Contingent Self-esteem in Chinese Early and Late Adolescents

By

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Abstract

Contingent self-esteem is the extent to which self-esteem is contingent upon outcomes and achievement (Kernis, 2002). It has been explored in Western settings extensively, however limited studies have been done with non-Western samples, especially in mainland China. The purpose of this study is to get a better picture of contingent self-esteem in different domains among Chinese early and late adolescents, and how contingent self-esteem is related to global self-esteem and depressive symptoms with a Chinese sample. Culture and social values may influence the development of contingent self-esteem (Bandura, 1986, 1991). Under the influence by Confucianism, Chinese culture emphasizes social harmony and moderation (Xu, Farver, Schwartz, & Chang, 2004). In Chinese families, the individual exists in order to continue the family (Baker, 1979). And in Chinese society, emphasis on child education has become part of Chinese culture (Chu & Yu, 2010). These culture and value differences between China and Western countries could possibly influence Chinese adolescents' contingent self-esteem to some extent, and the impact of contingent self-esteem on Chinese adolescents could be different than on Western adolescents. Two hundred and seventy-seven junior high school students and two hundred and eighty-six college students were recruited to participate in the study. Three measures—the Rosenberg Self-esteem Scale, the Center for Epidemiological Studies Depression Scale, and the Contingencies of Self-worth Scale—were used to test participants' global self-esteem, depressive symptoms, and contingent self-esteem. Generally speaking, the findings of the study suggested contingency in others' approval domain was a negative predictor of global self-esteem and had a positive correlation with depressive symptoms. Competition contingent

self-esteem and Family Love contingent self-esteem, however, were positive predictors for global self-esteem and negative predictors for depression. Since studies showed that self-esteem contingencies are related to numerous deleterious outcomes among American adolescents, these findings suggest possible cultural influences on the impact of contingent self-esteem on psychological health. In addition, the findings of the study could be a useful source to further understand Chinese adolescents' behaviors, psychological health, and other related areas, and it may also shed light on how to boost Chinese adolescents' self-esteem and how to reduce their depression.

<u>Acknowledgement</u>

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Introduction

Purpose of the Study

The three main purposes of the study are: 1) to examine the degree of endorsement that Chinese early and late adolescents have on different domains of contingent self-esteem, 2) to examine relations between contingent self-esteem and global self-esteem in a Chinese sample, and 3) to examine relations between contingent self-esteem and depressive symptoms among Chinese youth.

Importance of understanding contingent self-esteem. Contingent self-esteem is the extent to which self-esteem is contingent upon outcomes and achievement (Kernis, 2002). Domain-contingent self-esteem is the degree to which individuals attach their global self-esteem to a particular domain (Crocker & Wolfe, 2001). Both positive and negative events in the domain lead to fluctuations in individuals' state self-esteem around their trait level of self-esteem (James, 1890). For example, if a person does not consider himself or herself as capable in domains of importance, s/he will have low global self-esteem. Researchers suggest that among different age groups, the more contingent individuals' self-esteem, the lower their level of global self-esteem, with contingency in the domain of God's love as the only exception (Crocker & Wolfe, 1998; Harter, 1999). Contingent self-esteem also shapes individuals' long-term and short-term goals. People may have self-validation goals in domains of contingent self-esteem in order to feel that they are valuable and competent (Crocker & Park, 2004).

People may base their self-esteem on different domains (Coopersmith, 1967; Harter, 1993). For example, people who seek love, approval, or support from others may have relationship-contingent self-esteem (Park, Croker, & Mickelson, 2004). The more people base their self-esteem on others' approval or support, the more likely they are to experience drops in their state self-esteem when they receive negative interpersonal feedback, however, those whose self-esteem is less contingent on others' approval may not experience the same degree of drops in their state self-esteem after receiving negative feedback (Park & Crocker, 2008).

Some students are more vulnerable than others when they underperform in academic settings. This is partially due to their various levels of academic contingent self-esteem (Crocker & Wolfe, 2001). Students with high level of academic contingent self-esteem will get self-esteem promotions when they receive good grades and self-esteem drops from poor academic performance. So, some scholars (Osborne, 1997; Steele, 1997) suggest that students with high academic contingent self-esteem will strive to perform well in order to increase or maintain positive self-esteem, and this motivation can be so strong that highly attaching importance to academics is necessary for students to succeed in school.

Girls are more likely than boys to base their self-esteem in the domain of physical appearance, and have higher level of physical appearance contingencies (Burwell & Shirk, 2006). Adolescent girls who base their self-esteem on physical appearance feel worse about their appearance, have lower global self-esteem, and feel more affectively depressed than those who do not base their self-esteem on appearance (Zumpf & Harter, 1989; Harter, 1997).

Contingent self-esteem has been linked to depression in both adolescents (Burwell & Shirk, 2006) and adults (Sargent, Crocker, & Luhtanen, 2006); more specifically, individuals with

higher levels of contingent self-esteem will experience more depressive symptoms. Adolescents with low self-esteem and high contingent self-esteem experienced relatively more depressive symptoms (Bos, Huijding, Muris, Vogel, & Biesheuvel, 2010). Burwell and Shirk (2006) suggest further that contingent self-esteem is a predictor of depression among adolescents.

Importance of understanding contingent self-esteem in Chinese settings. So far, extensive research has been done on the concept of contingent self-esteem, however, almost all of this research was done in Western settings. Limited studies have been done in Chinese settings, especially with samples from mainland China area, even though Chinese people represent a significantly larger proportion of the world's population.

In reality, people vary in their conceptions of ability and alter their views according to increasing experience, so culture and social values may influence the development of contingent self-esteem (Bandura, 1986, 1991). Chinese cultures and values are different than Western cultures and values to some extent. For example, Chinese values and cultures have been influenced by Confucianism and related philosophical systems, which emphasize social harmony and moderation (Nisbett, 2003; Xu et al., 2004). Under the influence of traditional Chinese cultures, Chinese individuals perceive themselves as more interconnected and interdependent with one another than Western individuals (Markus & Kitayama, 1991); Chinese individuals tend to think that holding a consistent external display without revealing inner emotions as the ideal interpersonal style (Tsai & Levenson, 1997).

Furthermore, Chinese individuals have a different understanding of academic achievement than their Western counterparts. Chinese parents believe that lack of effort is the predominant reason of their children's failure in academic tasks (Hess, Chih-Mei, & McDevitt, 1982);

Chinese students have stronger interest in increasing their level of competence in a subject than their American counterparts (Stigler, Smith, & Mao, 1995).

There are differences in physical appearance domain as well. Chinese parents believe that obese children are healthier and that obesity shows their love for children (Bush, 2003); and being too thin is as detrimental to self-esteem as is being too fat for Chinese students (Marsh, Hau, Sung, & Yu, 2007). Therefore, under the different Chinese settings, adolescents' contingent self-esteem may differ from Western adolescents. Study of contingent self-esteem in Chinese setting is necessary in order to understand more about Chinese adolescents, and the finding of the study may be a useful source for further relevant study and may shed light on how to boost adolescents' self-esteem in Chinese contexts.

The main reason of choosing junior high school students and college students as two groups is that in China, junior high school students and college students may face different pressures and have different experience in various aspects, for example, comparing to college students, junior high school students have less social activities, and more emphasis on academics (Chen & Stevenson, 1995). On the other hand, college students have more social life, so their ability could be judged not only by their academic achievement, but other achievement as well, for example, their interpersonal relationship. In that case, they could possibly attach importance to different domains than junior high school students, or they may attach different level of importance to the same domain than junior high school students. The researcher is interested in the degree to which Chinese early and late adolescents attach their global self-esteem to different particular domains. And also since the possible different emphases, the attached importance in different domains may have different influence on junior high school students and college students' global self-esteem and their depressive symptoms.

Outline of literature review. In the literature review, relevant terms, such as self-esteem, contingent self-esteem, domains of contingent self-esteem, depression, and so on will be defined, and their influence on adolescents will also be discussed. The relation between contingent self-esteem and global self-esteem, contingent self-esteem and depression will also be discussed. Relevant cultural differences between Chinese society and Western society will be illustrated with previous research findings. In addition, measures of the variables will also be discussed.

In short, in this study, I am most interested in the degree to which Chinese early and late adolescents attach their global self-esteem to a particular domain. The expectation is that the emphasis on certain domains of contingent self-esteem may be different due to the fact that Chinese culture is quite different than Western culture. In addition, the relation between Chinese adolescents' contingent self-esteem and their global self-esteem, and the relation between Chinese adolescents' contingent self-esteem and their depressive symptoms will also be studied.

Review of the Literature

Self-esteem

Self-esteem is one of the most popular constructs of psychology (Brown, Dutton, & Cook, 2001), because it affects motivation, performance, functional behavior, and life satisfaction, and is significantly related to well-being throughout life (Deci & Ryan, 1995; Guindon, 2010). It is possible that behaviors meant to maintain and strengthen a positive sense of self are ubiquitous, so self-esteem is an essential human need (Greenberg, 2008; Allport, 1955; James, 1910; Roger, 1961; Rosenberg; 1979). Individuals with higher self-esteem were found to demonstrate more effective behavior and better adjustment than those with lower self-esteem (Deci & Ryan, 1995). In addition, evidence shows that individuals high in self-esteem perform better under stress than their low self-esteem counterparts (Greenberg, Pyszczynski, & Solomon, 1995). Adolescents

with low self-esteem may also deal with positive life events less well than those with high self-esteem. Brown and McGill (1989) asked recruited high school students to complete self-report measures of life events, self-esteem, and physical well-being two times after a 4 months interval, and they found out that life events may disrupt adolescents' identity by leading them to reevaluate themselves. Because individuals with low self-esteem are not used to thinking of themselves as successful, so a positive life event may force them to reevaluate the self, and cause confusion about identity, therefore, it may have deleterious effects on health among those individuals; on the other hand, individuals with high self-esteem are used to thinking of themselves as successful, so the event may lead only minor changes in the self-concept, and consequently, there will be less risk for developing illness for those adolescents when encountering positive life events.

Hansford and Hattie (1982) did a meta-analysis on many studies and tried to explore the relationship between individuals' self-esteem and their achievements. The results showed that the majority of correlations were positive (944 positive, 22 zero, and 170 negative), though in general the level of association was comparatively small (the mean correlation was .21). So they concluded that, compared to other variables, self-esteem was a strong correlate of achievement. However, till now there is no general agreement about the question: whether increasing self-esteem changes achievement, or increasing achievement changes self-concept. So the direction of the causality and the confirmation as to causal predominance is still undefined (Byrne, 1986; Hattie, 1992).

Self-esteem is relevant to a vast array of phenomena among adolescents, so the importance of it in adolescence is also undeniable. Self-esteem has been implicated in adolescents' depression and suicidal ideation (Rosenberg, 1985; Harter, 1993), loneliness and peer rejection

(Ammerman, Kazdin, & Van Hasselt, 1993; East, Hess, & Lerner, 1987), academic achievement (Hattie, 1992), and life satisfaction (Huebner, 1991).

  Models of self-esteem. According to Rosenberg (1965), self-esteem is defined as an individual's global judgments about him- or herself, including levels of self-worth, self-acceptance and self-respect. It is about people's general and typical feelings of self-worth, liking, and acceptance, which is considered to be comparatively stable across time and context (Rosenberg, 1986; Savin-Williams & Demo, 1983). Guindon (2010) suggests further that, first of all, self-esteem is an individual's evaluation of the self-concept, namely, it is an attitude. Competence and achievement are the two integral elements of self-esteem, which appear to be intertwined with a judgment of self-worth. Second, self-esteem seems to be dual in nature, including a general evaluation (global) and a specific evaluation of elements of the self (selective). That is to say, Guindon (2002) assumes that self-esteem exists as a self-esteem system with a global component and a selective component. And according to her understanding, global self-esteem is an overall estimate of general self-worth, and a trait or tendency that is relatively stable and enduring, which is composed of all subordinate traits within the self; whereas selective self-esteem is an evaluation of specific and constituent traits within the self, which is situationally variable and transitory, that is weighted and combined into global self-esteem. Other psychologists (Harter, 1999; Wagner & Valtin, 2004) also propose that self-esteem is a global self-concept which is determined by specific self-concepts. This means that individuals attach evaluations to all the various qualities and aspects of the self that vary in importance to them. Researchers agreed that self-esteem is a hierarchically organized and multifaceted construct; however, they still have different understandings about how to define the different domains. For instance, Coopersmith (1967) suggested that global self-esteem is based

on four domains: significance, competence, virtue and power. According to the hierarchical and multifaceted model (Shavelson, Hubner, & Stanton, 1976), self-esteem has different levels, the highest being global self-esteem, the lowest being evaluation of specific, concrete behaviors in context and with domain self-esteem, for example, academic self-esteem and nonacademic self-esteem, being somewhere in the middle.

Many scholars have argued that though self-esteem is regarded as a global construct, an individual's self-esteem may vary across different domains or dimensions (Fleming & Courtney, 1984; Heatherton & Polivy, 1991; Pelham & Swann, 1989; Savin-Williams & Demo, 1983). For example, a person who has high self-esteem regarding his or her athletic ability may have low self-esteem in interpersonal skills, or vice versa. Likewise, self-esteem motivation varies across domains. The person described above may work hard to maintain his or her athletic self-esteem, but care not for interpersonal relationship self-esteem. Self-esteem may vary across different areas of experience and according to role-defining characteristics, more specifically, it seems to fluctuate, affected by varying roles, expectations, performances, responses from others, and other situational characteristics (Demo, 1985). Scholars suggest that self-esteem fluctuates when individuals experience success and failure, in other words, individuals experience positive affect and boosts to self-esteem when they succeed at their goals and negative affect and drops in self-esteem when they fail (Carver, 2003; Carver & Scheier, 1998).

Trait versus state self-esteem. Typically, self-esteem is conceived of as a personality trait that is relatively stable across time and situations (Blascovich & Tomaka, 1991, James, 1890); however, some researchers have noted that self-esteem can also be a psychological state that fluctuates in response to self-esteem-related events (Heatherton & Polivy, 1991; Kernis, Cornell, Sun, Berry, & Harlow, 1993; Rosenberg, 1979). Recently, researchers (Crocker & Wolfe, 2001)

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further claimed that both global self-esteem and domain self-esteem could be classified as both a trait and a state. According to the perspective of Crocker and Wolfe (2001), global trait self-esteem is usually assessed with items that refer to how one generally evaluates the entire self, for instance, "All in all, I am inclined to feel that I am a failure," whereas global state self-esteem is evaluated with similar items that refer to how one feels at the specific moment, such as, "Right now, I feel like a failure." Similarly, domain-specific self-esteem also could be both average, or trait level—that is, domain trait self-esteem—and momentary or state level—that is, domain state self-esteem.

Contingent Self-esteem

Contingent self-esteem is a fragile component of self-esteem and refers to the extent to which self-esteem is contingent upon outcomes and achievement (Kernis, 2002). It often involves some kind of social comparison because individuals are likely to esteem themselves according to how they measure up relative to others (Deci & Ryan, 1995). In the words of Deci and Ryan (1995): "Contingent self-esteem refers to feelings about oneself that result from— indeed, are dependent on—matching some standard of excellence or living up to some interpersonal or intrapsychic expectations (p.32)". That is to say, contingent self-esteem is the extent to which one's self-esteem is dependent on a given domain. The concept of contingent self-esteem was originally posited by James (1890). He suggested more than one century ago that individuals differ in what they believe they need to be or do to have value as a person; events in these domains lead to fluctuations in state self-esteem around an individual's trait level of self-esteem. According to James (1892), individuals focus mainly on ability in domains of importance, where they want to achieve success, so they do not examine their every action or attribute.

Domains and outcomes of contingent self-esteem. Crocker and Wolfe (2001) explored the concept of contingent self-esteem within specific domains, defining domain-contingent self-esteem as the degree to which an individual attaches his/her global self-esteem to a particular domain, so if the individual could meet the personal standard of success in the domain, s/he may feel valuable and competent. Thus, if a person considers himself or herself as competent in domains of importance, s/he will have high global self-esteem. Conversely, if one does not live up to the expectation in domains where one hopes to be capable, low global self-esteem will result. For example, an adolescent who feels like a good and worthy person only when s/he has just received an "A" on a final would have contingent self-esteem. Scholars argue that not all achievements and failures influence an individual's self-esteem equally; the more a person holds beliefs about what one must be or do to have worth and value as a person in any domain, the more the self-esteem will fluctuate in response to good and bad events in that specific domain (Crocker & Wolfe, 2001; Kernis & Waschull, 1995).

Domains of contingent self-esteem. There are several different specific domains to which an individual may attach his/her global self-esteem, and different individuals may have different levels of contingent self-esteem in these domains according to their various life experiences, cultural influence, and so on.

Some psychologists have proposed that self-evaluation in domains of importance may have a more salient influence on self-esteem than evaluation in less important domains (Crocker & Wolfe, 2001; James, 1890). Rosenberg and colleagues (1995) found that the effects of self-evaluations on self-esteem in any specific domain depended on the value the individual attached to that domain. Harter (1985a, 1986) and colleagues found out confusingly that children with

very similar profiles across five specific domains (i.e., scholastic competence, athletic competence, social acceptance, physical appearance, and behavioral conduct) had very different global self-esteem scores. Then they realized that it was necessary to also consider the importance of success in these domains to the individual, since according to James (1892), the competence or adequacy in domains of importance contributes to an individual's level of self-esteem. With more studies of different groups, from older children, adolescents, college students, to adults in the worlds of work and family (Harter, 1990), Harter and colleagues further discovered that the individuals who reported comparatively low self-esteem were those acknowledging that they were lacking in ability in domains for which they had aspirations of success. Harter (1993) confirmed that the correlations between global self-esteem and self-perceived ability in important domains (0.60-0.72) are far greater than those in less important domains (0.30).

Harter and colleagues (1990) found an inextricable link between individuals' self-evaluation in the domain of physical appearance and global self-esteem at any developmental level and with different populations. The correlations are typically high: between .70 and .80. So possibly, physical appearance is a very important domain of importance in Western samples. In addition, Cooley (1902) suggested that self-esteem was a social construction. Across many studies with different age groups, Harter (1985b) found that the correlations between perceived support from significant others and self-esteem from .50 to .65. So, besides physical appearance, individuals may also attach value to the domain of support from significant others. However, since individuals may attach different values to different domains across their life span (Bandura, 1986, 1991), so far, there is no general agreement on which domain of contingent self-esteem is the most or least common among Western samples.

Individuals differ in the contingencies on which they base their self-esteem (Coopersmith, 1967; Crocker & Knight, 2005; Harter, 1993; James, 1890; Park, Crocker, & Vohs, 2006). For instance, some base self-esteem on external factors such as appearance, others' approval, or academic achievement, while others base self-esteem on internal factors such as virtue or God's love (Crocker & Knight, 2005; Crocker, Luhtanen, Cooper, & Bouvrette, 2003), and an individual may value multiple contingencies to varying degrees (Crocker & Wolfe, 2001).

Crocker and Wolfe (1998) claimed that major domains of contingent self-esteem among college students were social acceptance, physical appearance, competence, God's love, power over others, and self-reliance. Recently, after summarizing related literatures, Crocker and Wolfe (2001) further proposed that self-esteem is mainly contingent on seven domains: appearance, competition, family support, perception of God's love, approval from others, school competence and behavior. They suggested that not all domain-specific self-evaluations have the same influence on global self-esteem, and individuals are highly selective about the domains on which they base their self-esteem.

Domain of relationship contingent self-esteem. The desire to form and maintain close relationships is considered to be an essential human need and motivation (Baumeister & Leary, 1995; Deci & Ryan, 2000). Consequently, when individuals are rejected by others they feel hurt (Leary, Springer, Negel, Ansell, & Evans, 1998), anxious (Leary, Koch, & Hechenbleikner, 2001), and their self-esteem goes down (Leary, Tambor, Terdal, & Downs, 1995). Park, Crocker, and Mickelson (2004) defined interpersonal contingencies as when individuals seek validation, love, or support from others. Individuals differ in how vulnerable they are to rejection and social disapproval because of their various bases of self-esteem, or contingencies of self-worth (Crocker & Wolfe, 2001). Though some individuals claim that they do not base their self-esteem

on others' approval (Crocker et al., 2003), Leary and colleagues (2003) still have suggested that social disapproval influences individuals' self-esteem, even those who report being unaffected by others' evaluations. Park and Crocker (2008) suggest that the impacts of receiving negative interpersonal feedback on outcomes such as state self-esteem, affect, and goal pursuit may be decided by how contingent one's self-worth is on others' approval. More specifically, they propose that the more an individual bases his/her self-worth on others' approval, the more likely s/he is to experience drops in state self-esteem and positive affect and increases in negative affect when s/he receives negative interpersonal feedback, whereas those whose self-worth is less contingent on others' approval may not experience the same degree of emotional distress following negative feedback.

Domain of academic contingent self-esteem. Besides basing one's self-esteem on relationships with others, students probably attach importance to the domain of academic competence. Students vary in their vulnerability of self-esteem to underperforming in academic settings. One individual difference that may predict such vulnerability is the degree to which students base their self-worth on academic achievement—or academic contingencies of self-worth (Crocker & Wolfe, 2001). As mentioned earlier, several studies have already found that contingency of academic self-esteem could moderate the influence of failure and achievement issues on academic state self-esteem (Crocker, Karpinski, Quinn, & Chase, 2003; Crocker, Sommers, & Luhtanen, 2002; Crocker & Wolfe, 2001). Students high in academic contingent self-esteem get self-esteem promotions from good academic performance and self-esteem drops from poor academic performance. Crocker, Sommers, and Luhtanen (2002) did research on a sample of college seniors applying to graduate school. They discovered that the more students based their self-esteem on their academic success, the higher their self-esteem was on days they

were admitted to graduate school and the lower their self-esteem was on days when their applications were denied.

Domain of appearance contingent self-esteem. Individuals are different in their appearance contingent self-esteem. Among adolescents, physical appearance is one of the most critical domains for global self-worth, especially among girls (Arnett, 2007; Dubois, Felner, Brand, Phillips, & Lease, 1996; Harter, 1999, 2001; Shapka & Keating, 2005). More specifically, girls are more likely than boys to rate their physical appearance as central to their self-worth (Harter, 1999), endorse higher levels of physical appearance contingencies (Burwell & Shirk, 2006) and report more body dissatisfaction compared with boys (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Patrick, Neighbors, and Knee (2004) suggested that appearance-related comparisons are more distressing for those who base their self-worth on physical appearance (i.e., have high appearance contingent self-esteem) and have lower self-perceived attractiveness.

Outcomes of contingent self-esteem. Instability of self-esteem is one result of having contingent self-worth (Deci & Ryan, 1995; Kernis, 2003). Crocker and Wolfe (2001) stated that if one's self-esteem is contingent on a specific domain, experiencing negative and positive events in that area leads to fluctuation in state self-esteem. Scholars also claimed that in domains on which self-esteem is highly contingent, enduring experiences or dramatically and permanently changed circumstances would impact the level of trait self-esteem (Crocker & Wolfe, 2001). In other words, when self-esteem is contingent, successful experience feels particularly good because succeeding at a task means that one is a success and therefore a worthy human being; however, failure in contingent domains is extra painful because it means one is a failure and therefore worthless. Consequently, individuals may be most likely to show self-serving biases

and defensive responses to negative outcomes in domains of contingency (Crocker & Wolfe, 2001).

Crocker and Knight (2005) claimed that experiencing positive and negative events in the domains in which self-esteem is contingent would cause instability of self-esteem, and individuals tend to either adopt performance goals, which are desires to show oneself as capable in others' eyes and may cause individuals stay away from tasks that can promote mastery of new skills (Ormrod, 2008), to succeed and avoid failure in their domain of contingent self-esteem, or totally disengage from the effort if their self-esteem is contingent on a domain. When threats in domains of contingency cannot be relieved, negative events in these domains should result in drops in self-esteem, and positive events should result in increases; thus, individual differences in stability of self-esteem across time (Kernis & Waschull, 1995) may be due partially to contingencies of self-esteem interacting with relevant events (Crocker et al., 2002).

The contingent self-esteem determine one's overall evaluation of the self to some extent (Crocker & Park, 2004; Crocker, 2002; Leary, Gallagher, Fors, Buttermore, Baldwin, Kennedy, & Mills, 2003; Park, Crocker, & Mickelson, 2004; Ryan & Deci, 2000). Researchers argued that across different age groups, for example, children, young adolescents, and college students, the more contingent individuals' self-esteem, the lower their level of self-esteem, with contingencies in the domain of God's love as the only exception (Crocker & Wolfe, 1998; Harter, 1999).

Contingent self-esteem influences individuals' life in many aspects. Crocker, Luhtanen, Cooper and Bouvrette (2003) did research on domains in which college students usually invest their self-esteem, and found out that contingent self-esteem shaped students' emotions, thoughts, and behavior. For example, their study showed that the more students based their self-esteem on their academic competence, the higher they reported their global self-esteem was on days when

they were admitted to graduate school. And students also reported that they spent more time on activities that are related to their contingent self-esteem. For example, if students have academic contingent self-esteem, they would like to spend more time on studying course materials, doing experiments in labs, reviewing knowledge before exams, and so on.

Crocker and Knight (2005) further claimed that contingent self-esteem in specific domains has predictable consequences, regardless of individuals' level of domain-specific self-esteem. Although contingent self-esteem can be motivating to some extent, the quality of motivation resulting from contingent self-esteem also is associated with stress, pressure, and tension, and may even undermine intrinsic interest in tasks (Deci & Ryan, 1995, 2000). Other scholars claimed that due to the painful feelings resulting from failure in domains of contingent self-esteem, individuals are inclined to self-handicap when failure is possible, creating difficulties to their own success prior to a task in order to find an excuse if they should fail (Covington, 1992; Rhodewalt & Tragakis, 2002). However, regardless of whether individuals typically have high or low self-esteem, they all seek the emotional high associated with success in domains of contingent self-worth and strive to avoid the emotional lows that accompany failure in these domains, so it is possible that individuals invest more effort in the domains in which their self-esteem is contingent simply because they care more about succeeding in these domains (Crocker, Brook, Niiya, & Villacorta, 2006). Generally, contingent self-esteem is both a source of motivation and a psychological vulnerability.

Many researchers (Crocker et al., 2003; Crocker et al., 2002; Crocker & Wolfe, 2001) have already demonstrated that academic contingent self-esteem moderates the effects of success and failure events on academic state self-esteem. Hu, Yang, Wang, and Liu (2008) did research on Chinese university students, and discovered that in domains that are under one's control, for

example ability, global self-esteem would be affected by domain self-esteem directly. However, in the domains that the individual could not control, for example appearance, contingency of domain self-esteem could moderate the influence of domain self-esteem on global self-esteem. That is to say, for individuals whose self-esteem was highly contingent on uncontrollable domains, the domain self-esteem could affect this individual's global self-esteem more strongly.

Contingent self-esteem shapes individuals' long-term and short-term goals. Kernis (2002) claimed that individuals with contingent self-esteem would invest their feelings of self-worth in their daily activities' results. And these successes and failures in contingent domains are generalized to the overall worth and value of an individual, leading one to view successes as validation of one's worth and failure as confirmation of unworthiness (Crocker & Luhtanen, 2003; Crocker, 2002). Since individuals want to demonstrate that they are successful in domains of contingent self-esteem, so they could feel that they are worthy and valuable, consequently, they will have self-validation goals in these domains (Crocker & Park, 2004). Self-validation goals refer to individuals' wish to demonstrate or prove the qualities of the self (Crocker et al., 2006), and when individuals have self-validation goals, they interpret their achievements as reflections on their abilities. However, though these goals are motivating, they are a fragile source of motivation because individuals may easily drop the goals when the success is indefinite (Crocker & Park, 2004). So, individuals have self-validation goals in domains of contingent self-worth because they want to prove that they are a success, instead of a failure (Crocker et al., 2006; Crocker & Park, 2004). However, Niiya and Crocker's study (2005) indicated that though contingent self-esteem is motivating, the motivational boost mainly occurs on tasks that are easily achieved, not on challenging tasks that require persistence and self-regulation.

Although individuals' contingent self-esteem is comparably stable over time (Park et al., 2004), they are still subject to revision when demands of the environment or individuals' abilities change; for instance, when individuals who base their self-esteem on academic performance face repeated disappointments in the academic area, they might substitute academic contingent self-esteem with another contingent self-esteem that will inevitably become more salient and achievable, and result in continued maintenance of global self-esteem (Cheng & Kwan, 2008).

Outcomes of relationship contingent self-esteem. Crocker and Wolfe (2001) suggested that contingent self-esteem that depends on the approval or attitude of other individuals rather than on one's own achievement and behavior should be more difficult to satisfy because these are beyond one's own control. Harter, Stoker, and Robinson (1996) found that adolescents whose self-esteem is dependent upon the approval of others were particularly preoccupied with the opinions of others, thought that they were receiving comparatively low and fluctuating levels of social support, and experienced comparatively low and fluctuating self-esteem. In addition, in a study on contingent self-esteem and self-reported anger, Kernis, Paradise, and Goldman (1999) discovered that college students whose self-esteem is highly contingent on having power over others reported particularly high tendencies to experience anger. On the other hand, if one's self-worth is not dependent on interpersonal relationships, neither the need for relationships nor seeing oneself as lacking in relationships will influence one's evaluation of the self (Cambron, Acitelli, & Pettit, 2009).

Outcomes of academic contingent self-esteem. Generally, students who base their self-worth on academic performance experience lower state self-esteem, less positive affect, more negative affect, more depressive symptoms, and more negative self-evaluations when they perform poorly on academic tasks, receive lower than expected grades, or are rejected from graduate schools,

relative to those whose self-worth is less contingent on academics (Crocker et al., 2003; Crocker et al., 2002; Niiya, Crocker, & Bartmess, 2004; Park & Crocker, 2003). The more a student's self-esteem is contingent on academic achievement, the more it decreases on days s/he receives lower grades than the expectation, and Crocker, Karpinski, Quinn and Chase (2003) found out further that this is especially true for women who major in engineering, because they face negative stereotypes about their ability.

Scholars argue about the influence of students' academic contingencies of self-worth on their performance in school. Some of them (Osborne, 1995, 1997; Steele, 1997) claim that students who base their self-esteem on academic achievement will strive to perform well and avoid performing poorly in order to increase or maintain positive self-esteem, and this motivation can be so strong that highly basing self-worth on academics is necessary for students to succeed in school. For example, Brook (2005) measured academic contingency of self-worth, had participants solve GRE analytical problems, and then gave them the opportunity to study solutions to the problems they had attempted. Staking self-worth on academics marginally predicted spending more time studying the GRE solutions.

Crocker and Knight (2005) proposed that students who regard their academic accomplishments as the base of their self-esteem would typically have self-validation goals in this domain, viewing their schoolwork as an opportunity to prove their intellectual competence. However, others (Burhans & Dweck, 1995; Crocker & Park, 2004) suggest that students who base their self-worth on academics tend to want to validate their ability, which can undermine learning and achievement. Crocker and Knight (2005) noticed that the more contingent their self-esteem is on academic achievement, the more time students spend working on an easy verbal task, but the less time they spend working on a difficult verbal task, in other words, more

contingent students tend to work on tasks that could make them feel competent rather than those that could challenge them. College students whose self-esteem is highly contingent on academic success, should be especially inclined to disengage from their major, drop courses, or even change majors when their performance fall behind; they are inclined to take courses and choose majors at which they expect to succeed (Crocker et al., 2006). Crocker and Luhtanen (2003) surveyed on more than 600 college freshmen, and found out that the more that students based their self-esteem on academics at the start of the year, the more daily hassles they experienced at the end of the year, including more time pressure, dissatisfaction with their abilities, conflicts with professors and teaching assistants, and even loss of interest in their courses. Deci and Ryan (1987) also contend that when students focus on maintaining self-esteem it decreases intrinsic motivation and creates pressure to achieve, which can depress their academic performance.

Outcomes of appearance contingent self-esteem. Appearance contingent self-esteem influences adolescents' lives in many aspects. College freshmen who base their self-esteem on their physical appearance report greater levels of alcohol consumption, drug use, unsafe sexual practices, and binge drinking (Crocker, 2002). Scholars claimed that adolescent girls who report that physical appearance determines their self-worth tend to feel worse about their appearance, have lower self-esteem, and feel more affectively depressed than those who do not feel their worth is based on appearance (Zumpf & Harter, 1989; Harter & Waters, 1991; Harter, 1997). Park and Maner (2009) noted that whereas low self-esteem (LSE) appearance-contingent individuals want to avoid social contact with others, high self-esteem (HSE) appearance-contingent individuals respond to appearance threats by desiring contact with close others, and more specifically, for HSE individual, close others are possibly to be viewed as positive sources of support and affirmation, thus, seeking contact with close others may be a way of gaining a

compensatory boost to the self. However, LSE individuals are especially vigilant to the possibility of rejection and negative social evaluation, and they were less inclined to respond to self-threat by seeking social contact, instead, they preferred to engage in activities that would serve to improve their appearance.

Depression and Contingent Self-esteem

In adolescence, depressive symptoms are common (Steinberg, 1999). Evidence showed that that about 25% of adolescents regularly experience symptoms of depression (Compas, Ey, & Grant, 1993). Costello and colleagues (2003) also suggested that depression would increase during adolescence. Devine, Kempton and Forehand (1994) claimed that depressive symptoms in adolescence would lead to adult depression.

According to diathesis-stress models of depression, personality or cognitive styles interact with situational factors to create risk for depression (Beck, 1987), so certain individuals are more vulnerable to developing depressive symptoms. Scholars believe that depression is triggered only when these vulnerable individuals experience relevant negative life events or stressors (Beck, 1983, 1987; Hankin & Abramson, 2001). Instability in self-esteem is a risk factor for depression, especially for individuals who experience negative life events and issues (Butler, Hokanson, & Flynn, 1994; Roberts & Kassel, 1997). Scholars believe that self-esteem is especially unstable when individuals experience positive and negative events in domains on which their self-worth is staked (Crocker, 2002; Crocker et al., 2002; Crocker & Wolfe, 2001). Cambron, Acitelli, and Pettit (2009) discussed further that the study of contingent self-esteem might be beneficial for the study of depression, because it would be possible that individuals are only vulnerable to depression if they attach their self-worth to specific domains.

Studying the correlation between depression and contingent self-esteem is important for both early and late adolescent populations. Contingent self-esteem has been linked to depression in both adolescents (Burwell & Shirk, 2006) and adults (Sargent et al., 2006); more specifically, individuals with higher levels of contingent self-esteem have reported more depressive symptoms. Bos and colleagues (2010) found that adolescents with low self-esteem and high contingent self-esteem experienced comparatively more depression. Burwell and Shirk (2006) did a longitudinal study to examine the development of depressive symptoms among adolescents, and they found out that contingencies could predict change in depressive symptoms over time. Their findings support the idea that contingency is a predictor of depressive symptoms among adolescents.

Among adults, college students may tend to have depressive symptoms due to the fact that the transition to college could be stressful, and the new environment may place new demands on them. Sargent, Crocker, and Luhtanen (2006) did a longitudinal study and suggested that higher levels of external contingencies of self-worth, including approval from others, appearance, competition, and academics contingent self-esteem, would predict increases in depressive symptoms over the first semester of college; however, internal contingencies of self-worth, including God's love and virtue, would not predict the level of depressive symptoms. So, they concluded that higher levels of external contingencies of self-worth might lead to vulnerability to depressive symptoms.

Different domains of contingent self-esteem may have different influences on depression. Cambron and colleagues (2009) suggested that interpersonal contingent self-esteem may predict depressive symptoms because contingent self-esteem in the interpersonal domain may create instability in self-esteem and elicit behaviors and thoughts that play a role in the development

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and maintenance of depression when a negative event happens in the contingency domain. Cambron and colleagues (2009) further stated that women are more inclined to be affected by interpersonal contingent self-esteem than men, consequently, they are at greater risk for the development of depressive symptoms.

Other scholars claimed that individuals with higher level of friendship contingent self-esteem reported greater depressive symptoms and lower self-esteem than individuals who do not attach high value to their self-esteem in the domain of friendship, because the individuals who stake high value on the quality of their friendships tend to engage in behaviors and thought patterns that perpetuate the experience of depressive symptoms (Cambron, Acitelli, & Steinberg, 2010). That is to say, they believed that friendship contingent self-esteem represented a risk factor for depression.

Furthermore, academic contingent self-esteem may also influence individuals' levels of depressive symptoms. Crocker, Karpinski, Quinn, and Chase (2003) found in their research that academic contingent self-esteem might lead to greater instability of self-esteem, hence cause the increases in depressive symptoms, particularly if they have some depressive symptoms initially.

However, differences among cultures and social values may affect the average level of depressive symptomatology, the factors that are related to depressive symptoms, and the extent to which these factors are consequential for adolescents' mood (Greenberger, Chen, Tally, & Dong, 2000; Greenberger & Chen, 1996). For example, in a collectivist culture, like China, the importance of social harmony may make relationships with others more powerful predictors of adolescents' mood than in a culture, like United States, which holds more individualistic values (Jing & Wan, 1997). In addition, cultural issues may also have influence on academic contingent

self-esteem and its effect on individuals' depressive symptoms. Crystal and colleagues (1994) found out that though Chinese students reported higher levels of parental expectation and lower levels of parental satisfaction regarding their academic achievement than their American peers, they reported less stress and academic anxiety than their American counterparts. Greenberger and colleagues (2000) suggested that to some extent, culture may selectively accentuate or lessen the depressive impact of specific psychosocial stressors. So, the influence of contingent self-esteem on depression may or may not be similar in Chinese settings compared to Western settings.

Development and Contingent Self-esteem

So far, there is little developmental research on contingent self-esteem. Kernis (2002) suggested that research with young adolescents should begin by finding out which contingencies are most prevalent among individuals of this age group. Harter and colleagues (1990) claimed that if adolescents acknowledged that they had no sufficient competence in domains for which they want to succeed, they reported relatively low self-esteem. Crocker and Wolfe (1998) and Harter (1999) found out that the more contingent young adolescents' self-esteem, the lower their level of self-esteem, with God's love as the only exception. Bos and colleagues (2010) examined the relationships between global self-esteem and contingent self-esteem on a sample of 264 adolescents; they found out that global self-esteem was negatively related to contingent self-esteem. They also found out that contingent self-esteem was significantly associated with depression, anxiety, eating problems, and disruptive behavior among adolescents. Therefore, knowing more about contingent self-esteem among adolescents seems vital for research about this group of individuals. However, although contingent self-esteem has been studied with

adolescents, particularly late adolescents, extensively, little is known about how contingent self-esteem will change with age.

Gender Differences in Contingent Self-esteem

Males and females may attach importance to different domains, or they may attach different levels of importance to the same domain. For example, Grossbard, Lee, Neighbors and Larimer (2009) examined gender as a moderator of the association between contingent self-esteem and body image concerns. Their results showed that females reported higher levels of contingent self-esteem and stronger concern about their weight than males. Also, studies show that girls are more inclined than boys to rate their physical appearance as central to their self-worth (Harter, 1999), have higher levels of physical appearance contingencies (Burwell & Shirk, 2006) and report more body dissatisfaction compared with boys (Thompson et al., 1999).

Beside the difference of contingent self-esteem in the domain of physical appearance, there is gender difference in the domain of relationship contingent self-esteem. Burwell and Shirk (2009) suggested that females tend to develop interpersonal self-esteem contingencies, because according to Gilligan (1982), females may inhibit the expression of their own feelings and thoughts in order to preserve relationships when they reach adolescence.

Cultural Differences and Contingent Self-esteem

According to Bronfenbrenner's ecological system theory, the interaction between factors in the child's maturing biology, his immediate family/community environment, and the societal landscape fuels and steers his development, so in order to study a child's development, scholars must look not only at the child and his immediate environment, but also the influences of the larger environment, including cultural values, as well (Bronfenbrenner, 1977). Different cultures and social values (i.e., collectivistic culture vs. individualistic culture) may have varied

influences on the development of contingent self-esteem. According to Bandura (1986, 1991), contingent self-esteem is not changeless, instead these contingencies develop over the course of time in response to many forms of socialization and social influence, so it may be the cultural differences in the structure and function of the self (Markus & Kitayama, 1991) that create the different impacts of domain-contingent self-esteem in different types of individuals.

Collectivistic cultures are characterized by close linkages between individuals and a greater sense of obligation to the group (Triandis, 1995). Particularly, in their review, Oyserman and colleagues (2002) found relatively consistent support for the characterization of East Asian societies, especially China, as much less individualistic and much more collectivistic than Western societies. For many centuries, Chinese values and cultures have been shaped by the influence of Confucianism and related philosophical systems. In their societies, the importance of social harmony has been emphasized. Chinese society values obligations to others, and they avoid conflict in their life (Nisbett, 2003; Xu et al., 2004). In collectivistic societies, since they emphasize on the responsibilities and obligations of the individual to others, a focus on individual rights and desires is often viewed as selfish, antisocial, and possibly dangerous (Nisbett, 2003; Oyserman, Coon, & Kemmelmeier, 2002).

However, individualistic culture is in contrast to collectivistic culture. It is characterized by much looser linkages between individuals and a stronger sense of obligation to the individual than to the group (Triandis, 1995). Generally speaking, in individualistic societies, individual rights and privileges have been emphasized and their members are expected to assert and insist on these rights.

Park, Crocker and Vohs (2006) noted that social experiences, prevailing cultural norms and values influence the development of contingencies, for example, the experiences of acceptance

or rejection due to performance in certain domains, so the contingencies of self-worth can shift across social contexts. More specifically, they claimed that some cultural values, such as independence and interdependence, may play a role in the development of specific contingent self-esteem. For example, individuals in individualistic cultures may base their sense of self-esteem more on being independent and unique, whereas individuals from interdependent cultures may base their self-esteem more on others' approval, being a good friend, or being a loyal group member.

Cultural differences in the domain of relationship contingent self-esteem. Individuals are sensitive to what others think of them (Mead, 1934) and, thus, individuals from different cultures may face different social pressures, and pursue self-esteem goals that are based on what they think will have worth and value (Crocker & Knight, 2005). Until recently, most of the research about relationship contingent self-esteem was done in individualistic cultures such as the United States, where there is a substantial literature related to and focus on the "self" (Markus & Kitayama, 2003). Individualism promotes the "I", self-determination, self-reliance, and autonomy, but on the other hand, collectivism values the "we", relatedness, cooperation, and conformity (Arnett, 2007; Triandis, 1995; Unger & Crawford, 1993). Cross-cultural research further suggests that individuals from individualistic cultures are inclined to perceive themselves as distinct from others, however, those in collectivistic perceive themselves as more interconnected and interdependent with one another (Markus & Kitayama, 1991). Moreover, collectivists are concerned with fitting in with the social group and maintaining social harmony, so they tend to use their connectedness to others as the basis to judge their sense of self (Kim & Markus, 1999).

For collectivists, the ideal interpersonal style is one that holds a consistent external display without revealing inner emotions; conversely, Americans freely share their emotions with others (Tsai & Levenson, 1997). Since Chinese culture emphasizes keeping harmony and fitting well with the society (Kim & Markus, 1999), it is likely that interpersonal relationships will be attached importance accordingly to some extent. Consequently, it is possibly that the individuals from collectivistic cultures (e.g., China) would identify with interpersonal contingencies. Cheng and Kwan (2008) did research in Hong Kong, and they found that collectivists were more likely than individualists to report both attachment anxiety and avoidance, and anxiety and avoidance were both related to basing self-esteem on appearance and social support.

Another important aspect of Chinese culture is the emphasis on family. In Chinese culture, family is the basic unit of society. Traditionally, in Chinese families, the view has been that individuals were a means rather than an end, that is to say, the individual existed in order to continue the family; however, in the West, the view has been that family existed in order to support the individual (Baker, 1979). So, possibly, Chinese children have a different understanding of their roles in a family, and hold a different perspective of their family love. After the implementation of 'one-child' policy, in year 2000, the average family size was 3.16 in urban areas (Zeng & Wang, 2003), so most families had only one child. The emphasis on pursuing the objective of lineage proliferation in Chinese society (Chu & Yu, 2010) and the smaller family size may cause parents invest more effort on their only child. Consequently, both Chinese early and late adolescents may attach importance of their self-esteem to family love domain, and the influence of having contingent self-esteem in this domain may be positive on their global self-esteem and depressive symptoms.

Cultural differences in the domain of academic contingent self-esteem. Due to the

difference between Chinese and Western educational practices and philosophy underlying these

practices (Grant & Dweck, 2001), more research is needed in the Chinese context about the

academic contingent self-esteem. Confucian doctrines influenced Chinese educational practices

and philosophy for many years. The Confucian idea that no matter how hard you work, you can

always work harder is used frequently in Chinese academic settings (Kim, Grant, & Dweck,

1999). In a study of parental beliefs about children's academic achievement by Hess and

colleagues (1982), it was revealed that Chinese mothers cited lack of effort as the predominant

reason of their child's failure in mathematics, whereas American mothers attributed failure to

ability, training, luck, and effort equally. Chinese children have also shown a comparatively

stronger interest in increasing their level of competence in a subject than their American

counterparts, independent of their perception of the adequacy of their present level (Stigler et al.,

1995).

In 1978, China moved toward its third education regime, which emphasized competition,

quality, and talents (Chu & Yu, 2010). The modern Chinese educational system is intensive and

competitive. Secondary school students usually spend approximately thirty hours in the

classroom and another fifteen hours on their homework each week (Dillon, 2009). Students

enter junior high school when they are 12-14 years old, and after three years in junior high

school, they take a very competitive entrance examination to get into a senior high school (Dillon,

2009). Students will spend another three years in senior high school before they take a national

examination to get into a college. These college entrance examinations are extremely

competitive, so consequently, in many households, all normal family activities are suspended

during the preparation period for the examination season, and all family members will combine their efforts in supporting their children to get into the right university (Dillon, 2009).

Although only 15% of college-aged individuals in China attend college (Ministry of Education of the People's Republic of China, 2003), college attendance is highly emphasized, because college graduates earn substantially more than their high school graduate counterparts (Tang, Luk, & Chiu, 2000). So, traditional emphasis on education in Chinese societies is very strong; in fact, Chinese families are known to pay more attention to child education than families from many other ethnic backgrounds (Chu & Yu, 2010). Actually, emphasis on child education has become part of Chinese culture, and usually parents give a very high priority to their children's education (Chu & Yu, 2010).

Chinese students generally see effort as influential in performance, particularly failure, and they tend to believe that studying hard influences their academic performance (Chen & Stevenson, 1995). Consequently, Chinese early adolescents are inclined to think of their academic achievement as a process, instead of an end which shows their final achievement and intelligence. In Chinese culture, under the influence of Confucian heritage, learning is more than simply the pursuit of knowledge, but a constant striving toward perfecting the self through the process of learning (Lee, 1996; Li, 2002, 2005; Tu, 1979). Consequently, due to the Chinese culture's emphasis on academics, academic competition, and the importance of hard work in the academic domain, Chinese students are more likely to stake more of their self-esteem on the domain of academic performance.

Cultural difference in the domain of appearance contingent self-esteem. In China, with moderation as an underlying philosophy (Marsh et al., 2007), may the appearance contingent

self-esteem in adolescences differ from those found in Western samples. For example, Marsh, Hau, Sung, and Yu (2007) found in their research that in contrast to Western research, objective and subjective indexes of body fat were unrelated to global self-esteem and slightly positively related to health self-concept in Hong Kong children. And, consistent with the Chinese cultural value of moderation, being too thin is as detrimental to self-esteem as is being too fat for these Chinese students (Marsh et al., 2007). In contrast, Birbeck and Drummond (2005) found among Western samples that thinness as a desirable self-image was prevalent among Western very young girls, whereas boys had a larger acceptable range of ideal body type. Furthermore, studies done in Western settings showed that level of obesity is negatively related to self-concept during the preadolescent and early adolescent period (Cash, Morrow, Hrabosky, & Perry, 2004; Feingold & Mazzella, 1998; Marsh, 1997). This result shows stronger Chinese cultural values of moderation and acceptance of obesity than in Western culture. Historically, eating disorders have been comparatively less common in the Chinese populations than in Western populations, and the Chinese have regarded plumpness, especially in females, as desirable and attractive (Lee, Ho, & Hsu, 1993). Until recently, Chinese parents apparently believed that obese children are healthier and that obesity reflects their love for their children (Bush, 2003).

Measures of Variables

In order to examine participants' global self-esteem, the Chinese version (Robinson, Shaver, & Wrightsman, 1997) of the Rosenberg Self-esteem Scale (SES; Rosenberg, 1965) was used. The SES is a widely used measure assessing global self-esteem in Chinese younger and older adolescents (Bush, Peterson, Cobas, & Supple, 2002; Cai, 2003; Li, 2006; Shek, 2002), and it is composed of 10 items. The SES has demonstrated high internal consistency and validity (Fleming & Courtney, 1984; Hoge & McCarthy, 1984), and the validity and reliability were

found to be acceptable for use in a Chinese population (Cai, 2003; Li, 2002), and more specifically, in Li's study, the Cronbach alpha was .86 in the Chinese sample, and in Cai's study, α is .77 in the Chinese sample.

In order to examine participants' experience of depressive symptoms, the 20-item Center for Epidemiological Studies Depression scale (CES-D; Radloff, 1977) was used. The items are constructed to measure all of the major dimensions of depressive symptomatology including: (1) depressed mood, (2) feelings of guilt and worthlessness, (3) feelings of helplessness and hopelessness, (4) loss of appetite, (5) sleep disturbance, and (6) psychomotor retardation. This measure of depressive symptoms has excellent psychometric properties when used with the general public, and shows construct and discriminant validity (Radloff, 1977). This scale is appropriate for use with adolescents (Radloff, 1991) and has been used previously in research with Chinese samples (Cheng & Chan, 2005; Cheung & Bagley, 1998; Lin, 1989). More specifically, in Cheung's study, their results showed that CES-D had adequate construct validity to measure the depression of Chinese (1998). This scale has been used with younger adolescents, and the results showed that CES-D Scale was acceptable and reliable with this group of people with good internal consistency (above .87) and test–retest reliability (above .50) (Radloff, 1991; Roberts, Andrews, Lewinsohn, & Hops, 1990).

In order to exam participants' contingent self-esteem, the Contingencies of Self-worth Scale (CSWS) was used. The CSWS assesses the following seven domains on which individuals might base their feelings of self-worth: family love and support (e.g., ''When my family members are proud of me, my sense of self-worth increases''), outdoing others in competition (e.g., ''Doing better than others gives me a sense of self-respect''), physical appearance (e.g., ''When I think I look attractive, I feel good about myself''), academic competence (e.g., ''My

self-esteem is influenced by my academic performance''), being a virtuous or moral person (e.g., ''I couldn't respect myself if I didn't live up to a moral code''), God's love (e.g., "My self-worth is based on God's love''), and others' approval (e.g., ''I can't respect myself if others don't respect me''). Each of the subscales of the CSWS has been found to possess good test–retest reliability and correlate in the expected direction with other personality variables such as the Big Five (e.g., Crocker et al., 2003). The overall CSW scale and each of the subscales have high internal consistency and test–retest reliability , more specifically, past research has shown internal consistencies for the subscales ranging from .82 to .96, and has indicated test-retest reliabilities ranging from .71 to .87 (Crocker et al., 2003).

However, because individuals in different cultures may base their self-esteem in different areas, this measure was altered for use in different cultures (Hu et al., 2008). In China, there is no common belief in God. (For instance, in a survey involving 18 nations around the world, 77.1% of the Chinese respondents stated that they were not at all or slightly religious, which is the highest percentage of all nations; Saxena, 2006.) Thus, the God's love subscale was not used. The remaining subscales of the contingences of self-worth scale (Crocker et al., 2003) were back-translated into Chinese. In Cheng and Kwan's study (2008), all CSWS subscales except for the God's love subscale were back-translated into Chinese, and in their sample, alpha coefficients were comparatively high for each subscale (e.g., .75 for physical appearance, .83 for other's approval, .83 for academic competence, .77 for support from family and friends). The CSWS has also been used with younger adolescents (McArdle, 2010).

Summary

In sum, plenty of research has been done in Western contexts to reveal the contingent self-esteem, and we now know that it influences individuals' global self-esteem and individuals'

behavior. For example, having contingent self-worth may cause fluctuations in individuals' state and trait self-esteem (Crocker & Wolfe, 2001). Among different age groups, the more contingent individuals' self-esteem, the lower their level of self-esteem, with God's love as the only exception (Crocker & Wolfe, 1998; Harter, 1999). Contingent self-esteem may also shape individuals' long-term and short-term goals (Crocker et al., 2006; Crocker & Park, 2004). Bos and colleagues (2010) found out that contingent self-esteem has associations with depression, anxiety, eating problems, and disruptive behavior among teenagers. Though due to many forms of socialization and social influence, contingent self-esteem develops over the course of time (Bandura, 1986, 1991), until now, limited studies have examined the contingent self-esteem among Chinese young adolescents and young adults, especially in mainland China, even though Chinese individuals represent a significantly larger proportion of the world's population. The aim of the present study is to assess Chinese late and early adolescents' contingent self-esteem in different domains, and what influence contingent self-esteem may have on their global self-esteem and levels of depression.

The Current Study

Hypotheses

Since males and females may attach importance to different domains, or they may attach different levels of importance to the same domain (Burwell & Shirk, 2006; Harter, 1999), so in this study, the first hypothesis is that there will be difference between males' and females' contingent self-esteem.

Many studies have supported the idea that the more contingent a person's self-esteem, the lower his level of global self-esteem (Crocker & Wolfe, 1998; Harter, 1999). So the second

hypothesis is that: for both early and late adolescents, the more contingent their self-esteem in each of the measured domains, the lower their global self-esteem will be.

Scholars have found that the higher level of contingent self-esteem individuals have, the more depressive symptoms they report (Burwell & Shirk, 2006; Sargent et al., 2006). So the third hypothesis is that higher levels of contingent self-esteem will be related to higher levels of depressive symptoms in my participants.

Method

Participants

Demographic Information: Two hundred and seventy-seven junior high school students (136 males, 141 females) from three middle schools. Junior high school participants ranged from 12 to 17 years of age ($M = 14.47$, $SD = 1.10$), and included 96.8 % Han nationality, 3.2 % minority. The three middle schools were selected intentionally to represent a wide range of students with different level of academic performance. One middle school is one of the most prestigious middle schools in Xi'an with students having comparatively higher academic performance than average junior high school students. It is possible that students from a prestigious middle school are more likely to go to a university, especially a leading one. The other two schools have students with average to below-average academic performance, so their chance of going to a university is comparatively smaller than the students from a prestigious school.

And two hundred and eighty-six college students (116 males, 170 females) from three universities participated in the study. The three universities were also selected intentionally to represent students with different levels of academic performance. The first university is a public

university that is one of the leading universities in China, serving students with high academic performance. The second university is also a public university, and serves students with average academic performance. The third university is a private university. In China, private universities generally serve students with comparatively lower academic performance students compared with public universities. However, since only 15% of the senior high school students will have a chance to attend a university (Ministry of Education of the People's Republic of China, 2003), even the students from private universities have relatively high academic performance. College participants ranged from 18 to 24 years of age ($M = 20.72$, $SD = .925$), and included 97.6% Han nationality, 2.1% minority.

Measures

*Rosenberg Self-Esteem Scale (RSE)***:** Global trait self-esteem was assessed using the Chinese version (Robinson et al., 1997) of the RSE (Rosenberg, 1965). The RSE is a widely used measure assessing global self-esteem in Chinese individuals (Cai, 2003; Li, 2006), and it is composed of 10 items. Each item is scored on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The RSE has high internal consistency and high test-retest reliability, and it has been demonstrated in numerous studies to be a valid measure of self-esteem. For the college student sample, Cronbach's alpha was .79; and for the junior high student sample, Cronbach's alpha was .75.

Center for Epidemiological Studies Depression Scale (CES-D): Participants' experience of depressive symptoms was assessed by the 20-item CES-D (Radloff, 1977). Respondents reported the frequency of symptoms over the past week on a 4-point scale ranging from 1 *(rarely or none of the time)* to 4 *(almost or all of the time).* For the college student sample, Cronbach's alpha was .82; and for the junior high student sample, Cronbach's alpha was .87.

Contingencies of Self-Worth Scale (CSWS): CSWS (Crocker et al., 2003) assesses the degree to which individuals base self-esteem in seven domains. In China, since there is no common belief of God, the God's love subscale was not used in this study. The CSWS consists of 30 items to which participants provide ratings of agreement on scales ranging from 1 (strongly disagree) to 7 (strongly agree).

College students: Cronbach's alphas for the subscales were: Appearance CSW (α= .69) (Consistent with Crocker et al. (2003), CSW was used to label the original measure), Competition CSW (α= .72), Virtue CSW (α= .72), Others' Approval CSW (α= .71), Family Love CSW (α= .67), Academics CSW (α= .76). One item was dropped from Appearance CSW subscale, Others' Approval CSW subscale, and Family Love CSW subscale respectively, due to the negative effect each of them had on the reliability of each of the three subscales.

Junior high school students: Analyses revealed that the subscale reliabilities among junior high students were too low for the initial subscales to be used in analyses (subscale αs = .42 to .66). Thus, exploratory factor analysis was conducted to further test the links between the 30 CSWS items. A 6-factor solution was implied. Inspecting the content of factors revealed that factors 1-4, and 6 comprised reasonable item clustering (see Table 1 for information about factor loadings). This factor structure produced a significant chi-square statistic, $\chi^2 = 242.79$, $p < .001$, so we rejected the null hypothesis that the model fits perfectly in the population, but other global fit indices suggested a reasonably good fit, CFI = .95, RMSEA = .04 (RMSEA 90 percent confidence interval of .03 to .05). So the five factors model was used in further analysis.

The five newly combined factors were: Family Love Contingent Self-Esteem (CSE) (CSE was used to label the newly combined five factors measure), which included two items from the original family love subscale with the highest loading; Academic and Competitive Performance

CSE, which included two items from the original academic subscale, and three items from the original competition subscale; Others' Approval CSE, which included three items from the original others' approval subscale with the highest loading; Virtue CSE, which included two items from the original virtue subscale with the highest loading; and Others CSE, which included two items from the original competition subscale, one item from the original academic subscale, and one item from the original other's approval subscale. The reason why academic and competition items formed the fourth domain might be due to the situation that the Chinese education system emphasizes on competition (Chu & Yu, 2010). Once children enter elementary school, they are experiencing constant competition (Dillon, 2009), so Chinese junior high students could view academic performance and competitive performance as related issues. But so far, reasons are unclear about why the Others Contingent Self-Esteem domain was formed, it is hard to explain why those items formed the cluster. Cronbach's alpha for each subscales were: Family Love CSE (α= .62), Academic and Competitive Performance CSE (α= .82), Virtue CSE (α= .61), Others' Approval CSE (α= .73), Others CSE (α= .66). Even after running exploratory factor analysis (EFA) and using a new combined five factor model for junior high school students, some of the subscales still had comparatively low reliabilities. However, these low reliabilities may be due in part to the small number of items on some of the factors identified by the EFA.

Translation and Validation of Measures

The equivalence of instruments in different cultural and linguistic contexts is critical for the validity of cross-cultural comparative research (Punnett & Shenkar, 1996; Van de Vijver & Leung, 1997). For the Contingencies of self-worth Scale (CSWS) and Center for Epidemiological Studies Depression scale (CES-D), the techniques of back-translation (Werner

& Campbell, 1973) and bilingual checking (Punnett & Shenkar, 1996) were used to translate the measures from English into Chinese. Three measures were counterbalanced to avoid the carryover effects of answering the measures.

Two pilot studies were conducted to test participants' understanding of content and wording of the two translated Chinese measures. Sixty students (30 junior high school students and 30 college students) were recruited for the first pilot study (these 60 students did not participate the final survey), and the results showed that they had some difficulties in understanding some of the items. Then 6 students of the 60 students were chosen randomly to be interviewed by phone about their detailed understanding of the two measures. Adjustments of the translation were made according to students' feedback. Then second pilot study was conducted to further test Chinese students' understanding of the measures. Another 60 students (30 junior high school students and 30 college students) were recruited for the second pilot study (these 60 students did not participate the final survey either), and the results showed that the new version of the two translated Chinese measures were clearly understood by them.

Results

Overview of Analyses: All analyses were conducted separately for college students and junior high students because the factor structure of the measure for contingent self-esteem is different for the two groups. For each age group, first, the means of each domain's contingent self-esteem were calculated. Then, a MANOVA was run to examine the gender difference in levels of endorsement of each of the domains of contingent self-esteem. Next, correlation coefficients were calculated to test the relationship between students' contingent self-esteem and their global self-esteem. Then series of hierarchical regression analyses was conducted to test hypotheses regarding the associations between the domains of contingent self-esteem and global self-esteem. Next, another correlation coefficient was calculated to test the relationship between

individuals' contingent self-esteem and their depression. Finally, a series of hierarchical regression analyses was conducted to test specific hypotheses regarding the associations between the domains of contingent self-esteem and depression.

College Students

The means of each domain's contingent self-esteem were calculated (see Table 2).

Gender differences in contingent self-esteem. Gender difference was tested by a MANOVA ($F(1, 259) = 2.50$, $p = .023$), and the results showed that there was only significant gender difference in Competition CSW ($F = 5.35$, $p = .022$) with male college students $M = 5.59$, $SD = .77$ showing higher endorsement than female college students $M = 5.33$, $SD = .89$.

Predicting global self-esteem from contingent self-esteem. And for the college students, the result of the analysis showed that gender did not result in a statistically significant increase in explained global self-esteem $\Delta R^2 = .012$, $F(1, 260) = 3.13$, $p = .08$. And the results of the analysis of the second block of variables showed that the six variables explained a statistically significant amount of variance of participants' global self-esteem $\Delta R^2 = .07$, $F(6, 254) = 3.30$, $p = .004$. As can be seen in Table 4, only two domains, Competition CSW and Others' Approval CSW, had significant effects on individuals' global self-esteem. More specifically, Others' Approval CSW was a significant negative predictor of global self-esteem, but Competition CSW was a significant positive predictor of global self-esteem, which meant that if college students attached more importance to the others' approval domain, their global self-esteem would drop, however, the more importance they attached on the competition domain, the higher their global self-esteem would be.

Predicting depression from contingent self-esteem. And the result of the analysis of the first block of variable showed that gender did not result in a statistically significant increase in

explained depression $\Delta R^2 = .001$, $F(1, 251) = .24$, $p = .62$. And the results of the analysis of the second block of variables showed that the six variables explained a statistically significant amount of variance of participants' depression $\Delta R^2 = .10$, $F(6, 245) = 4.61$, $p < .001$. As can be seen in Table 5, three domains—Appearance CSW, Competition CSW, and Family Love CSW—had significant effect on college students' depressive symptoms. More specifically, Appearance CSW was a positive predictor of depression, which meant that if college students cared more about their appearance, they would suffer more depressive symptoms. However, both Family Love CSW and Competition CSW were negative predictors of depression, which meant that if college students attached more importance in these two domains, their depressive symptoms might be reduced.

Junior High School Students:

The means of each domain's contingent self-esteem were calculated (see Table 6).

Gender difference in contingent self-esteem. Gender difference was tested by a MANOVA ($F(1, 252) = 2.71$, $p = .021$), and the results showed that there were significant gender differences in both Academic and Competitive Performance domain ($F = 6.27$, $p = .013$) and Others' Approval domain ($F = 7.14$, $p = .008$) with female junior high students, $M = 6.13$, $SD = .73$ and $M = 4.05$, $SD = 1.42$, respectively, had higher endorsement than male students, $M = 5.94$, $SD = .80$ and $M = 3.56$, $SD = 1.44$, respectively.

Predicting global self-esteem from contingent self-esteem. A series of hierarchical regression analyses was run. Students' global self-esteem was regressed on gender in the first block. The results of the analysis showed that the first block of variables entered in the regression did not result in a statistically significant increase in explained global self-esteem $\Delta R^2 = .003$, $F(1, 248) = .65$, $p = .42$. Of greater interest is the result of the second block of the

hierarchical regression. In the second block, five measured domains of contingent self-esteem were entered. The results showed that the variables of Academic and Competitive Performance Contingent Self-esteem (CSE), Others' Approval CSE, Family Love CSE, Others CSE, and Virtue CSE explained a statistically significant amount of variance of participants' global self-esteem $\Delta R^2 = .25$, $F(5, 243) = 16.53$, $p < .001$. As can be seen in Table 8, each domain except virtue had a significant effect on individuals' global self-esteem in junior high school students.

The results showed that for junior high school students, Others CSE and Others' Approval CSE had significantly negative association with early adolescents' global self-esteem. So, when they attached more importance on these two domains, Chinese early adolescents' global self-esteem would be reduced. Contingent self-esteem in the domain of family love and academic and competitive performance had a significantly positive association with global self-esteem, so if junior high school students attached more importance in these two domains, their global self-esteem would increase accordingly.

Predicting depression from contingent self-esteem. A series of hierarchical regression analyses was run. Junior high school students' depression was regressed on gender in the first block. The results showed that the first block of variables entered in the regression resulted in a statistically significant increase in explained depression $\Delta R^2 = .03$, $F(1, 240) = 8.25$, $p = .004$, with males higher than females. Of greater interest is the result of the second block of the hierarchical regression. In the second block, five measured domains of contingent self-esteem were entered. The results of a series of hierarchical regression analyses showed that the variables of Academic and Competitive Performance CSE, Others' Approval CSE, Family Love CSE, Others CSE, and Virtue CSE explained a statistically significant amount of variance of

participants' depression $\Delta R^2 = .28$, $F(5, 235) = 18.74$, $p < .001$. As can be seen in Table 9, each domain except Other's Approval CSE had a significant effect on individuals' depression.

Results showed that for junior high school students, Others CSE had significantly positive effect on early adolescents' depressive symptoms. So, when they attached more importance on this domain, Chinese early adolescents might have higher level of depression. Results also showed that contingent self-esteem on family love domain, academic and competitive performance domain, and virtue domain had significantly negative effects on junior high school students' depression, so when attaching more importance on these three domains, junior high school students' depressive symptoms would decrease.

Discussion

The main purposes of this study were to measure Chinese early and late adolescents' domain-contingent self esteem and to examine the relations between contingent self-esteem and global self-esteem and between contingent self-esteem and the depressive symptoms students reported. Previous studies showed that self-esteem contingencies are related to numerous deleterious outcomes among adolescents, for example, contingent self-esteem has been linked to depression in adolescents (Burwell & Shirk, 2006). However, so far, limited studies have been done in Chinese settings, especially with samples from mainland China. It is known that Chinese culture and values are different than Western culture and values to some extent, so a study done in a Chinese sample could be helpful to understand more about Chinese adolescents.

College Students

Gender difference. The hypothesis was not completely supported by the findings. The only gender difference was observed in the Competition domain, where male college students had higher level of contingency than female college students, could be partially explained by

Chinese traditional emphasis on male children. Traditionally, Chinese parents have had such a strong preference for male children that after the 'one-child' policy was introduced in 1979, boys greatly outnumbered girls (by a ratio of 119:100 in 2005; Dillon, 2009). There is a common objective of lineage proliferation in Chinese society (Chu, 1991), which is characterized by the family surname. Because only the male line is entitled to carry on the family surname, the lineage-continuation objective fosters the practice of sex discrimination against females (Saso, 1999), and male adults, instead of female adults, are expected to provide resources to their elderly parents or grandparents (Dillon, 2009), so the only male child in a family may be held a higher expectation by their parents to perform better than others in competitive situations. These differences in parental expectations may have led to the observed gender difference in which Chinese male college students attached more importance to the competition domain than female college students.

Predicting global self-esteem from contingent self-esteem. In order to predict college students' global self-esteem from their levels of domain contingent self-esteem, multiple regression analysis was conducted. The hypothesis was that there was a negative association between college student's global self-esteem and their domain contingent self-esteem in all domains. Results showed that Others' Approval CSW was a significant negative predictor of global self-esteem, but Competition CSW was a significant positive predictor of global self-esteem, and other domains did not have significant effects on college students' global self-esteem. So having higher level of Others' Approval CSW would decrease Chinese late adolescents' global self-esteem. On the other hand, when having higher level of Competition CSW, college students' global self-esteem would increase. Previous research suggested that if adolescents' self-esteem was dependent upon others' approval, they would experience

comparatively low and fluctuating self-esteem, especially when they were experiencing low levels of social support (Robinson, 1996). But, if one did not attach importance in interpersonal relationships, his/her self-esteem would not be influenced by the need for relationship or seeing himself/ herself as lacking in the relationship domain (Cambron et al., 2009).

Contingent self-esteem on competition domain had positive influence on Chinese late adolescents' global self-esteem. This phenomenon could be partially explained by the Chinese education system and the positive basic concept toward competition. In China, once they enter elementary school, students have to face fierce competition at every step of their education (Chu & Yu, 2010). They study long hours every day, and need to pass competitive entrance examination to enter senior high school and college (Dillon, 2009). Furthermore, only the students with good academic performance can be admitted to a good high school (Pomerantz, Ng, & Wang, 2008), and only 15% of individuals of college-attending age go to college (Ministry of Education of the People's Republic of China, 2003). Moreover, attendance at college is vital in Chinese society, because college graduates earn substantially more than their high school graduate counterparts (Tang et al., 2000). Therefore, competition existed from day one once children entered school. Among Chinese early adolescents, they tend to relate their academic performance to competition, and since they consider learning is not only about gaining knowledge, but an ongoing process to pursue perfection of the self (Lee, 1996; Li, 2002, 2005; Tu, 1979), they hold a positive attitude towards academic and competitive performance. And, Chinese adolescents are more oriented toward mastery (Wang & Pomerantz, 2009). They are also more persistent in the face of challenge. Study showed that Chinese adolescents' performance improved after failure (Ng, Pomerantz, & Lam, 2007). Consequently, it is possible that Chinese late adolescents may view competition as a way to learn and improve themselves;

therefore, contingent self-esteem on competition domain is a positive predictor of Chinese college students' self-esteem, instead of a negative one showed in a Western sample.

Predicting depression from contingent self-esteem. The findings showed that only two domains—Appearance CSW and Others' Approval CSW—were significantly positively correlated with Chinese college students' depression, so the hypothesis was not fully supported. Previous research found out that the higher the level of contingent self-esteem, the more depressive symptoms an individual has (Burwell & Shirk, 2006; Sargent et al., 2006). Studies among college students also claimed that higher levels of external contingencies of self-worth would predict increase in depressive symptoms (Sargent et al., 2006). So, the findings fit in with previous theoretical perspectives, and it also showed that the influence of contingent self-esteem on depression in these two domains may be similar in Chinese settings compared to Western settings. However, the other four domains did not have significant correlation with depression, so my hypothesis was not completely supported.

Interestingly, Others' Approval CSW and Appearance CSW had a significant positive correlation with depression, though Chinese college students tended to attach the least importance in these two domains. Maybe Chinese college students were inclined to attach lower value in these two domains just in order to dis-identify themselves, so their self-esteem would be protected. Or, maybe Chinese college students' attached comparatively less importance in these two domains, they experience more pressure in these two domains than other domains. Since appearance and others' approval are usually out of control of students themselves, therefore, experiencing negative events in the two domains may especially lead to instability in their self-esteem, hence causing more depressive symptoms.

In order to predict Chinese college students' depression from their level of contingent self-esteem, a multiple regression analysis was conducted. Results showed that appearance contingent self-esteem was a significant positive predictor of students' depression, which means that when Chinese college students had higher level of appearance contingent self-esteem, they would experience more depressive symptoms; however, if they had lower level of appearance contingent self-esteem, they could have less depression. This finding is consistent with previous studies.

However, family love contingent self-esteem and competition contingent self-esteem were significant negative predictors of depressive symptoms among Chinese college students, so when they attached more importance in these domains, their depressive symptoms might reduce to some extent. Research done in Western samples showed that external contingencies of self-worth—others' approval, appearance, academic competence, and competition contingencies of self-worth—predicted increase in depression over time among college freshmen (Sargent et al., 2006). The results did not provide support for hypothesis completely.

Moreover, the present data also suggested that the other three measured domains of contingent self-esteem, others' approval, virtue, and academics, were unrelated to changes in college students' depression significantly.

Data showed that basing self-esteem on family love and competition domain might help Chinese college students to reduce their depressive symptoms to some extent. This phenomenon could be explained by the unique importance of family among Chinese society (Baker, 1979), Chinese family structure, and also Chinese adolescents' different understanding of competition (Ng et al., 2007; Wang & Pomerantz, 2009). For example, after the implementation of "one-child" policy, the average family size became smaller (Zeng & Wang, 2003), and Chinese children have

a responsibility to continue the family (Baker, 1979), and to pursue the objective of lineage proliferation (Chu & Yu, 2010). So consequently, parents invest more effort on raising their only child, and Chinese children see themselves as a means to continue the family rather than an end (Baker, 1979), which is different than the views of children from Western countries about their roles in a family. All these situations may explain partially why Family Love domain could be a positive influence on Chinese late adolescents' depression.

In sum, for Chinese college students, Others' Approval CSW not only had a negative correlation with their global self-esteem, but was a negative predictor of it as well. But, contrasted with my hypothesis, competition CSW was a positive predictor of global self-esteem. Chinese college students held a comparatively positive attitude toward competition (Chen & Stevenson, 1995), and they considered it as a part of learning process, with improving themselves and mastering more knowledge as an ultimate goal (Lee, 1996; Li, 2002, 2005; Tu, 1979). Therefore, having contingent self-esteem in competition domain did not have the same detrimental influence on Chinese college students as it had on Western samples.

And about the relation between depression and contingent self-esteem, Appearance CSW had a positive correlation with Chinese college students' depression, and was also a significant positive predictor of their depressive symptoms. However, findings suggested that Family Love CSW and Competition CSW were significant negative predictors of depressive symptoms, which was the opposite of Western samples. There was a unique importance of family among Chinese society (Baker, 1979), and since most families in urban area only have one child (Zeng & Wang, 2003), Chinese college students might have a comparatively different feeling about their families and the love they got from their families than their Western counterparts. And their attitude

toward competition could partially explain why Competition CSW did not have the same detrimental effect on depression as it had on Western late adolescents.

The findings of this study suggested that the difference between Chinese and Western cultures did influence Chinese late adolescents' contingent self-esteem, especially the influence of contingent self-esteem on global self-esteem and depression. In Chinese society, people tend to use their connectedness to others as the basis to judge their sense of self (Kim & Markus, 1999), and they values relatedness, cooperation, and conformity (Arnett, 2007; Triandis, 1995; Unger & Crawford, 1993). Chinese late adolescents have more chances to compete with others in different areas besides academic performance than Chinese early adolescents, so it will be more interesting to not only examine the importance of other's approval in Chinese late adolescents' self-esteem, but also test the importance of conformity and connectedness domain in their self-esteem, and how it will be related to depressive symptoms and the global self-esteem.

Junior High School Students:

Gender Differences. Female early adolescents showed higher endorsement in both Academic and Competitive Performance domain and Others' Approval domain than male early adolescents, but the difference was greater in the Other's Approval domain. According to Burwell and Shirk (2009), females tend to develop stronger interpersonal self-esteem contingencies than males. Gilligan (1982) also suggested that when they reach adolescence, females tend to inhibit the expression of their own feelings and thoughts in order to preserve relationship. In Chinese societies, obligations to others and social harmony have been emphasized, and Chinese people try to avoid conflict in their life (Nisbett, 2003; Xu et al., 2004). The result of the study fitted in with existing theoretical perspective about the difference between

the two genders in others' approval contingent self-esteem. So it's possible that females are inclined to care more about getting others' approval than males.

Predicting global self-esteem from contingent self-esteem. The hypothesis was that there would be a negative relationship between Chinese early adolescents' contingent self-esteem in each of the measured domains and their global self-esteem. Some scholars claimed that across different age groups, the higher the level of an individual's contingent self-esteem, the lower his/her level of global self-esteem (Crocker & Wolfe, 1998; Harter, 1999). The results of my study did not support the hypothesis completely.

In Chinese junior high school students, the relationships between Family love CSE and RSE, and Academic and Competitive Performance CSE and RSE were positive. This may be explained partially by the extremely high importance of family in Chinese culture (Baker, 1979)**.** Collectivism values the "we", relatedness, cooperation, and conformity (Arnett, 2007; Triandis, 1995; Unger & Crawford, 1993), Chinese people especially value how their family members think of them, and how their families love them. Unlike individualistic societies, which value autonomy and self-determination (Unger & Crawford, 1993), Chinese society values filial piety, so Chinese individuals especially care about families' opinion when making decisions. On the other hand, since the majority of Chinese family in urban areas only have one child (Zeng & Wang, 2003)**,** parents usually give their children a great deal of love and attention, and even see their own worth as contingent on their children's performance (Pomerantz et al., 2008). So it is possible that when Chinese adolescents attach more importance in family love domain, their global self-esteem may increase accordingly. Because first to them, Chinese traditional values teach them family indeed is the most important thing is their life (Chu & Yu, 2010), and second, they usually will receive the maximum of love and attention from their parents, so they may feel

good about their family, consequently, there could be a positive relationship between family love contingent self-esteem and their global self-esteem.

A possible reason for the positive relation between Academic and Competitive Performance CSE and global self-esteem was that maybe Chinese early adolescents tend to treat academic performance and competitive performance as a positive booster to their self-esteem. In China, the majority of elementary school students report that that they like school and homework (Stevenson et al., 1990), and they have more intrinsic than extrinsic reasons for doing homework or other school-related activities (Wang & Pomerantz, 2009). Chinese students believe that studying hard influences their academic performance (Chen & Stevenson, 1995). Consequently, Chinese early adolescents are inclined to think their academic achievement as a process in which they are making process step by step, instead of an end which shows their final achievement and intelligence. In Chinese culture, learning is a constant striving toward perfecting the self through the process of learning (Lee, 1996; Li, 2002, 2005; Tu, 1979).

Furthermore, due to the fierce competition in Chinese education system (Ministry of Education of the People's Republic of China, 2003; Pomerantz et al., 2008) , competition existed from day one once children entered school, Chinese early adolescents may consider competition as a part of their study, and it is an ongoing process in order to pursuit the perfection of the self. So possibly, the more importance Chinese early adolescents attach on the domain of academic and competitive performance, the higher their self-esteem will be.

Moreover, for junior high school students, Others CSE and Others' Approval CSE had significantly negative effect on early adolescents' global self-esteem and that this effect held even after gender was taken into account. Both of them were important predictor for junior high

school students' global self-esteem. So, when they attached more importance on Others domain and Others' Approval domain, Chinese early adolescents might have lower global self-esteem, and this finding was consistent with existing research. Contingent self-esteem in the domain of family love and academic and competitive performance had a significantly positive effect on global self-esteem. Due to the extreme importance of family in Chinese society (Chu & Yu, 2010), having higher family love contingent self-esteem may not have the same detrimental effect to global self-esteem as in the Western society. And since Chinese early adolescents may hold a different understanding of academic and competitive performance than American counterparts (Chen & Stevenson, 1995; Lee, 1996; Li, 2002, 2005; Tu, 1979; Wang & Pomerantz, 2009), so attaching more importance in this domain also could have positive influence on their global self-esteem.

Predicting depression from contingent self-esteem. The hypothesis was that there was a positive relationship between Chinese early adolescents' contingent self-esteem in each of the measured domains and their level of depressive symptoms. Previous research found out that the higher the level of contingent self-esteem, the more depressive symptoms an individual has (Burwell & Shirk, 2006; Sargent et al., 2006). Instability of self-esteem is one result of having contingent self-worth (Deci & Ryan, 1995; Kernis, 2003). Some scholars suggested that instability in self-esteem is a risk factor for depression, especially when people experience positive and negative events in domains on which their self-worth is attached (Crocker, 2002; Crocker, Sommers & Luhtanen, 2002; Crocker & Wolfe, 2001).In order to predict Chinese early adolescents' depression from their level of contingent self-esteem, a multiple regression analysis was conducted. Consistent with prior study (Burwell & Shirk, 2006), results showed that for junior high school students, Others CSE had significantly positive effect on early adolescents'

depressive symptoms and that this effect held even after gender was taken into account. So, on one hand, when they attached more importance on this domain, Chinese early adolescents might have higher level of depression, on the other hand, if they care less about this domain, they could possibly experience less depression. Results also showed that contingent self-esteem on family love domain, academic and competitive performance domain, and virtue domain had significantly negative effects on junior high school students' depression. These results were not consistent with existing studies. Again, having contingent self-esteem on these three domains could be positive influence on Chinese adolescents. The results further prove that in Chinese settings, due to different values and culture influence, early adolescents may hold a different attitude towards family love and academic and competitive performance, so the influence of the contingent self-esteem on these domains will be different contrasted with Western counterparts.

In sum, for Chinese junior high school students, having contingent self-esteem in family love domain and academic and competitive performance domain had positive effect on their global self-esteem. Due to the extremely high importance of family in Chinese culture and value (Baker, 1979; Chu & Yu, 2010), it is understandable that Family Love CSE was not only positively correlated to Chinese early adolescents' global self-esteem, but was a positive predictor of global self-esteem, therefore having higher family love contingent self-esteem might not have the same detrimental effect to global self-esteem as in the Western society. And learning in Chinese culture is a constant striving toward perfecting the self through the process of learning (Lee, 1996; Li, 2002, 2005; Tu, 1979), Chinese early adolescents might hold a different understanding of academic and competitive performance than American counterparts (Chen & Stevenson, 1995; Lee, 1996; Li, 2002, 2005; Tu, 1979; Wang & Pomerantz, 2009), therefore

attaching more importance in this domain did not have as same detrimental influence on their global self-esteem as in Western samples.

And about the relation between depression and contingent self-esteem, having contingent self-esteem on Academic and Competitive Performance CSE, Family Love CSE, and Virtue CSE actually had negative effects on depression. In Chinese society, not only are adolescents educated to understand and accept the unique importance of their family (Baker, 1979; Chu & Yu, 2010), they also receive maximum of love from their parents. And they may hold a different attitude towards the academic and competitive performance, compared with their American counterparts (Chen & Stevenson, 1995; Lee, 1996; Li, 2002, 2005; Tu, 1979; Wang & Pomerantz, 2009). The results further prove that in Chinese settings, due to different values and culture influence, early adolescents may hold a different attitude towards family love and academic and competitive performance, so the influence of the contingent self-esteem on these domains will be different contrasted with Western counterparts.

Due to the culture difference between China and Western countries, the influence of contingent self-esteem, especially the influence of it on global self-esteem and depression, was comparatively different in Chinese early adolescents and their Western counterparts. In this study, the original CSWS was not appropriate to be used in Chinese early adolescents, and there were only two items in some domains, which could possible reduced the chance of getting an adequate understanding of Chinese early adolescents' contingent self-esteem in different domains, and also the influence of contingent self-esteem on global self-esteem and depression. More suitable measure should be developed to fit Chinese early adolescents. For example, the academic contingent self-esteem domain and competition contingent self-esteem could be combined into one broader domain, because Chinese early adolescents spend large amount of

time at school and doing homework at home per day, and they are competing with each other academically daily at school (Dillon, 2009), so to them, academic performance and competition are intertwined. And Chinese people tend to use their connectedness to others as the basis to judge their sense of self (Kim & Markus, 1999), so it will be interesting to examine the importance of peer relationship on Chinese early adolescents' self-esteem more specifically, instead of only testing others' approval in general.

Comparison of Chinese Late and Early Adolescents

Generally speaking, Chinese late and early adolescents were comparatively consistent about the value they attached in different domains. The most important domains for both late and early adolescents were family love and competition. Chinese culture's emphasis on family and competition seems to have similar influence on both late and early adolescents.

Considering the relation between contingent self-esteem and global self-esteem, there were still some similarities between the two age groups. First of all, contingency in others' approval domain was a negative predictor of global self-esteem in both groups. Second, competition factor was a positive predictor of global self-esteem in both groups. However, among college students, contingency in appearance domain was negatively correlated with global self-esteem. And among junior high school students, academic and competitive performance domain had a significantly positive correlation with global self-esteem. During junior high school phase, Chinese students are mainly focus on the academic achievement and being competitive in academic related activities (Dillon, 2009), consequently, academic and competitive performance CSE could be more developmentally appropriate for them.

Considering the relation between contingent self-esteem and depression, contingency in other's approval domain had a positive correlation with depression in both groups. Contingency in family love and competition domain were negative predictor for depressive symptoms in both groups. However, appearance contingent self-esteem was a positive predictor of depression among college students. In Chinese early adolescents, contingency in academic and competitive performance domain, family love domain, and virtue domain had a negative correlation with depression.

Previous studies conducted in Western culture background showed that contingent self-esteem usually was negatively associated with global self-esteem (Crocker & Wolfe, 1998; Harter, 1999), and positive associated with depressive symptoms (Burwell & Shirk, 2006; Sargent et al., 2006). However the present study showed a little different picture. Actually, contingent self-esteem could have some positive influence on Chinese adolescents.

In Chinese culture, family has an extremely high importance in Chinese society that the individual existed in order to continue the family (Baker, 1979). And after the implementation of "one-child" policy, family size reduced to 3.16 in urban areas (Zeng & Wang, 2003), so the only child of the family is taking the responsibility of lineage proliferation (Chu & Yu, 2010). So, possibly, Chinese adolescents have a different understanding of their roles in a family, and hold a different perspective of their family love than their Western counterparts. Under these influence, family love contingent self-esteem could have a positive influence on Chinese adolescents. More specifically, Chinese early adolescents' family love contingent self-esteem could positively predict their global-esteem and negatively predict their depression. And family love contingent self-esteem also could negatively affect Chinese late adolescents' depressive symptoms.

Though Chinese education system is intensive and competitive (Chu & Yu, 2010; Dillon, 2009), Chinese students generally see effort as influential in performance (Chen & Stevenson, 1995), they care about obtaining more knowledge instead of performing well before others (Wang & Pomerantz, 2009), and they believe that learning is a constant striving toward perfecting the self (Lee, 1996; Li, 2002, 2005; Tu, 1979). And Chinese parents give a very high priority to their children's education (Chu & Yu, 2010). Under the influence of Confucian heritage, contingent self-esteem on academic and competitive performance domain could also have a positive influence on both Chinese early and late adolescents. Actually, academic and competitive performance CSE did positively influence Chinese junior high school students' global self-esteem and negatively influence their depressive symptoms. And competition CSE was a positive predictor of Chinese college students' global self-esteem and a negative predictor of their depression. Therefore, have higher level of contingent self-esteem seems as a positive influence on Chinese adolescents.

In sum, the similarities of competition and family love contingent self-esteem and especially their positive influence on global self-esteem and negative influence on depression between Chinese college students and junior high school students further showed that in Chinese culture family has its unique role and influence on Chinese adolescents, and Chinese value of education, the attitude toward academic achievement and competition is comparatively different than Western value and culture.

Though there was some consistency among early and late Chinese adolescents, there were still differences. Generally speaking, Chinese junior high school students spent most of their time on study and they competed constantly in their academic performance with each other, however after entered college, Chinese late adolescents had less pressure on their academic achievement,

and they started to have more social activities. The findings of the present study showed that only among Chinese junior high school students, academic and competitive performance contingent self-esteem had a positive correlation with global self-esteem, and a negative correlation with depression. So, with different social influence and life experience, people with different age could possibly have different values in various domains, and the influence of contingent self-esteem on Chinese adolescents' global self-esteem and depressive symptoms may also vary accordingly.

Implications and Limitations

So far, extensive research has been done on the concept of contingent self-esteem, however, almost exclusively in Western settings. Limited studies have been done in Chinese settings, especially with samples from mainland China. As a collectivistic society, Chinese people have different values and culture than individualistic society, so Chinese people may base their self-esteem on different domains than people from individualistic society. And the contingent self-esteem may also have different influence on people's global self-esteem and depression among Chinese samples than among Western samples. China has a large population; any attempt to understand its people more is worthwhile.

Since contingent self-esteem may influence adolescents' life in many ways, knowing more about Chinese adolescents' specific situation about it may help to further understand their behaviors, psychological health, and other related areas more thoroughly, and it may also shed light on how to boost adolescents' self-esteem in Chinese contexts. For example, the knowledge of Chinese adolescents' contingent self-esteem may help us to explore the mechanism of the instability of Chinese adolescents' self-esteem. It could also help researchers to understand more

about Chinese adolescents' emotions, thoughts, and behavior. Furthermore, since contingent self-esteem is associated with psychological vulnerability among adolescents (Deci & Ryan, 1995, 2000), more knowledge about it could also be helpful when it comes to understanding a source of adolescents' depressive symptoms, and helping to reduce their stress and pressure, which has relevance to clinical psychology as well.

In addition, although contingent self-esteem has been studied with late adolescents extensively, little is known about how the contingent self-esteem among early adolescents. The present study examined both early and late Chinese adolescents, and found different patterns between these two age groups. Further research could try to compare the early and late adolescents or follow the same group over years, so the change of contingent self-esteem over time could be examined. And since the specific mechanism for influence of contingent self-esteem on global self-esteem and depression is still unclear in Chinese samples, another direction for further study should be focusing on finding out the mechanism of the influence by examining Chinese adolescents' specific attitude and culture, and what kind of forms of socialization and social influence they experience in detail.

However, there are still several limitations of the current study. First of all, all participants were recruited from one large city in mainland China. It is possible that the results would not generalize to all Chinese students, particularly those in rural areas. For example, the average family size in rural areas is comparatively larger than in urban areas, families in rural areas may have severer sex discrimination against female children than families in urban areas, and attitudes toward education in rural areas might also be different compared to attitudes in urban areas. So, further research will be necessary to show a clearer picture. However, since the schools and universities included in the current study were selected intentionally to represent a

wide range of students with different levels of academic performance, the findings should be able to represent a larger population to some extent.

Second, in using existing measures with new populations, issues of reliability and validity must be considered. In the current research, a direct translation of an existing measure of contingent self-esteem proved to be adequately reliable for the college student sample, but not for the junior high school student sample. A factor analysis indicated that the underlying factor structure for contingent self-esteem may be different for Chinese junior high school students than for Chinese college students. Future research might explore whether a measure specifically developed for use with Chinese populations might undercover new domains of contingent self esteem, such as filial piety. In addition to issues of measurement validity, there are also issues of statistical conclusion validity that should be considered. Given that this study was an initial exploration of contingent self-esteem in a Chinese population, research questions were broad and many potential relationships were considered. This approach leads to increased possibility for type I error, in which statistically significant findings are occasionally found by chance. Further research should also examine the relations between contingent self-esteem, global self-esteem, and depression in Chinese samples in order to validate the findings of the present study.

Finally, this research used a cross-sectional design to compare junior high school and college students, which could also limit the understanding of the development of contingent self-esteem to some extent. Further research could use longitudinal methods to follow the same group over years, so the development of contingent self-esteem could be examined.

Conclusion

In summary, the findings of the research suggested that culture and value differences between China and Western countries may have influence on adolescents' contingent self-esteem,

and the associations between contingent self-esteem and global self-esteem and contingent self-esteem and depression. In fact, having contingent self-esteem in both competition domain and family love domain could have some positive effects on Chinese adolescents' global self-esteem and depressive symptoms, instead of some detrimental effects showed in Western adolescents. Therefore, the findings of the current research could be helpful to not only further understanding of Chinese adolescents' psychological health, but also could shed light on the ways to boost their global self-esteem and reduce their depression.

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Table 1

Five-factor model of contingent self-esteem for junior high sample

Factor	Items	*M* factor loading
Family love factor (α=.62)	Knowing that my family members love me makes me feel good about myself.	.81
	It is important to my self-respect that I have a family that cares about me.	.55
Academics/competition factor (α=.82)		
Academics	Doing well in school gives me a sense of self-respect.	.75
	I feel better about myself when I know I'm doing well academically.	.64
Competition	Doing better than others gives me a sense of self-respect.	.79
	I feel worthwhile when I perform better than others on a task or skill.	.55
	Knowing that I am better than others on a task raises my self-esteem.	.73
Others' approval factor (α=.73)	I don't care if other people have a negative opinion about me.	.64
	I don't care what other people think of me.	.76
	What others think of me has no effect on what I think about myself.	.64
Virtue factor (α=.61)	My self-esteem would suffer if I did something unethical.	.67
	My self-esteem depends on whether or not I follow my moral/ethical principles.	.55
Others factor (α=.66)	My self-esteem depends on the opinions others hold of me.	.48
	My self-worth is affected by how well I do when I am competing with others.	.62
	My self-esteem is influenced by my academic performance.	.52
	My self-worth is influenced by how well I do on competitive task.	.48

Table 2

Means of the Six Factors

Factors	M	SD
Academic CSW	5.15	0.98
Virtue CSW	4.61	1.03
Family Love CSW	5.57	0.89
Others' Approval CSW	3.91	1.16
Competition CSW	5.43	0.85
Appearance CSW	3.95	1.14

Note. CSW = Contingencies of Self-Worth Scale

Table 3

Correlations among variables for college students

Variables	2	3	4	5	6	7	8
1 Global Self-esteem	-.503**	-.103	-.023	.061	-.221**	.060	-.119*
2 Depression		.110	.037	-.107	.130*	-.036	.245**
3 Academic CSW			.302**	.334**	.430**	.591**	.355**
4 Virtue CSW				.419**	.088	.476**	.136*
5 Family Love CSW					.051	.486**	.138*
6 Others' Approval CSW						.218**	.372**
7 Competition CSW							.291**
8 Appearance CSW							

Note. CSW = Contingencies of Self-Worth Scale; *p ≤ .05. **p≤ .01.

Table 4

Multiple regression analyses predicting global self-esteem among college students

	Standardized Beta	t	p value
Appearance CSW	-.096	-1.396	.164
Others' Approval CSW	-.173*	-2.451	.015
Family Love CSW	.059	.822	.412
Academics CSW	-.089	-1.049	.295
Virtue CSW	-.070	-.986	.325
Competition CSW	.171*	1.976	.049

Note. Analysis controls for gender; CSW = Contingencies of Self-Worth Scale; *p ≤ .05.

Table 5

Multiple regression analyses predicting depression among college students

	Standardized Beta	t	p value
Appearance CSW	.247***	3.611	.000
Others' Approval CSW	.015	.217	.828
Family Love CSW	-.143*	-1.979	.049
Academics CSW	.128	1.514	.131
Virtue CSW	.117	1.641	.102
Competition CSW	-.177*	-2.046	.042

Note. Analysis controls for gender; CSW = Contingencies of Self-Worth Scale; *p ≤ .05. ***p ≤ .001.

Table 6

Means of the Five Factors

Factors	*M*	*SD*
Family Love CSE	**5.92**	**1.12**
Academic and Competitive Performance CSE	**6.04**	**0.77**
Others' Approval CSE	**3.80**	**1.45**
Others CSE	**4.00**	**1.16**
Virtue CSE	**5.22**	**1.28**

Note. CSE = the newly combined five factors measure for contingent self-esteem

Table 7

Correlations among variables for junior high students

Variables	2	3	4	5	6	7
1 Global Self-esteem	-.582**	.335**	.188**	-.238**	-.287**	.074
2 Depression		-.336**	-.232**	.211**	.291**	-.152*
3 Family Love CSE			.410**	-.034	.160**	.279**
4 Academic and Competitive Performance CSE				.064	.316**	.289**
5 Others' Approval CSE					.284**	-.035
6 Others CSE						.233**
7 Virtue CSE						

Note. CSE = the newly combined five factors measure for contingent self-esteem;
*p ≤ .05. **p≤ .01.

Table 8

Multiple regression analyses predicting global self-esteem among junior high school students

	Standardized Beta	t	p value
Family Love CSE	**.296***	**4.734**	**.000**
Others' Approval CSE	**-.137***	**-2.320**	**.021**
Others CSE	**-.347***	**-5.549**	**.000**
Academic and Competitive Performance CSE	**.167***	**2.537**	**.012**
Virtue CSE	**.021**	**.347**	**.729**

Note. Analysis controls for gender; CSE = the newly combined five factors measure for contingent self-esteem; *p ≤ .05, ***p ≤ .001.

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Table 8

Multiple regression analyses predicting global self-esteem among junior high school students

	Standardized Beta	t	p value
Family Love CSE	**.296*****	**4.734**	**.000**
Others' Approval CSE	**-.137***	**-2.320**	**.021**
Others CSE	**-.347*****	**-5.549**	**.000**
Academic and Competitive Performance CSE	**.167***	**2.537**	**.012**
Virtue CSE	**.021**	**.347**	**.729**

Note. Analysis controls for gender; CSE = the newly combined five factors measure for contingent self-esteem; *p ≤ .05, ***p ≤ .001.

Table 9

Multiple regression analyses predicting depression among junior high school students

	Standardized Beta	t	p value
Family Love CSE	-.28***	-4.51	.000
Others' Approval CSE	.06	1.01	.315
Others CSE	.38***	6.34	.000
Academic and Competitive Performance CSE	-.22***	-3.40	.001
Virtue CSE	-.12*	-1.99	.048

Note. Analysis controls for gender; CSE = the newly combined five factors measure for contingent self-esteem;
*p ≤ .05, ***p ≤ .001

Appendix

Appendix A:

Definition of Main Terms

Self-esteem: self-esteem is defined as an individual's global judgments about him- or herself, including levels of self-worth, self-acceptance and self-respect (Rosenberg, 1965).

Contingent self-esteem: contingent self-esteem refers to the extent to which self-esteem is contingent upon outcomes and achievement in a particular domain (Kernis, 2002).

Depression: "A mood state of sadness, gloom, and pessimistic ideation, with loss of interest or pleasure in normally enjoyable activities, accompanied in severe cases by anorexia and consequent weight loss, insomnia or hypersomnia, asthenia, feelings of worthlessness or guilt, diminished ability to think or concentrate, or recurrent thoughts of death or suicide." (Colman, 2003, p. 196).

Rosenberg Self-esteem Scale

INSTRUCTIONS: Please respond to each of the following statements by circling your answer using the scale from "Strongly disagree" to "Strongly agree." If you haven't experienced the situation described in a particular statement, please answer how you think you would feel if that situation occurred.

	STATEMENT	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that I am a person of worth, at least on an equal plane with others.	○	○	○	○
2.	I feel that I have a number of good qualities..	○	○	○	○
3.	All in all, I am inclined to feel that I am a failure.	○	○	○	○
4.	I am able to do things as well as most other people.	○	○	○	○
5.	I feel I do not have much to be proud of.	○	○	○	○
6.	I take a positive attitude toward myself.	○	○	○	○
7.	On the whole, I am satisfied with myself.	○	○	○	○
8.	I wish I could have more respect for myself.	○	○	○	○
9.	I certainly feel useless at times.	○	○	○	○
10.	At times I think I am no good at all.	○	○	○	○

Appendix C:

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

	During the Past Week			
	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	☐	☐	☐	☐
2. I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
3. I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
4. I felt I was just as good as other people.	☐	☐	☐	☐
5. I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
6. I felt depressed.	☐	☐	☐	☐
7. I felt that everything I did was an effort.	☐	☐	☐	☐
8. I felt hopeful about the future.	☐	☐	☐	☐
9. I thought my life had been a failure.	☐	☐	☐	☐
10. I felt fearful.	☐	☐	☐	☐
11. My sleep was restless.	☐	☐	☐	☐
12. I was happy.	☐	☐	☐	☐
13. I talked less than usual.	☐	☐	☐	☐
14. I felt lonely.	☐	☐	☐	☐
15. People were unfriendly.	☐	☐	☐	☐
16. I enjoyed life.	☐	☐	☐	☐
17. I had crying spells.	☐	☐	☐	☐
18. I felt sad.	☐	☐	☐	☐
19. I felt that people dislike me.	☐	☐	☐	☐
20. I could not get "going."	☐	☐	☐	☐

SCORING: zero for answers in the first column, 1 for answers in the second column, 2 for answers in the third column, 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.

Appendix D:
CONTINGENCIES OF SELF-WORTH SCALE
INSTRUCTIONS: Please respond to each of the following statements by circling your answer using the scale from "1 = Strongly disagree" to "7 = Strongly agree." If you haven't experienced the situation described in a particular statement, please answer how you think you would feel if that situation occurred.

		Strongly Disagree	Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Agree	Strongly Agree
1.	When I think I look attractive, I feel good about myself.	1	2	3	4	5	6	7
2.	My self-worth is based on God's love.	1	2	3	4	5	6	7
3.	I feel worthwhile when I perform better than others on a task or skill.	1	2	3	4	5	6	7
4.	My self-esteem is unrelated to how I feel about the way my body looks.	1	2	3	4	5	6	7
5.	Doing something I know is wrong makes me lose my self-respect.	1	2	3	4	5	6	7
6.	I don't care if other people have a negative opinion about me.	1	2	3	4	5	6	7
7.	Knowing that my family members love me makes me feel good about myself.	1	2	3	4	5	6	7
8.	I feel worthwhile when I have God's love.	1	2	3	4	5	6	7
9.	I can't respect myself if others don't respect me.	1	2	3	4	5	6	7
10.	My self-worth is not influenced by the quality of my relationships with my family members.	1	2	3	4	5	6	7
11.	Whenever I follow my moral principles, my sense of self-respect gets a boost.	1	2	3	4	5	6	7
12.	Knowing that I am better than others on a task raises my self-esteem.	1	2	3	4	5	6	7
13.	My opinion about myself isn't tied to how well I do in school.	1	2	3	4	5	6	7
14.	I couldn't respect myself if I didn't live up to a moral code.	1	2	3	4	5	6	7
15.	I don't care what other people think of me.	1	2	3	4	5	6	7
16.	When my family members are proud of me, my sense of self-worth increases.	1	2	3	4	5	6	7
17.	My self-esteem is influenced by how attractive I think my face or facial features are.	1	2	3	4	5	6	7
18.	My self-esteem would suffer if I didn't have God's love.	1	2	3	4	5	6	7

		Strongly Disagree	Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Agree	Strongly Agree
19.	Doing well in school gives me a sense of self-respect.	1	2	3	4	5	6	7
20.	Doing better than others gives me a sense of self-respect.	1	2	3	4	5	6	7
21.	My sense of self-worth suffers whenever I think I don't look good.	1	2	3	4	5	6	7
22.	I feel better about myself when I know I'm doing well academically.	1	2	3	4	5	6	7
23.	What others think of me has no effect on what I think about myself.	1	2	3	4	5	6	7
24.	When I don't feel loved by my family, my self-esteem goes down.	1	2	3	4	5	6	7
25.	My self-worth is affected by how well I do when I am competing with others.	1	2	3	4	5	6	7
26.	My self-esteem goes up when I feel that God loves me.	1	2	3	4	5	6	7
27.	My self-esteem is influenced by my academic performance.	1	2	3	4	5	6	7
28.	My self-esteem would suffer if I did something unethical.	1	2	3	4	5	6	7
29.	It is important to my self-respect that I have a family that cares about me.	1	2	3	4	5	6	7
30.	My self-esteem does not depend on whether or not I feel attractive.	1	2	3	4	5	6	7
31.	When I think that I'm disobeying God, I feel bad about myself.	1	2	3	4	5	6	7
32.	My self-worth is influenced by how well I do on competitive tasks.	1	2	3	4	5	6	7
33.	I feel bad about myself whenever my academic performance is lacking.	1	2	3	4	5	6	7
34.	My self-esteem depends on whether or not I follow my moral/ethical principles.	1	2	3	4	5	6	7
35.	My self-esteem depends on the opinions others hold of me.	1	2	3	4	5	6	7