = 71.87$, $SD = 9.93$, $n = 69$), and Caucasian ($M = 69.97$, $SD = 9.77$, $n = 177$). African Americans score the lowest in interdependence ($M = 68.07$, $SD = 10.21$, $n = 30$).
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Chapter 4
DISCUSSION

In this study, I tested whether self construal moderates the relationship between differentiation of self and anxiety. I expected that people high in interpersonal self construal might be more fused with others without the consequence of more anxiety, due to differences in what is culturally appropriate. Conversely, individuals high in independent self construal would be less affected by emotional cutoff.

Study results did not support the hypotheses. Self construal had no effect on the relationship between differentiation of self and anxiety. Emotional cutoff, fusion with others, and independent self construal all predicted trait anxiety, but there was no interaction between them. Instead, findings support the cross-cultural validity of the differentiation of self construct. Results were similar to findings by Tuason and Friedlander (2000), who found Filipinos had levels of differentiation comparable to those of Caucasians in the United States.

However, there were several discrepancies that emerged and require further examination. Independent self construal predicted lower anxiety. It also correlated positively with both fusion with others and emotional cutoff, as well as overall differentiation of self score. Interdependence correlated negatively with fusion with others and overall differentiation of self scores, but positively with emotional cutoff. This is an interesting finding, which suggests individuals high in interdependent self construal
may be more skilled at preserving beneficial relationships. However, individuals higher in interdependent self construal were less differentiated.

The fact that there were no significant differences in differentiation of self across ethnic groups is consistent with the work by Gushue and Constantine (2003), who found that African American women from an American University also scored similar rates of differentiation as Whites, with a similar relationship to psychological health. They did find that participants scored differently on specific subscales depending on levels of collectivism.

There were also slight differences in differentiation of self according to ethnic group. This is an interesting area for further research. Although there was no difference in self construal among Hispanic and Asian/Pacific Islander groups, these three ethnic groups scored the lowest on differentiation and the lowest in emotional cutoff, but did not score differently in anxiety. This actually contradicts my hypothesis, because ethnic groups which are typically interdependent in self construal were more emotionally cutoff than those of ethnic groups who are generally independent.

The belief that individuals who score high in both types of self construal are better adapted while people who score low in both are poorly adapted (Yamada & Singelis, 1999) was not supported in current research. Interdependent self construal had no effect on anxiety. Self construal did not vary by race or ethnicity. I did not replicate Singelis’ (1994) finding that independent and interdependent self construal correlate
negatively with each other, nor did I find support for the claim of Cross and Madson (1997) that females were more interdependent in self construal than males.

The Fusion with Others scale of the differentiation of self scale has been criticized for having ethnic and gender bias. This study did not find much ethnic bias in Fusion with others. There were, however, gender differences. Females were more fused with others than their male counterparts. They were slightly less differentiated overall, and slightly more anxious. Skowron and Schmitt (2003) acknowledge this same gender difference in the validation of the revised fusion with others scale. However, they reported similar scores in fusion with others and blamed the other scales for the gender bias, which was the opposite of my finding. This study was also consistent with previous research that age correlates with differentiation of self. Older participants were higher in differentiation. Interestingly, they were also more interdependent in self construal.

Independence had an unexpected relationship with anxiety. Even though there was no interaction between independent self construal and fusion with others, people who scored higher on independent self construal tended to score higher on anxiety. This supports Rosenblatt’s (1984) view, that even the “rugged American” may not benefit from independence as much as idealized. In fact, Caucasians, on average, scored lower in independence then all other ethnic groups besides the multi-ethnic group. The Asian/Pacific Islander American groups scored higher than Caucasians in both Independence and Interdependence.
Sampson (1977) argues that contemporary views of mental health which emphasize a self contained, individualistic ideal burden the individual with the need to possess all traits defined as good and desirable. In contrast, interdependence allows the individual to celebrate personal qualities while enjoying community with others who contain other healthful qualities so that all members mutually benefit. Groups such as Alcoholics Anonymous and half-way houses are validated by this view.

This study was only one step toward validation of Bowen theory. It was successful in duplicating previous findings with a large and ethnically diverse population. This study is unique in that it utilized a more ethnically diverse sample than most studies that used the DSI. It is also unique in using an assessment of individual cultural values (self construal), rather than ethnicity or acculturation. However, it was limited in that the entire sample was still relatively homogenous in that it consisted solely of psychology students at a Western university. While the participants differed in ethnicity, they share a similar environment. The lack of differences in self construal in this sample may be due to this homogeneity.

It is possible that college students in an independent culture may have increased independence from their family of origin in order to succeed in a university with such values. It is also possible that individuals in this sample who were high in independent self construal experience less anxiety due to living in a predominantly independent society. These findings are still interesting, however, in reference to psychotherapy with Americans of ethnic minority groups.
It is also plausible that few differences were found because the self construal scale is not as accurate as it could be for detecting different views of the self. Levine et al. (2003), in particular, has criticized the scale for lacking validity and found the scale was highly unstable within and across cultures across eleven studies. This study did not find the large discrepancy between Caucasians and Asian/Pacific Islanders in self construal suggested by Markus and Kitayama (1991) and Singelis (1994).

The current study may have benefited from including more measures of views and values, such as an acculturation scale or ethnic identity scale. This study was also limited by using only one measure for psychological adjustment. The State/Trait Anxiety Inventory was selected to assess anxiety in participants in order to be consistent with previous research which used this inventory. Anxiety is only one aspect of mental health. Other aspects may be more indicative of adjustment or more sensitive to the predictors used in this study. More research is necessary to better understand the relationship between independent self construal and decreased anxiety, and whether similar relationships exist with other aspects of mental health.

Future research should explore the impact of ethnicity on differentiation through other measures and other indicators of psychological health, such as a life satisfaction scale or global assessment of functioning. Future research could also yield more accurate data by sampling from multiple populations.

This study did not examine the intrapersonal aspects of differentiation of self. It is plausible that emotional reactivity and I position are related to self construal. Emotional
reactivity is viewed differently in some cultures. *I* position is particularly interesting, since *I versus we* statements was an early way to assess self construal.

Overall, results were consistent with research by Gushue and Constantine (2003) and Tuason and Friedlander (2000), where overall levels of differentiation and the effect on anxiety were consistent across ethnic groups. It appears, in general, differentiation of self as an avenue for psychological health is relatively valid across ethnic groups, but the specifics vary. Psychotherapists cannot assume that all clients operate according to the same views as those of the therapist.

Cultural competence underscores the recognition of patients’ cultures and develops a set of skills, knowledge, and policies to deliver effective treatments (Sue & Sue, 1999). Underlying cultural competence is the conviction that services tailored to culture would be more inviting, would encourage minorities to get treatment, and would improve their outcome once in treatment. Competence places the responsibility on mental health services organizations and practitioners, most of whom are White (Peterson et al., 1996) and challenges them to deliver culturally appropriate services.

The American Psychological Association (2003) advocates two specific characteristics necessary for effective delivery of mental health services to ethnic minority clients. First, the therapist must contain awareness of oneself as a racial and cultural being and of the biases, stereotypes, and assumptions that influence worldviews. Second, the therapist must be acquainted with the worldviews of culturally diverse clients.
A paramount challenge in cross cultural research is that there are no uniform racial or ethnic groups, White or non-White. Rather, each is highly heterogeneous, including a diverse mix of immigrants, refugees, and multigenerational Americans, with vastly different histories, languages, spiritual practices, demographic patterns, and cultures. In fact, there is more diversity within a racial group than between racial groups. Eighty five percent of human genetic diversity is found within a given racial group (Barbujani et al., 1997, as cited in Benjamin, 2001). What becomes clear is that culture and social contexts, while not the only determinants, shape the mental health of minorities and alter the types of mental health services they use.

A key aspect of any culture is that it is dynamic: Culture continually changes and is influenced both by people’s beliefs and the demands of their environment (Lopez & Guarnaccia, 2000). Immigrants from different parts of the world arrive in the United States with their own culture but gradually begin to adapt. The term *acculturation* refers to the socialization process by which minority groups gradually learn and adopt selective elements of the dominant culture (Lehman, Chiu, & Schaller, 2003). Yet, that dominant culture is itself transformed by its interaction with minority groups.

This creates a daunting task for psychotherapists to become culturally competent. One step in this process is to recognize that many views considered universal are culturally specific. Psychotherapists need to recognize that, as cultural beings, they may hold attitudes and beliefs that can detrimentally influence their perceptions of and interactions with individuals who are ethnically and racially different from themselves.
Bowen (Kerr & Bowen, 1988) family systems theory is a prominent and widely used approach in the marriage and family therapy field. The major tenets of the theory, including differentiation of self, triangulation, family projection process, fusion, emotional cutoff, and multigenerational transmission process, are foundational concepts in the training of many marriage and family therapists, with differentiation being the most central concept in Bowen’s theory. This view of healthy adjustment may be more applicable to members of ethnic minority groups due to attention to the value of relationships and connection as part of identity. Differentiation is similar across ethnic groups and appears to maintain a similar relationship with anxiety. However, this study is only one step in providing such validation and additional research is needed.

Psychotherapy clients may receive messages from popular culture suggesting that maturity involves separateness and connectedness reflects immaturity. Rosenblatt (1984) has suggested, "[North] Americans risk becoming sissified when they acknowledge normal human dependencies" (p. 116). Quintana (Quintana & Kerr, 1990) speaks of a client reporting, "I know I shouldn't care about my parents' opinions of me, but they still affect me" (p. 353). Many such clients may benefit from exploring their assumption about the nature of parent-adolescent relationships or about the role of connectedness in adulthood. In some cases, a goal of counseling might not be to care less about others' opinions but to transform and seek out relationships that are more supportive. In addition, counselors should not assume that independence is necessarily a developmental goal. Rather, balance and obtaining nurturing relationships seem more appropriate goals.
Another implication of this study is that counselors should realize that problems in interdependence take many forms and are not restricted to so-called fusion or enmeshment problems. Counselors who equate developmental maturity with independence may fail to recognize that some forms of independence reflect problems with emotional cutoff. The tendency for researchers to assume that findings or conclusions from research on one population can be generalized to other populations is a form of colorblindness which invalidates the experiences and realities of many ethnic minority clients (Sue, 2004). According to the fourth century Chinese sage Chang-Tsu, “how we view the world is not only about what we see, but about what we don’t see” (Sue, 2004, p. 766).

The solitary goal of strict independence underestimates the value of communion and the strength obtained by ethnic identity. To view all forms of dependence as weakness invalidates legitimate ways of coexisting with others and could ultimately do more harm. It not only constitutes a microaggression, but potentially removes them from the healthy qualities of the group. By propagating an individualistic, self contained perspective, psychology plays a significant role in invalidating the cultural values of interdependent oriented clients. Cultural misunderstandings between patient and clinician, clinician bias, and the fragmentation of mental health services deter minorities from accessing and utilizing care and prevent them from receiving appropriate care.
APPENDIX

Demographics

Age_____

Gender: Male Female

Ethnicity: Please describe your ethnicity______________________________

Which racial group(s) best describe (s) you?

Caucasian American  Hispanic American  Asian/Pacific Islander  American

African American  Native American Indian

Other (please describe)_______________
REFERENCES


(Original work published 1978)


Hishinuma, E. S., Miyamoto, R. H., Nishimura, S. T., Goebert, D. A., Yuen, N. Y. C.,
Anxiety Inventory for multiethnic adolescents. Anxiety Disorders, 15, 511-533.
Hishinuma, E. S., Miyamoto, R. H., Nishimura, S. T., Nahulu, L. B., Andrade, N. N.,
Makini, G. K., et al. (2000). Psychometric properties of the state-trait anxiety
inventory for Asian/Pacific Islanders adolescents. Assessment, 7(1), 17-36.
women and minorities apply; efficacy trials, effectiveness trials, and validity.
Home, K. B., & Hicks, M. W. (2002). All in the family: A belated response to Knudson-
Martin’s feminist revision of Bowen theory. Journal of Marital and Family
Therapy, 28(1), 103-113.
students to the STAI items that assess the presence or absence of anxiety. Journal of
Personality Assessment, 74(1), 48-62.
self and psychosocial development. Contemporary Family Therapy, 27(2), 249-
259.


Zhang, A. Y., Snowden, L. R., & Sue, S. (1998). Differences between Asian- and White-