

Womanist Identity, Acculturation, and Gender Role Identity: An Examination of Chinese Female Students in the United States

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WOMANIST IDENTITY, ACCULTURATION, AND GENDER ROLE IDENTITY:
AN EXAMINATION OF CHINESE FEMALE STUDENTS IN THE UNITED STATES

Dissertation

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Abstract

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Qingyi Yu

As the first generation born after China introduced its "one-child policy," Chinese female students in the United States belong to a special population that is under the dual pressures of their parents' expectations to succeed and the conflicting traditional Chinese stereotypes of women as obedient to men, dependent, and home orientated. Previous research on Chinese female students' acculturative experiences indicates that these women face unique challenges in redefining their gender roles. However, no studies have explored whether womanist and acculturative processes are related to this psychological transition. The current study explored womanist identity and acculturation attitudes as processes influencing Chinese women's negotiations of their gender roles and redefinitions of themselves as women while living in the United States. Chinese female international students ($N=192$), enrolled in colleges or universities in the US, completed a demographic questionnaire; the Womanist Identity Attitude Scale (Helms, 1990), which assessed their manner of coping with traditional role expectations; and, the Acculturation Scale for Asian International Students (Gu, 2008), which measured acculturation attitudes. Their gender-role traits and stereotypical attitudes toward American women were examined by the Bem Sex Role Inventory (BSRI) (Bem, 1974) and Attitudes toward Women Scale (AWS) (Spence, Helmrich, & Stapp, 1978). Canonical correlation analyses were used to investigate relationships among (a) womanist identity and

acculturation attitudes, (b) womanist identity and gender-roles, and (c) acculturation attitudes and gender roles. Two identity-acculturation patterns, three identity-gender role patterns, and two acculturation-gender role patterns were identified. When the Chinese women were self-defining their gender-role identity, they were participating in U.S. culture and integrating traditional and non-traditional gender-role traits and attitudes. Traditional womanist attitudes were associated with increased levels of rejecting the U.S. culture, traditional gender roles, and perceived dissimilarities between themselves and U.S. women. The current study is the first to investigate gender-role and acculturation developmental issues of “One-Child” women from a psychological perspective. Obtained results suggest that their adaptive processes are more complex than anticipated. Methodological limitations of the study are discussed.

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Six years ago, I came to the United States for my doctorate program. Like many other Chinese female international students, I have experienced stressful encounters with cultural, racial, linguistic, academic and gender role challenges embedded in the daily life experiences. Joining ISPRC (Institute for the Study and Promotion of Race and Culture) was the first time that I realized my own culture, race, and womanhood. I would like to thank the ISPRC family and acknowledge their love and support.

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Chapter 1

In 1979, the Chinese government initiated a law that restricted the number of children urban couples could have to only one child, if they resided in mainland China (Cameron, Erkal, Gangadharan, & Meng, 2013). As the first generation of women born after China introduced the "One-Child Policy," Chinese female international students are a special population faced with the triple pressures of parental expectations, gender-role identity issues, and acculturation that are different from other international students' experiences.

Parental Expectations

The first pressure comes from the parents' expectations for their daughters' academic achievement and career success. As only children, these young women receive more attention and strong pressures from their parents towards personal achievement and obtaining higher education than perhaps was the case prior to implementation of the One Child Policy (Cameron et al., 2013). Possibly in response to parental pressure, by the end of 2004, China's National Database showed that women in China were better educated than ever before, and about 44% of the enrolled undergraduate Chinese college students were females (Department of Population, Social, Science and Technology Statistics, Chinese National Bureau of Statistics, 2004).

In addition, there has been increasing recognition that of all the international students in the United States, China has sent the largest number to American colleges since 2009 (Institute of International Education [IIE], 2013). According to the latest IIE data, by the end of 2013, there were 235,597 Chinese international students in the United

States, which accounted for 29% of all international students at various educational levels in the United States. Of the large number of Chinese international students in the United States, Chinese female students represented about 40% of the population and most of them were born after China introduced the One-Child Policy (Wang, 2012). These women were enrolled in American colleges and universities and represented the highest percentage of female international students on many American campuses (Qin, 2009).

As the "only hope" of the family, many Chinese female international students chose to study abroad due to their parents' expectations that they become more successful than their peers (Cameron et al., 2013). It has been argued that the One-Child Policy caused Chinese parents to spend more time and money on their only child's education than ever before (Pimental, 2006; Roberts & Blanton, 2001). For example, according to a recent survey, most Chinese parents agreed that investing their savings in sending their children to the United States could provide them the best education opportunity in the world (Cameron et al., 2013).

Since they are the first generation of Chinese women expected to fulfill family roles historically fulfilled by men along with traditional Chinese female gender roles, these women are a special group in Chinese history. Faced with the pressures of family expectations for their success away from home, they must also resolve their own identity crises as they encounter Western value systems regarding women's roles that may be in conflict with traditional Chinese stereotypes of women's roles. However, there has been limited systematic research that addresses Chinese female students' perceptions of gender roles within and outside Chinese culture and their negotiation of the possibly different gender-role expectations in the United States.

Gender Role Identity Crises

The second pressure faced by Chinese female international students comes from their gender role identity crises as they attempt to adapt to their lives in a new country while conforming to traditional Chinese gender-role stereotypes. *Gender- role stereotypes* are defined as fixed ideas about men and women's functions and responsibilities that are widely accepted by a society (Chen & Cheung, 2011). The traditional Chinese gender-role stereotypes consider women to be inferior and subordinate to men (Cheung, 1996). Hence, these traditional Chinese stereotypes of the ideal woman do not correspond with a woman's pursuit of higher education and professional work.

According to Confucian philosophy, traditional Chinese culture encourages the value of "ignorance as women's virtue." For example, Goff (2004) reported that Chinese men want wives to take care of the housework and do not like the idea that wives have a higher education level or a better career than they do. As a consequence, the dilemma between their parents' expectations and traditional gender-roles may be causing a new social problem for "left-over women" (To, 2013; p. 1). *Left-over women* (or "Sheng Nü" in Chinese) refers to single, highly educated professional women who are having trouble finding a life/romantic partner due to their high competence and independence in a society that still values the "man-as-superior" Chinese patriarchal view of women's gender roles. To's study shows that some highly educated women have even chosen to lie about their education level (e.g., doctorates, master's degrees from top level universities) because they were concerned about being rejected by men. In addition, even though men and women now have equal rights to employment and education

opportunities in China (Bauer et al., 1992), professional, highly-educated women are likely to be criticized as "non-feminine," "selfish," and "irresponsible to their family" (Zuo & Bian, 2001).

In addition, as a cultural heritage of Confucianism, the traditional Chinese stereotypes and expectations of women's behavior can be described as obedient, submissive, subservient, and subordinate to men (Bauer, Wang, Riley & Zhao, 1992; Hawkins, 1994; Lin & Yi, 1997). Possible gender conflicts may occur for women because of (a) the expectations from Chinese men that women conform to traditional Chinese culture's gender roles for women, (b) the women's parents' expectations that they conform to gender roles for men, and (c) possibly Chinese women's perceptions of the Western value system with respect to gender roles that are embedded in an individualistic culture.

Acculturation and Gender Roles

In addition to gender-role conflicts that women bring from their home culture, living in a new culture can be a formative period during which they are searching and developing their identities and self-concepts within the context of another country. The *acculturation process* is defined as the acculturative changes one makes to accommodate in response to the host culture (Graves, 1967), or a process of adjusting attitudes and behaviors as a result of contact with another cultural or dominant group (Roysircar, 2003). Acculturation is considered to be associated with international students' psychological well-being when living in a new culture or environment (Gu, 2007). While they are living in a new environment where traditional Chinese gender role stereotypes

are not salient, the acculturation process potentially involves reconsideration of their gender-role identities for these highly educated Chinese women.

Studies of Chinese women's acculturation experiences and their gender roles when living in the United States are limited in number. However, Zhou (2000) found evidence to suggest that Chinese women, when making the transition from Chinese culture to U.S. culture, developed stress regarding their perceived need to change their traditional Chinese gender role identities and behavior patterns to American standards, which they perceived as conflicting with traditional Chinese stereotypes of women. Zhou interviewed Chinese women in four focus groups living in New York City about their acculturative experiences and gender roles after moving to the United States. Zhou found that the women reported low self-esteem and considerable confusion about their gender roles after moving to the United States and complained about being disproportionately responsible for doing the housework even when they were employed outside the home. The women also expressed concern that their spouses did not respect them if they chose to be a homemaker.

In addition to Zhou's (2000) study, Qin (2009) interviewed Chinese female ($N = 11$) graduate students about their experiences in the United States using semi-structured open-ended interviews. During the interview, some participants reported "shifting senses of womanhood" (Qin, 2009, p. 123) after they came to the United States. The results showed that some women reported that they were not aware of their womanhood after they came to the United States. One woman reported struggles between being a housewife and an independent professional, whereas another woman reported she wanted to be herself after she came to the host culture (p126).

Thus, Zhou and Qin's (2009) studies suggested that the transition of Chinese female international students' perceptions of womanhood might vary depending on their acculturative experiences. Nevertheless, there has been limited research that has focused on the compatibility of Chinese female international students' perceptions of Chinese gender roles and US gender roles and the Chinese women's negotiations of the different social stereotypes of women between the two cultures.

In the limited literature exploring Chinese female students' gender identity development, a few studies have revealed unique gender-role identity crises that Chinese women seem to experience while living in the United States. Zhu (2013) found that single-child Chinese female students studying abroad were accustomed to being labeled as "high achievers" by their parents and teachers in China, and they reported feeling stress about their parents' expectations for them, which include responsibilities for caring for them in the future. These women not only faced challenges of acculturation stress in the United States as do other international students, but also carried the extra burden of parental stress and gender-role disruption. Huang (1997) interviewed six Chinese female students about their life experiences in the US following One Child and found that most of the women reported feeling more open to different attitudes about women's roles. However, neither of the researchers further investigated how the women's attitudes might have changed after coming to the US.

Also, much of the existing research only focuses on gender-role identity and acculturation processes as they pertain to American-born Asian women. Although similar experiences might apply to all Chinese female students (i.e., both Chinese-born and American-born Asian women) to the extent that they are influenced by traditional

Asian culture, they should not be simply considered to be the same group given that the Chinese female international students are not only influenced by the One-Child Policy, but also by having less social support than U.S.-born Asian American women (Gu, 2008). Yet the research on Chinese female international students' gender role identity and acculturation processes is very limited.

Proposed Study

Therefore, the proposed study aims to investigate how Chinese female international students negotiate possible discrepancies between the Chinese traditional stereotypes of women (e.g., being obedient to men) and their own gender role identity after moving to the United States in order to reveal the extent to which gender role conflicts are related to Chinese women's acculturation processes. The proposed study might be the first research to address the potential gender-role conflicts faced by Chinese women specifically since the implementation of China's One-Child Policy and the development of globalization increased Chinese women's options for gender-role identities.

None of the research on gender-role identity development and acculturation of Chinese women has used a theoretical framework to explain how the process works. There are two theories that could be used to investigate Chinese female international students' psychological transitions concerning their gender-role identity and acculturation processes: Helms's (1995) womanist identity model and Berry's (1980) acculturation model, respectively. Womanist identity is defined as the perceptual processes by which women overcome internalized sexism in a male dominated society. Berry's acculturation

model defines individual's cultural adaptation status in terms of the levels of maintenance of one's culture of origin and participation in a new culture.

The current study is the first research to address the potential influence of both womanist identity attitudes (i.e., perceptual processes by which women overcome internalized sexism in a male dominated society) and acculturation processes (i.e., adjusting attitudes and behaviors as a result of contact with another country's culture) in order to reveal whether or not living in the United States results in Chinese women's negotiating the traditional Chinese gender-role stereotypes and redefining their gender roles to match the host environment.

Therefore, the impact of this research will be its contribution to filling the research gap on the factors associated with the positive well-being of Chinese women in the United States. In addition, this research empirically investigates psychological transitions in gender-role identities of a unique group of women, who are the first generation in history to be both the government mandated only-child of a family and a sojourner living in a western country. Thus, the study will provide information that will permit better understanding of Chinese women of the current generation. Furthermore, by considering its effects on traditional Chinese culture, the present study provides information about potential effects of One-Child Policy.

Chapter 2

Review of Literature

Education statistics indicate that Chinese female international students, born after China initiated the One-Child policy, have become one of the largest groups of international students in U.S. colleges and universities. Moreover, a few studies have found that Chinese women seem to be faced with both acculturation stress and gender-role stress. Acculturation stress has been attributed to their transition to the US, whereas gender-role stress has been attributed to several sources. Proposed sources of gender-role stress include (a) the conflict between parental expectations in their home country concerning the desirability of individual achievement and (b) men's expectations that women conform to traditional social stereotypes requiring obedience to men. In addition, Chinese women may hold beliefs about gender-roles of women in the United States, which may or may not put them in conflict with respect to their own gender-role identity and may or may not be influenced by acculturation processes (Zhou, 2000). However, very little theoretical literature exists to explain the ways in which these women negotiate acculturation issues and their identity development as women.

Two conceptual models, Berry's (1980) acculturation model and Helms's (1990) womanist identity model might be useful for exploring the gender-role adaptations of these women. In order to explore how Chinese female international students' acculturation processes and womanist identity are related to their attitudes about their gender-role orientation, the following literature will be reviewed: (a) history of the feminist movement in China as it pertains to women's gender roles; (b) Chinese female international students' acculturation experiences in the United States; (c) womanist

identity as framework for explaining how women define themselves as women; and (d) gender-role stereotypes and conflicts.

History of Feminism in China

Origins of the Chinese Feminist Movement. In traditional Chinese culture, women's ideal gender roles are defined by their family roles throughout their life stages of daughter, wife, and mother. At each of the different life stages, women should successively obey their father, husband, and son (if they become widowed) (Cheung & Happern, 2010). The first liberation movement in Chinese feminism may be traced back to the history of the Qing-Dynasty (1915-1923). During the New Culture Movement, Chinese intellectuals encouraged the woman to be "her-self" instead of just being a "wife" and "mother" (Chen & Cheung, 2011). This movement can be considered as the first conceptualization of liberation for women in the history of China. However, such voices were not widespread in China and they were quickly lost during the Civil War (1927-1950) and the Japanese invasion during World War II (1937-1945). The voices for liberation did not return until the founding of the People's Republic of China in 1949.

Thus, the second feminist movement began in 1949 when a "gender-neutral" policy became the official government position of the People's Republic of China and remains so today. During this era absolute gender equality has been the guiding principle for the role of women in society as embodied in the statement, "women can hold up half the sky" (Chen & Cheung, 2011, p. 271). In order to answer the government's call, women were required to participate in all of the occupational and political social roles in the country, and even dressed in the same clothing as men during the "Cultural Revolution" period (1966-1976).

However, these early feminist voices were not able to entirely change the deeply rooted social stereotypes of women's gender roles that were characterized by obedience to men and discrimination against women with respect to achieving career success (Chen & Cheung, 2011). Consequently, Chinese women became more and more dependent on social policies, but less motivated to rediscover the questions of who they are and to rethink their own socialized gender roles (He, 2007).

The Only-Child Female Generation. With the most recent development of feminism in contemporary China (from 1980 onward), new issues regarding Chinese women's gender roles have emerged with the introduction of the "One Child Policy." The policy started in China in 1979 as a way of controlling population growth in Mainland China for the purpose of enhancing economic development. Since the 1980s, the policy has changed slightly so that it allows families from rural areas and ethnic minority groups to have more than one child. Nevertheless, after the policy was introduced, studies have shown an unbalanced sex ratio at birth. By 2004, the male-to-female ratio for infants from 0-4 years old was 122:69 (Department of Population, Social, Science and Technology Statistics, National Bureau of Statistics, 2004). It should be noted that sex-selective abortion, favoring male over female fetuses, may be preferred in many areas as the explanation for the unbalanced new-born female-to-male sex ratio. Researchers believe this unbalanced birth sex ratio might be due to the traditional Chinese culture wherein inheritance traditionally was passed through the sons, and it was the sons not daughters who were responsible for the care of elderly parents (Edwards, 2000).

On the other hand, after the introduction of the One Child Policy, for the parents who did not choose selective abortion, the fact that a family only has one child has

dramatically increased their expectations for their only daughters' education and achievements. Chinese women are better educated than ever before. By the end of 2004, the enrollment of women had reached 44% among all Chinese undergraduate college students in Mainland China (Department of Population, Social Science, and Technology Statistics, National Bureau of Statistics, 2004). However, although parents' investment in girls' educations has been increasing since the late 1990s, and women have more educational and occupational opportunities than in the past (Chen & Cheung, 2011), pursuing higher education and career achievement is still in strong conflict with the traditional Chinese value that ignorance is women's virtue (*nv zi wu cai bian shi de*).

Perhaps as a consequence of the conflict between their achievements and traditional values, in the past few years, there has been an increase in the number of single or unmarried Chinese professional women or "leftover women" (*Sheng nu*) (To, 2013, p.1). In the social media, these women are blamed for their competence and independence. Being single and professional is considered a new social, but not necessarily desirable, phenomenon in Mainland China. To (2013) argues that the Chinese traditional patriarchal culture negatively stereotypes women, who achieve higher education and careers, for not fitting the traditional domestic roles. After interviewing a sample of Chinese single professional women ($N=50$) in Shanghai, To found that highly educated professional women were suffering from discrimination in the marriage market. Many women were using "partner choice strategies" such as lying about their educational level. For example, one female pharmaceutical scientist said, "I never tell people that I have a PhD. Even when I was doing my PhD I never told people about it...I didn't even tell them I was doing a Masters" (p.10).

Another recent study used the Chinese national database from the Chinese General Social Survey (CGSS; $N = 5,984$) conducted in 2003, 2005, 2006, and 2008 showed that Chinese men displayed a tendency to marry women who were less educated than themselves (Qian, 2012). Hence, many Chinese women are facing a new stage in Chinese history where women's traditional role of being defined as ignorant and obedient to men is in conflict with the new opportunities for education and professional development.

Characteristics of Chinese Women's Gender-Role Stereotypes. *Gender stereotypes* can be defined as fixed ideas about appropriate roles and behaviors for men and women that are widely accepted by the society (Chen & Cheung, 2011). The first study of gender-role stereotypes in Mainland China occurred when Qian, Zhang, Luo, and Zhang (2000) developed the first Chinese version of the Sex Role Inventory for College Students (CSRI) at Peking University. In their study, they asked college students ($N = 190$) to rate 519 Chinese words according to the extent to which they described typical feminine and masculine characteristics. Based on the students' responses, they classified the words into four types of sex roles: positive masculine (e.g., independent), negative masculine (e.g., aggressive), positive feminine (e.g., yielding), and negative feminine (e.g., shy). Qian et al.'s psychological study in Mainland China resulted in the first instrument to permit examination of gender-role stereotypes of Chinese men and women.

Using the CSRI, Qin and Yu (2001) investigated the gender-role traits of men and women ($N = 1330$), age 17-52 years, and found that the top five gender-role traits for women as rated by Chinese men were (a) ladylike, (b) tender, (c) kind, (d) innocent, and

(e) elegant, but the top five gender-role traits for women rated by Chinese women were (a) independent, (b) kind, (c) optimistic, (d) self-control, and (e) cheerful. Thus, the study showed that Chinese men tended to hold more traditional gender role stereotypes towards women (e.g., ladylike, innocent) than Chinese women did.

In Qin and Yu's (2001) study, as compared to the traditional American gender-role stereotypes (e.g., Bem, 1974), Chinese men's stereotypes toward women's gender-role traits were more similar to the American feminine gender roles (e.g., tender, elegant), while Chinese women's gender role stereotypes towards women were more similar to the American masculine gender roles (e.g., independent, optimistic). In addition, different from the American gender role stereotypes, Chinese men also rated "innocent" to be among the top five traits for women. This might be related to the traditional Chinese cultural value that women should be innocent and less educated. However, limited empirical research has addressed whether Chinese women exhibit the masculine characteristics that Chinese women prefer or the feminine characteristics that men prefer when they are sojourners in the United States.

Chinese Women's Acculturation in the United States

Acculturation has become one of the leading topics for research in relation to international students' psychological well-being when living in a new cultural environment. *Acculturation* has been variously defined (a) as the changes one makes in oneself in response to the host culture (Graves, 1967) or (b) a process of adjusting attitudes and behaviors as a result of contact with another cultural or dominant group (Roysircar, 2003). Thus, acculturation can be considered to be a behavioral and psychological process of adjustment in a new cultural environment.

Berry (1980; 1984; 1997) proposed a bidimensional model of acculturation which may be relevant to the adjustment issues of Chinese female international students. In his model, Berry proposed two dimensions that determine people's acculturation status as they transition to a new cultural environment. The dimensions are (a) the extent to which people maintain their own cultural heritage and (b) the extent to which people establish relations with the new culture groups. Berry proposed that these two dimensions intersected to form four types acculturation statuses: (a) separation, (b) assimilation, (c) marginalization, and (d) integration.

Specifically, the *Separation* acculturation status refers to the maintaining of one's own cultural heritage (i.e., Chinese) while having little contact with the new culture (i.e., US). Individuals who are in the separation acculturation status may be more stressed than those engaged in the processes of integration or assimilation because they do not have much information about the culture in which they intend to survive. Thus, Chinese female students who are in the separation acculturation status might strongly accept traditional female gender roles and only interact with people from Chinese culture who support traditional Chinese femininity traits and conformity to conservative gender roles for women.

The *Assimilation* acculturation status refers to rejection of one's own cultural heritage while fully accepting and absorbing the values and behaviors of the new culture. In some extreme cases, one might entirely discard her culture of origin, and such great change is theorized to be associated with intermediate levels of acculturative stress (Gu, 2008). Chinese female international students who are in the assimilation acculturation

status might reject the traditional Chinese female gender roles and search for alternative gender roles that are consistent with their stereotypes of American women.

The *Marginalization* acculturation status refers to low maintaining of one's home culture and low contact with the new culture. Individuals who are engaged in the marginalization process of acculturation are considered to be highly stressed because they do not accept behavioral or normative values from either culture (Berry, Kim, Minde, & Mok, 1987; Berry et al., 1989). For example, Chinese female students in the marginalization acculturation status might feel stressed and confused about women's gender roles, and might feel lost with respect to how to act and behave as a woman.

The *Integration* acculturation status refers to strongly maintaining one's own cultural heritage and strongly adopting the new culture. Thus, the person is able to function flexibly in either of the two cultures. Individuals who are in the integration acculturation status are considered to experience the lowest level of acculturation stress because they are not experiencing much culture-related conflict. Thus, Chinese female international students, who are in the Integration status of acculturation, might accept and be open to the traditional Chinese female gender roles, the non-traditional gender roles that characterize parental expectations, as well as U.S. gender traits and roles as they perceive them. For example, with respect to gender roles, they might agree and be willing to pursue higher education and professional development, but also accept domestic responsibilities.

It is useful to conceptualize Berry's statuses as attitudes or beliefs the Chinese women might hold rather than types of mutually exclusive categories into which they are classified (Berry, 1984). Thus, Berry's four acculturation statuses as applied to Chinese

female students' gender traits and roles may be classified as attitudes indicative of (a) conformity to traditional Chinese culture to some extent (i.e., Separation, Integration), (b) acceptance of U.S. culture to some extent (i.e., Assimilation, Integration), or (c) rejection of both cultures (Marginalization). Further generalizing from Berry's model, Chinese female international students might experience higher levels of cultural conflicts with respect to women's gender roles and traits when their attitudes reflect lower levels of acculturation to U.S. society and lower levels of cultural conflict towards gender roles and traits when their attitudes reflect higher levels of acculturation to U.S. society.

Measures of Acculturation

Several instruments have been designed to measure Asian people's acculturation based on Berry's acculturation model, and the most commonly used measure is the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Ahuna, & Khoo, 1992). The SL-ASIA consists of 21 items intended to assess whether people have a "highly western identity" or a "highly Asian identity" by measuring behavioral acculturation. Behavioral acculturation includes language use, food preferences, and cultural identity including ethnic and racial identity and the measure has been used for both Asian international students and Asian Americans (Gu, 2007). However, the SL-ASIA might be problematic for measuring Chinese international students' acculturation processes for the following reasons: First, this measure failed to differentiate Asian international students from Asian Americans. Second, many items are not related to the acculturation experiences of international students, but rather ask about immigrants' generational status (e.g., the SL-ASIA item 12 asks, "what generation are you?"). Most importantly, the SL-ASIA only measures one dimension of acculturation (from high Asian identity to high

Western identity), but does not take into account the possibility of Marginalization (confusion about cultural identity) and Integration (flexible acceptance of both the host culture and culture of origin). The current study is based on Berry's dimensional model and, therefore, it is necessary to measure attitudes consistent with each of his acculturation statuses.

Due to the conceptual and design problems of the SL-ASIA, Gu (2007) developed the Acculturation Scale for Asian International Students (ASAIS), based on the SL-ASIA and Berry's (1984, 1990) acculturation model. This scale was the first acculturation scale for assessing acculturation processes of Asian international students specifically. The ASAIS includes items that highlight the unique experiences of Asian international students, such as attitudes about Asian values and adaptive behaviors (e.g., "I am open to both Asian and American religious beliefs"; "I prefer to speak English rather than my own language"; p. 116). Given the fact that Chinese female international students' experiences of acculturation are qualitatively different from the experiences of Asian American female students, Gu's ASAIS might be the most appropriate measure to use to investigate Chinese female international students' acculturation experiences.

Acculturation and Chinese Female Students' Gender Roles

As female students of color in universities in the United States, Chinese female students face a triple challenge because of their sociopolitical status, race, and gender. The process of relocation, cultural, and psychological change could cause them to rethink who they are in U.S. society. Therefore, exploring the ways in which the acculturation process affects their adjustment could help provide better understanding of Chinese women's psychological transitions in the United States. As the "only hope" of

their families, many Chinese female international students chose to study abroad due to their parents' expectations that they become more successful than their peers (Cameron et al., 2013), a decision that their parents support by spending more time and money on their daughter's education than before the implementation of the One Child policy (Cameron et al., 2013; Pimental, 2006; Roberts & Blanton, 2001). By investing their savings to send their daughters to the US, Chinese parents are encouraging them to engage in gender-role behaviors that are not traditional for Chinese women.

However, within the large population of Chinese international students in the United States, there are no official data that focus specifically on the percentage of Chinese female students who might be facing the challenge of integrating their gender role and cultural identity. Nevertheless, some research on gender differences in international students' adjustment has found that female international students reported more difficulty in adjusting to other cultures than did male students (Manese, Sedlacek, & Leong, 1988). Moreover, case studies have revealed that many married women were professionals and high achievers back in China, but after they came to the United States, they reported being financially dependent on their husbands which made them feel discouraged and depressed (Huang, 1997). Thus, Manese et al.'s and Huang's studies suggest that the women may have been more non-traditional with respect to gender roles when they arrived in the US than marriageable Chinese men desired them to be, but not necessarily more than their parents expected them to be.

Nevertheless, given that Chinese culture is influenced by Confucianism as a common cultural heritage and Chinese female students typically embrace the Confucian philosophy of harmony and passive female roles, one of the unique acculturative

adjustments for Chinese female students may involve their struggle to reconcile Chinese stereotypes of women, such as obedience, submissiveness, and subservience, with gender roles that require them to be independent and high achievers (Hawkins, 1994; Lin & Yi, 1997). The nature of appropriate gender roles for women in U.S. culture is a question that has not been answered in American society and has not been mandated by a single policy. Therefore, social expectations may be different for U.S. women than they are in Chinese culture or, alternatively, Chinese women may perceive that they are different. Consequently, Chinese female international students may experience more difficulty than other female international students do in figuring out how to adapt their gender-role identities to fit in U.S. society (Hsieh, 2006).

To investigate the nature of Chinese women's gender-role transitions, Zhou (2000) compared Chinese female married students' perceptions of their gender-role identities before and after moving to the United States. Zhou found that the married women reported dramatically lower self-esteem and greater dependence on their spouses after moving to the United States, which they perceived as entirely different from their life back in China. Also, Zhang (2007) used self-report questionnaires with a sample of Chinese women ($N=40$), living in the United States, to investigate the relationships among gender-role change, self-esteem, and marital satisfaction. Zhang found that the change in gender roles to domestic and subordinate roles was associated with low self-esteem and marital dissatisfaction for those women when living in the US. Thus, Zhou (2000) and Zhang's (2007) research suggests that Chinese female students might face a difficult adjustment regarding their gender roles when living in the United States. However, the nature of the difficulty seems to be that they became more traditionally

feminine in the US than they were in China, a condition which they experienced as stressful.

In contrast, Huang (1997) interviewed six Chinese female students about their life experiences in the United States. Most of the women reported feeling open to different attitudes toward women, which might have a variety of interpretations, including greater liberalism or conservatism with respect to women's gender roles. However, Huang's research did not investigate the question of what kinds of attitudes had been changed or in what directions. Hence, there is still a research gap with regards to the psychological processes underlying Chinese female students' acculturation and how such processes do or do not influence the women's definition or redefinition of their gender roles in the US.

Gender Identity

Gender identity is the person's interpretation of the gender-related socialization cues about themselves as a member of a particular gender group. Thus, it is a psychological construct that can be measured and perhaps manipulated rather than a demographic variable for classifying people into discrete categories. Spence (1985) defines *gender identity* as a "fundamental existential sense of one's maleness or femaleness" (p. 79). Two theorists have developed models that address women's gender identity development (Downing & Roush, 1985; Helms, 1990; 1996).

Feminist Identity. Downing and Roush (1985) developed a feminist identity development model based on Cross's (1971) Black identity development model. This model proposed a progression through stages from (a) Passive Acceptance, unawareness of inequity and discrimination; (b) Revelation, experience of crises that forces one to confront that inequity; (c) Embeddedness-Emanation, immersion and exploration of one's

own group; (d) Synthesis, integration of one's experiences toward oppression; and finally (e) Active Commitment, commitment to meaningful action toward feminism. However, researchers have argued that the feminist identity development model lacks concern for the effects of ethnicity and race on gender-role identity development (Hoffman, 2006). The womanist identity model has been perceived as "recognizing poverty, racism, and ethnocentrism as equal concerns with sexism" (Henley et al., 1998, p. 321).

Womanist Identity Model. As an alternative gender identity development model, Helms's Womanist identity development model (Helms, 1990; 1996; Ossana, Helms & Leonard, 1992) is the first model that considers ethnicity and race (Hoffman, 2006). Helms (1990) contends that although women's process of developing a healthy gender identity should be the same in the US regardless of race and ethnicity, the content of such processes might be different. Thus, for example, Chinese female international students' interpretation of "oppression" from men might be different from other cultural groups or might be different based on their own acculturation process. Thus, the womanist identity development model could be a useful theoretical model for understanding Chinese women's psychological changes in how they define their womanhood during their acculturation in the United States.

Helms's womanist identity model (cited in Ossana et al., 1992) consists of four information-processing statuses that describe within-group differences that develop with respect to gender oppression. In this model, Helms argued that "women's healthy gender identity development involves movement from an externally and societally based definition of womanhood to an internal definition" grounded in "the woman's own values, beliefs, and abilities" (Ossana et al., 1992, p. 403). Thus, womanist identity development

is characterized by moving from an externally based definition to an internally based definition of oneself as a woman. Helms also designed the Womanist Identity Attitudes Scale (WIAS) (see Ossana et al., 1992) to assess women's attitudes related to each of the four statuses.

The womanist identity model consists of four schemas as measured by sets of attitudes (a) Pre-encounter, (b) Post-Encounter, (c) Immersion/Emersion, and (d) Internalization. Collectively, they imply that women's transitions of gender identity evolve from conformance to externally prescribed gender characteristics (i.e., stereotypes) to internally defined characteristics, although the schemas and attitudes are considered to be interactive rather than mutually exclusive.

The first schema, Pre-encounter, is described as conformity to society's views on gender. When expressing this schema, women may consciously or unconsciously think and behave in ways that exaggeratedly value men but devalue women. Thus, if Chinese female students are conforming to the Chinese traditional societal ideals of womanhood, they may have concerns about pursuing education and professional individual development, and may express a feminine gender-role identity that is consistent with social stereotypes towards womanhood.

The second schema, Post-Encounter, occurs when women's contact with new environments or experiences suggest alternative ways of womanhood or an environment in which gender-role conflict is made salient. Chinese women, who use this schema, may question their previously accepted values and beliefs about gender roles and explore alternative ways of being a woman. Thus, with respect to the Post-Encounter schema, Chinese women may be trying to develop new definitions of their gender roles which

may involve an increase in masculine gender-role characteristics, if they were traditionally feminine.

The third schema, Immersion/Emersion, includes two aspects. When using the Immersion aspect of the schema, women may tend to idealize women and reject the patriarchal definitions of womanhood. In the second aspect, Emersion, women search for positive definitions of womanhood. Thus, when using the Immersion-Emersion schema, Chinese female international students' may "rebel" against the traditional "feminine" stereotypes of womanhood and search for a gender-role identity that is more consistent with the masculine gender role.

The final schema, Internalization, allows women to integrate a new personalized positive definition of womanhood into their gender-role identity, without relying on the external societal definitions or stereotypes of womanhood. Thus, for this schema, Chinese women's gender identity may be defined as their own self-satisfying standards regardless of the Chinese societal ideals of womanhood. Therefore, the Womanist Identity Model might be useful in understanding how Chinese women negotiate and contend with socialization messages that they receive about being women, both those they bring from China as well as those they witness in the US. This model would also allow us to reflect on how the interaction with a different culture and environment affects their redefinition of womanhood.

Empirical Study of the Relationships between Womanist Identity and Acculturation

Only one study has investigated the question of whether the various womanist identity schemas might be differently related to women's attitudes about aspects of women's social roles (Alacorn, 1997). Alarcon examined the relationships between

Asian American women's ($N=74$) womanist identity attitudes and acculturation. She used the SL-ASIA scale (Suinn et al., 1987), which, as previously described, is a 21-item multiple-choice scale designed to measure acculturation of Asian Americans. Alarcon found that the level of Internalization womanist identity attitudes was positively related to Integration acculturation attitudes. This finding suggests that higher levels of integrating Chinese and Asian cultures might be associated with higher levels of self-defining gender identity attitudes.

However, Alarcon's (1997) study focused on acculturation experiences of Asian American women, whose ethnic origins were not described. Thus, there has been no research that investigated Chinese female students' acculturation and womanist identity specifically. By exploring the relations between Chinese female students' acculturation and womanist identity attitudes, it may be possible to obtain a better understanding of how the experience of perceiving new social messages about gender roles while interacting within a new culture affects Chinese women's definition of womanhood.

Gender Role Identity

In the present study, the term *gender-role identity* is used as a psychological construct referring to a Chinese woman's perceptions of her own masculinity and femininity as defined by gender-role stereotypes. *Gender role stereotypes* can be defined as "structured sets of beliefs about the personal attributes of women and men" (Ashmore & Del Boca, 1979, p. 222). The traditional female stereotypes include "feminine" physical characteristics (e.g., soft voice, dainty, delicate), and "feminine" behavior and occupations (e.g., cares for children, decorates the home, works as a school teacher) (Biernat & Kobrynowicz, 1999). A gender-role conflict for Chinese women may be that

the One-Child Policy and parental expectations have encouraged women to assume traditionally masculine traits and sex roles, which is contrary to tradition.

Traditional Chinese Feminine Gender Roles

Chinese women have been faced with gender oppression throughout the long history of China. Traditional Chinese gender-role ideology considers women to be inferior and subordinate to men (Cheung, 1996). In the old China, a wife could be divorced if she committed "wrongs" such as disobeying parents-in-law or failing to give birth to a son. For the majority of families, daughters were only considered temporary family members until they moved away to their husbands' homes. The traditional achievement for a woman was to be married to a good husband (provider), to give birth to sons, and to hope their sons would be successful in the future. For example, one traditional Chinese saying states, "A mother's value depends on her son's success" (mu ping zi gui). This traditional value for women is still endorsed in contemporary China, and is also reinforced by newspapers, movies and commercials that communicate messages about women's success as judged by their husband and children's success rather than themselves (Yu & Charpenter, 1991).

In traditional families, boys and girls are raised in different ways that are considered sex appropriate. For example, boys are raised and educated to conform to masculine roles such as pursuing power and taking responsibility, whereas girls are educated to be subordinate to males and other family elders (Cheung, 1996, p.47). In addition, although education had great value in traditional Chinese culture, Chinese society did not allow or encourage women to receive formal educations until the beginning of the 20th century when the One Child policy was implemented. Under this

policy, women were encouraged to take on traditionally masculine roles of taking responsibility for their own families by achieving educational and career success.

Gender-Role Identity Conflicts

Chinese female international students are facing two types of gender-role conflicts, within Chinese culture and perhaps U.S. host culture. The within culture conflict comes from being the family's "only hope" while struggling with overcoming traditional gender-role expectations. Contemporary Chinese women, who choose to study abroad and seek personal career achievements, risk being judged by men and other women as "non-feminine." The host-culture conflict is between their perceptions of American women's gender roles and their decisions to adjust or not adjust their behaviors to resolve possible conflicts during the acculturation process. Nevertheless, given that these women have engaged in the non-traditional feminine behaviors of leaving home and studying abroad, it is possible that they have been influenced by movements and policies in China that encourage them to seek alternative definitions of womanhood.

Alternatives to the Traditional Chinese Female Norms

The Chinese feminist movement advocated gender equality for women and men (Chen & Cheung, 2011). Briefly speaking, Chinese feminism seems most similar to liberal feminism in the US, which is based on the belief in equality between males and females, and emphasizes their similarities (Crawford & Unger, 2000). Although different types of feminism exist in the US (e.g., radical, socialist, cultural), liberal feminism seems to have had the most influence on U.S. laws and policies and perhaps U.S. women's gender-role traits and behaviors. Consequently, it is possible that Chinese

female students perceive themselves as similar to American women with respect to their gender-role identity.

Moreover, most Chinese women might hold a gender-role stereotype of western women that corresponds to the liberal feminism perspective, given that Chinese feminism, which was modeled on Western feminism, sets equality between the genders as its goal. Although little research has investigated the nature of Chinese women's gender-role stereotypes of White women, some research has suggested that the TV commercials in China since 1996 have portrayed Chinese women in more traditional gender roles (e.g., involved in more domestic housework) than is true for women in American commercials (Cheng, 2008). Xu's (2012) study also examined the impact of mass media on Chinese people's stereotypes of American women, and found that the most frequently described gender-role stereotypes of American women were "open-minded, independent, sexually open, professional, and aggressive". These studies seem to suggest that Chinese women stereotype American women's gender roles as more masculine than they perceive themselves. Thus, holding the stereotype that American women are all liberal might have an impact on Chinese international students' gender-role identity during their acculturation in the United States.

Researchers have found cultural differences between Chinese and American women's attitudes toward women's gender-roles. Chia, Allred, and Jerzak (1997) compared Chinese and American women's attitudes using the Attitudes Toward Women scale (AWS; Spence & Helmreich, 1972). They found that American women had more liberal or nontraditional attitudes than Chinese women. In another cross-national study comparing Chinese-born participants and White American participants, Braun and Chao

(1978) also found that Chinese women's gender role attitudes were more conservative or traditionally feminine than were the attitudes of their American counterparts.

In sum, theory suggests that Chinese women studying abroad should perceive themselves as similar to U.S. women in terms of gender roles and identity if they have abandoned the principles of female subordination and inferiority and perceive that U.S. women have as well. However, research supports between-group differences with Chinese women tending more toward traditional gender roles than American women. Nevertheless, it is still unclear how Chinese women's perceptions of how a typical woman should act and behave in the US are associated with their own gender-role identity and acculturation status.

Empirical Studies of the Relationships among Acculturation, Womanist Identity, and Gender-Role Identity

For the most part, in studies of Chinese women's levels or types of acculturation to the US, acculturation has been inferred from the fact that they are currently living in the US and these findings have been inconsistent. Some case studies have revealed that many Chinese women reported feelings of liberation after moving to the United States, and reported that their thoughts, feelings, and bodies belonged to themselves and their attitudes toward gender roles became more open (Qian, 2002). Yet Qian's case studies also have shown that many Chinese men choose to maintain their traditional male roles (such as being dominant and believing that men's careers are superior to women's careers) when they are studying or working in U.S. society.

The differences between Chinese women's and men's gender-role attitudes have led to many family conflicts and failed marriages for Chinese couples who moved to the

United States. The nature of the conflicts seems to be that women feel greater pressure from Chinese men and the men's families to conform to traditional Chinese female gender norms in the US than they did in China. For example, Qian's (2002) case study described a Chinese woman who came to the United States to attend medical school and did not want to have a baby while she was in school. She reported feeling great dissatisfaction in her marriage, and was facing great pressures to conform to traditional gender roles from her husband and in-laws as her husband was the only child in his family.

Also, in Zhou's (2000) previously described study of the acculturation issues of married Chinese women who came to the United States with their husbands, many of them expressed a great deal of dissatisfaction with taking the domestic and subordinate roles at home, and complained about the changes in their gender roles as compared to their life in China. Moreover, instead of pursuing their own educations, many of the women in Zhou's study devoted themselves to supporting their husband's education and managing family responsibilities because they felt pressure to be "the Chinese ideal of a virtuous wife and good mother" (Zhou, 2000, p.455). Thus, there seems to be a conflict between Chinese traditional stereotypes of women's gender roles and Chinese women's own gender-role ideology. Womanist identity theory would suggest that women resolve such conflicts by developing the capacity to define suitable gender roles for themselves.

Although there are no direct studies that explicitly examine Chinese women's womanist identity and gender roles, research involving other racial/ethnic women has suggested that these two psychological constructs might be related. For example, Moradi, Yoder, and Berendsen (2004) investigated college students' ($N = 200$) womanist

identity and gender role attitudes. They found that Preencounter or conforming womanist identity attitudes were related to conforming to societal stereotypes of womanhood and traditional gender-role attitudes towards women's rights and roles. Thus, it is also possible that, during Chinese women's acculturation process, receiving new cultural messages about women's gender roles (e.g., fewer criticisms from traditional Chinese society, new perceptions of American women's gender roles), allows Chinese women to develop different gender identity schemas and start to redefine themselves as women. Hence, by investigating the relationships among Chinese female international students' acculturation, womanist identity, and gender-role identity relative to their perceptions of American women, the picture of Chinese women's psychological transitions in the United States can be refined.

Statement of Problem

Some research and several commentaries suggest that the transition in gender roles for Chinese female international students in the US, born after the One Child Policy was implemented in China, is stressful for several reasons. First, their parents and the Chinese government expect them to exhibit gender-role characteristics typical of U.S. liberal feminism (e.g., gender equality with respect to educational and professional achievements), which some seem to do while they are in China. Yet marriageable Chinese men and the men's parents expect the women to conform to traditional Confucian principles of obedience to men and ignorance. Secondly, Chinese women are exposed to idealized White American standards of women's gender roles in the popular Chinese media, wherein White women are portrayed as independent and self-sufficient, traits which are contrary to traditional Chinese culture. A third reason is that Chinese international women probably experience the same kinds of acculturation adjustment issues (e.g., language barriers, different cultural norms) as other sojourners do regardless of their gender.

However, it is unknown whether Chinese women in the United States maintain their gender-role orientations from their home country or adjust to match their gender-role perceptions of U.S. women. Currently, there are no theories that integrate the unique acculturation and gender-role issues of Chinese female international students in the US. Yet some studies suggest that the women do experience gender-role conflict as they attempt to resolve gender-role issues. For example, some studies have found that Chinese female students reported confusion in terms of changes in their gender roles, but

more open attitudes about searching for new gender roles after moving to the United States (e.g., Huang, 1997; Zhou, 2000).

There are two theories that could be used to investigate Chinese female students' psychological transitions concerning their acculturation processes and gender-role identity: Helms's (1995) womanist identity model and Berry's (1980) acculturation model.

Womanist Identity

The womanist identity model proposes four information-processing statuses to explain the within-group differences that develop with respect to gender oppression (Helms, 1995). As previously described, the four statuses are (a) Preencounter, conforming to gender stereotypes; (b) Post-encounter, questioning the traditional gender stereotypes; (c) Immersion/Emersion, rejecting the traditional gender role stereotypes and searching for new definitions of womanhood; and (d) Internalization, integrating a new personalized positive definition of womanhood. Collectively, the statuses imply that women's transitions in gender identity potentially evolve from conforming to one's perceptions of society's gender norms and expectations for women's characteristics (i.e., stereotypes) to developing internally defined gender-role characteristics. More generally, the womanist identity statuses may be classified as those pertaining to (a) maintain or rejecting an environmentally defined gender-role identity (i.e., Preencounter, Post-encounter, and Immersion-Emersion) or (b) internalizing a self-defined gender-role identity (i.e., Internalization). Nevertheless, Helms's model does not specifically address issues pertaining to adjustment to a new culture.

Acculturation Model

Berry's (1980) acculturation model describes individuals' acculturation experiences with respect to four distinct types of attitudes: (a) Separation, rejection of the host culture and maintenance of the culture of origin; (b) Assimilation, acceptance of the host culture and low maintenance of the culture of origin; (c) Marginalization, (low engagement in both the host culture and culture of origin; and (d) Integration, strong maintenance of the culture of origin and acceptance of the host culture. These types of acculturation may be summarized as different attitudes about American culture: (a) participating in the U.S. culture (i.e., Integration and Assimilation), or (b) rejecting the U.S. culture (i.e., Separation and Marginalization). However, Berry's acculturation model does not specifically address issues of gender-role identity and traits.

Model Integration

Given that the womanist model focuses on women's internal processes in response to sexism specifically, whereas the acculturation model focuses on adaptations to the host culture generally, integration of the two models could provide a potential theoretical mechanism for explaining the psychological transitions in Chinese female international students' gender-role identity development during their interactions with Western culture.

Neither of the models provides a clear framework for how such integration would happen if a woman moves from a country that is either similar or dissimilar to the host country with respect to gender roles. That is, if Chinese women are liberal feminists (i.e., believe in the equality and similarity of genders and gender roles) and perceive that American women are also liberal feminists, then participating in American culture with

respect to gender roles would not be problematic for them and their gender (i.e., womanist) identity would be self-defined. On the other hand, if the women perceive that women's roles are quite different in the US relative to China, then they might choose not to adopt US gender-role norms and they might separate themselves from the host culture. Existing literature supports each position to some extent (e.g., Chen & Cheung, 2011; Huang, 1997; Qin, 2009; Zhou, 2000). The common theme in both of these possibilities is that it is the women's perceptions of differences between themselves and "typical American women" rather than actual differences that may account for the quality of their gender-role functioning in the US.

Therefore, it seemed reasonable to theorize that there would be significant relations between womanist identity, acculturation, and gender role discrepancy. In the study, *gender-role discrepancy* is defined as (a) the distance between Chinese international women's attitudes about their gender-role traits and their stereotypes of American women's gender-role traits and (b) the distance between Chinese international women's attitudes about women's roles for themselves and their beliefs about American women's attitudes.

Thus, I proposed that the internalizing gender-role identity attitudes (i.e., Internalization) and participating in the U.S. culture (i.e., Integration and Assimilation) were likely to be positively associated with high levels of both traditional and non-traditional gender-role traits because womanist theory does not require that the self-defined woman choose one type of gender-role trait(s) over the other; nor does liberal feminism. Traditional gender-role traits include participants' perceptions of their own

femininity and non-traditional gender-role traits refer to the women's perceptions of their own masculine traits and liberal attitudes toward women.

Discrepancies between the women's self-assessments and their stereotypes of American women's gender-role traits and attitudes toward women were used as indirect measures of pressures to adapt to the host culture pressure. In the current study, Bem's (1974) Sex Role Inventory was used to assess perceived feminine and masculine gender-role traits and the Attitudes toward Women Scale (Spence & Helmrich, 1978) was used to assess their liberalism or their stereotyped gender-role attitudes. Women responded to the items to describe themselves and their stereotypes of U.S. women's gender-role traits and attitudes.

Perceived gender role conflicts may be unique acculturative experiences for Chinese female students in the United States. Previous literature has suggested that some Chinese female students express confusion about their gender roles and search for new definitions of gender roles while they are in the US (e.g., Huang, 1997; Zhou, 2000). However, it is not clear what kind of psychological processes might be involved in their perceived gender-role conflicts. Hence, discrepancy scores were intended to operationally define the possible gender-role conflict between their own gender role identity and their endorsements of stereotypes of American women. The outcome variable of gender-role-identity discrepancy with respect to traits was calculated by comparing participants' perceptions of their own levels of endorsement of masculine and feminine traits to their perceptions of White American women's traits and attitudes toward women. The discrepancy between participants' perceptions of appropriate roles

for themselves as women relative to White American women was the other outcome variable.

Hypotheses

To test this hypothesis, scores from the Womanist Identity Attitude Scale (Helms, 1990) were used to assess the four womanist identity statuses and scores from the Acculturation Scale for Asian International Students (Gu, 2008) were used to assess attitudes reflective of the four types of acculturation attitudes. In this study, canonical correlation analysis (CCA) will be used to explore the relationships between the sets of variables among womanist identity attitudes, acculturation and their gender role identity. Researchers have suggested that CCA is most appropriate when a study is designed to examine the relationship between a set of predictor variables (\underline{X}_i) and a set of criterion variables (\underline{Y}_i), which includes both univariate and multivariate methods as special cases (Sherry & Henson, 2005). According to Levine (1977, p.16), the two pairs of canonical variates can be described as:

$$\underline{X}_i = a_{i1}x_1 + a_{i2}x_2 + \dots + a_{ip}x_p \quad (1)$$

$$\underline{Y}_i = b_{i1}y_1 + b_{i2}y_2 + \dots + b_{iq}y_q \quad (2)$$

The following hypotheses were tested in the current study:

Hypothesis 1: Chinese female students' womanist identity attitudes will be related to their acculturation status attitudes.

Null hypothesis: the predictor variable set (womanist identity attitudes) will not be significantly related to the criterion variable set (acculturation status attitudes).

Alternative hypothesis: the predictor variable set (womanist identity attitudes) will be significantly related to the criterion variable set (acculturation status attitudes).

Hypothesis 1a: Participants' processes of maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-encounter, and Immersion-Emersion) will be positively related to not participating in U.S. culture (i.e., Separation and Marginalization) and negatively related to participating in U.S. culture (i.e., Assimilation and Integration).

Hypothesis 1b: Participants' attitudes reflecting internalizing of a self-defined gender identity (i.e., Internalization) will be positively related to attitudes indicative of participating in U.S. culture (i.e., Assimilation and Integration) and negatively related to attitudes reflecting non-participation in U.S. culture (i.e., Separation and Marginalization).

Previous studies' findings indicate that higher levels of acculturation were associated with higher levels of womanist identity attitudes in samples of Asian American women of unknown ethnicities (e.g., Alacron, 1997). These results suggest that women who were participating in both American and Chinese cultures were more likely to demonstrate self-defining womanist identity attitudes. It is possible that Chinese female international students might show similar path(s) between womanist identity attitudes and acculturation. However, acculturation processes may affect their development in more complex ways than they affect the development of Asian women labeled as Americans, given that the Chinese women must reconcile perhaps competing gender-identity expectations in China as well as the US.

If Chinese women are in the process of rejecting (Preencounter, Post-encounter, Immersion) an externally defined gender-role identity that is different from the options that they perceive in the US, then the Chinese women may lessen feelings of rejection

and confusion by not participating in U.S. culture (Separation and Marginalization). Yet if they are internalizing self-defined gender roles (Internalization), they might be likely not only to participate in U.S. culture, but also to flexibly participate in both cultures (Assimilation and Integration). That is, they might adapt what they perceive as the best for themselves from both cultures.

To test this hypothesis, scores from the Womanist Identity Attitude Scale (Helms, 1990) were used to assess the four womanist identity statuses and scores from the Acculturation Scale for Asian International Students (Gu, 2008) were used to assess attitudes reflective of the four types of acculturation attitudes.

Hypothesis 2: Chinese female students' womanist identity attitudes will predict their (a) gender-role traits, (b) attitudes, and (c) the discrepancies between their self-descriptive traits and attitudes and their stereotypes of U.S. women's gender-role traits and attitudes.

Null hypothesis: the predictor variable set (womanist identity attitudes) will not be significantly related to the criterion variable set (gender role traits, attitudes and the gender role discrepancies).

Alternative hypothesis: the predictor variable set (womanist identity attitudes) will be significantly related to the criterion variable set (gender role traits, attitudes, and the gender role discrepancies).

Hypothesis 2a: When women's attitudes reflecting the process of maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-encounter and Immersion-Emersion) are high, their endorsement of traditional gender-role traits (i.e., own femininity, stereotypes of American women's femininity) will be high and their

endorsement of non-traditional gender-role traits (i.e., own masculinity, stereotypes of American women's masculinity) will be low, but their self-defined identities (Internalization) will be positively related to both traditional and non-traditional gender role traits.

Hypothesis 2b: When women's attitudes reflecting the process of maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-encounter and Immersion-Emersion) are high, their levels of endorsement of liberal or non-sexist attitudes toward women's roles for themselves and American women will be low, but their attitudes reflecting internalization of self-defined identities (Internalization) will be positively related to liberal attitudes for themselves and American women.

In Helms's womanist identity model, attitudes reflective of different statuses of womanist identity contribute to women's gender-related perceptions, such as gender self-acceptance and gender self-definition (Hoffman, 2006). The model is based on the premise that developing a self-definition of oneself as a woman requires overcoming external stereotypes and expectations about women's roles. However, limited information is available concerning how Chinese women actually perceive themselves with respect to gender-role traits or attitudes toward women. Existing research indicates that Chinese women considered the ideal woman to be independent, optimistic, kind, self-controlled, and cheerful (e.g., Qin & Yu, 2001), but these were not the traits that they used to describe themselves. Moreover, although Chinese media portrays US women as more liberated than Chinese women (Cheng, 2008), it is not clear whether Chinese women believe such stereotypes or perceive U.S. women as similar to themselves.

Scores on the Bem Sex Role Inventory (Bem, 1974) and the Attitudes toward Women Scale (Spence & Helmrich, 1978) will be used to measure women's self-descriptions as well as their stereotypes or beliefs about U.S. women.

Hypothesis 2c: When women's attitudes reflecting maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-encounter, and Immersion-Emersion) are high, they will perceive higher levels of gender-role discrepancies relative to American women and their internalizing gender-role attitudes (i.e., Internalization) will be related to lower levels of gender-role discrepancy.

Previous literature has found that Chinese women have expressed their willingness to search for new gender roles in the United States (e.g. Huang, 1997). Yet it is not clear how their perceptions of other women in the external environment shape their gender-role orientation(s). Perhaps their beliefs about U.S. women's social roles contribute to their gender-role conflict as demonstrated by differences between their self-perceptions of their masculine and feminine traits and their gender roles relative to their perceptions of the same aspects of White American women.

Thus, discrepancy scores might be an indicator of self-imposed acculturation pressure with respect to womanhood. In the current study, study discrepancy was operationally defined as the absolute differences between the Chinese women's self-descriptions of their feminine and masculine traits and attitudes toward women as compared to their stereotypes of U.S. women on the same variables.

Hypothesis 3: Chinese female students' acculturation status attitudes will predict levels of (a) gender-role traits, (b) sex-role attitudes, and (c) perceived Chinese and American women's gender-role discrepancies.

Null hypothesis: the predictor variable set (acculturation status attitudes) will not be significantly related to the criterion variable set (gender role traits, attitudes and the gender role discrepancies).

Alternative hypothesis: the predictor variable set (acculturation status attitudes) will be significantly related to the criterion variable set (gender role traits, attitudes, and the gender role discrepancies).

Hypothesis 3a: Participating in the U.S. culture (i.e., Integration and Assimilation) will be related to higher levels of both traditional gender roles (i.e., own femininity and stereotypes of American women's femininity) and non-traditional gender roles (i.e., own masculinity, stereotypes of American women's masculinity) and rejecting the U.S. culture (i.e., Separation and Marginalization) will be related to higher levels of traditional gender-role traits and lower levels of non-traditional gender role traits.

Hypothesis 3b: Participating in the U.S. culture (i.e., Integration and Assimilation) will be related to higher levels of liberal attitudes toward women's roles as reflected in self-reported attitudes and stereotypes of American women, and rejecting the U.S. culture (i.e., Separation and Marginalization) will be related to lower levels of liberal attitudes toward women for the participants and their descriptions of U.S. women.

Previous studies have found that some Chinese women expressed distress about changes in their gender roles during their acculturative experiences in the United States (e.g. Zhou, 2000). For example, in Zhou's study, married women complained about having to assume traditionally feminine roles, such as homemaker. However, none of the studies of Chinese women's acculturation experiences has actually used quantitative scales to measure the women's acculturation experiences and the relations of different

kinds of acculturative experiences to the women's beliefs about appropriate gender roles for women. Thus, it is possible that current research does not reflect the variety of Chinese female international students' acculturation experiences as related to their beliefs about sex roles.

Scores on the Acculturation Scale for Asian International Students (Gu, 2008), Bem Sex Role Inventory (Bem, 1974) and Attitudes toward Women Scale (Spence & Helmrich, 1978) were used to test Hypothesis 3a and 3b.

Hypothesis 3c: Attitudes reflective of participating in the U.S. culture will be related to lower levels of gender-role discrepancies and rejecting the U.S. culture will be related to higher levels of gender-role discrepancy.

Current research does not provide any information about how Chinese women perceive U.S. women relative to themselves. Hypothesis 3c is based on the premise that Chinese women participate in American culture if doing so does not require them to change their own beliefs too much. Gender-role conflict might be increased if the women perceive that they have to conform to US standards that are different from their home culture or their own beliefs.

The gender role discrepancies were measured as the absolute difference between participants' own gender roles and their stereotypes towards American women's gender roles.

Chapter 3

Method

Participants

Participants were Chinese women, who were currently enrolled in colleges or universities in the United States, born in China after the One Child Policy was implemented (1979 to now), and self-identified as the single child of the family ($N=192$). Participants ranged in age from 18 to 35 years (Mean= 25.97, SD= 4.46). Their length of time living in the United States ranged from .4 to 17 years (Mean = 3.65, SD=2.87). Participants were given the opportunity to enter a raffle for one of five \$20 Gift Cards.

Table 1 provides a summary of the respondents' self-described demographic characteristics. Most of the women were enrolled in graduate school programs, in Master's programs (46.2%) and Ph.D. or other professional degree programs (35.5%). The smallest percentage (17.7%) of the participants was enrolled in undergraduate programs. Most participants indicated that they were single (75%), and about half of the single participants indicated they were not involved in any romantic relationships. The majority of participants indicated that the highest degrees earned by their mothers and fathers were bachelor's degrees or higher. Hence, in general, the sample was becoming highly educated and was from highly educated families.

Table 1

Demographic Variables of Sample (N=192)

Variables	F	%	M	SD
Age			25.97	4.46
Time living in the United States (year)			3.65	2.87
Current Academic Standing				
Bachelor	33	17.7		
Master	86	46.2		
Ph.D. or other professional degree	66	35.5		
Highest education of Mother				
Middle School or lower	13	6.8		
High School	40	20.8		
Bachelor	108	56.3		
Master	22	11.5		
Ph.D. or other professional degree	9	4.7		
Highest education of Father				
Middle School or lower	9	4.6		
High School	24	12.5		
Bachelor	115	59.9		
Master	31	16.1		
Ph.D. or other professional degree	13	6.8		
Relationship Status				
Single(not involved in romantic relationship)	71	37.0		
Single (in a romantic relationship)	73	38.0		
Married or have been married	47	24.5		
Missing Value	1	.5		

Measures

Respondents were asked to complete the following measures: (a) a demographic questionnaire; the (b) Womanist Identity Attitude Scale (WIAS; Helms, 1990); (c) Acculturation Scale for Asian International Students (AS AIS; Gu, 2008); (d) Bem Sex Role Inventory (BSRI; Bem, 1974); and (e) the Attitudes toward Women Scale (AWS; Spence, Helmrich & Stapp, 1978).

Demographic Data. I designed a questionnaire to collect data about participants' date of birth, gender, current academic standing (Bachelor, Master, Ph.D. or other professional degree), number of children in their family, country of birth, highest education of their mother and father (elementary school or lower, middle school, high school, bachelor, master, Ph.D. or other professional degree), relationship status, and time length living in the United States. The information was collected to describe the sample and to determine whether participants' met the inclusion criteria of being only daughters in their families. The demographic measure can be found in Appendix A.

Womanist Identity Attitudes Scale (WIAS; Helms, 1990). The WIAS is a 55-item scale designed to assess women's processes of overcoming internalized gender-role oppression and developing a self-defined identity as a woman. In this study, this scale was used to assess the womanist identity attitudes of Chinese female international students in the United States.

The four subscales of the WIAS are as follows: (a) Preencounter (21 items), that assesses conformity to society's gender norms (e.g., "In general, I believe men are superior to women"); (b) Post-encounter (8 items) that assesses confusion regarding one's gender-role orientation (e.g., "Sometimes I think men are superior and sometimes I think they are inferior to women"); (c) Immersion-Emersion (16 items) that assesses purposeful psychological withdrawal into the community of women (e.g., "When I think about how men have treated women, I feel an overwhelming anger"); and (d) Internalization (11 items) that assesses self-defined gender-role orientation ("I think women and men differ from each other in some ways, but neither group is superior").

Five-point Likert-type scales were used to describe oneself with respect to each item. Four scores were obtained by summing responses to items comprising each of the four subscales. Higher scores indicate greater levels of the expressed womanist identity attitude. Descriptive statistics (i.e., means, standard deviations, and range of responses), as well as reliability coefficients, can be found in Table 2.

The WIAS has been used to investigate womanist identity attitudes in samples of varying ages and racial groups (e.g. Alarcon, 1997; Ossana et al., 1992). Ossana et al. investigated the attitudes of American college female students ($N = 659$), which included 7.7% Asian Americans, and reported Cronbach alpha coefficients for the four subscale scores as follows: Preencounter (.55), Encounter (.43), Immersion/Emersion (.82), and Internalization (.77). Roberts (2002) investigated Asian American college women, and reported Cronbach alpha coefficients of Preencounter (.68), Encounter (.57), Immersion/Emersion (.63), and Internalization (.55). Although no previous researchers have reported reliability coefficients for Chinese samples, the coefficients obtained in the current study were generally better than those reported in other studies, which may indicate that participants perceived items within subscales as measuring single constructs to some extent.

Studies have also reported evidence of construct validity of scores on the womanist identity scales (e.g., Letlaka-Rennert, 1996; Moradi et al., 2004). With respect to convergent validity, Ossana et al. (1992) reported significant correlations between WIAS Preencounter and Internalization subscales and scores on the Attitudes Toward Feminism Scale (Smith, Fernee, & Miller, 1975). Moradi et al. (2004) also reported

significant correlations between WIAS Preencounter and Internalization subscales and scores on the Attitudes Toward Women Scale.

Table 2

Summary of Alpha Coefficients, Means, Standard Deviations, and Score Ranges of Scales Used in the Current Study ($N=192$)

Scale	Alpha	M	SD	Obtained Ranges	
				Min	Max
Womanist Identity Attitudes					
Preencounter	.76	28.07	6.12	13	50
Post-encounter	.54	24.35	3.45	13	38
Immersion-Emersion	.70	39.55	6.13	23	60
Internalization	.64	43.55	3.96	24	52
Acculturation					
Integration	.85	57.67	9.42	31	77
Assimilation	.88	42.89	12.58	14	83
Separation	.87	57.57	13.59	17	93
Marginalization	.90	28.01	10.49	12	67
Sex Role Orientation					
Masculinity Self-report	.84	49.43	8.77	17	70
Masculinity US Stereotype	.89	54.84	8.72	10	70
Femininity Self-report	.91	53.95	10.34	16	70
Femininity US Stereotype	.88	49.00	8.71	10	70
Attitudes toward Women					
Self-report	.76	25.50	5.99	15	48
US Stereotype	.68	23.65	5.12	15	37

Acculturation Scale for Asian International Students (ASAIS; Gu, 2008).

The ASAIS is a 49-item scale designed by Gu (2008) to examine Asian international students' acculturation status attitudes based on Berry's (1980) bi-dimensional acculturation model, which describes individuals' acculturation experiences with respect to four distinct types of attitudes. The four types of attitudes and subscales are: (a) Separation, low adapting to the host culture, but high contact with the culture of origin

(e.g., "I prefer to be friends of people from my own country when I am in the U.S."); (b) Assimilation, which assesses individuals' adapting of the host culture, while having relatively low levels of maintenance of their own culture of origin (e.g., "I prefer to speak English rather than my own language"); (c) Marginalization, involves individual's low identification with both cultures (e.g., "I don't endorse either Asian or American values"); and (d) Integration, involves the maintaining of one's own cultural identity while also adapting to the new culture (e.g., "I am good at writing in both my own language and English").

Each item is rated on a 7-point Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree. Four scores are obtained by summing responses to items comprising each of the four subscales. Higher scores indicate greater levels of attitudes reflective of each of the acculturation statuses.

Gu (2008) developed the ASAIS on a sample of Asian international students ($N = 259$; 49% females; 22% Chinese students from Mainland China), and reported test-retest reliability coefficients for scores on each subscale as follows: Marginalization (.33), Separation (.66), Integration (.70), and Assimilation (.83). Also, the Cronbach alpha internal consistency reliability coefficients obtained for scores on the subscales were: Marginalization (.89), Separation (.83), Integration (.83), and Assimilation (.82). Cronbach alpha coefficients, Mean, Standard Deviations and range of responses were calculated for scores obtained in the current study. The current study showed higher internal consistency coefficients than Gu's (2008) study. The Cronbach alpha for the four subscales were: Marginalization (.90), Separation (.87), Integration (.85), and Assimilation (.88), respectively, and suggest that the women perceived the items as

assessing the same construct within subscales. (Table 2).

Bem Sex Role Inventory Short Form. The Bem Sex Role Inventory Short Form (BSRI-SF; Bem, 1974) is a 30-item self-report measure of gender-role identity, which consists of two subscales, Masculinity and Femininity. The Masculinity subscale consists of 10 traits traditionally viewed as more desirable for a man than for a woman (e.g., independent, competitive, aggressive). The Femininity scale consists of 10 traits traditionally viewed as more desirable for a woman than for a man (e.g., compassionate, sympathetic, sensitive to the needs of others). The remaining 10 items are used as filler items which are excluded from analyses.

In the present study, only the Masculinity and Femininity subscales were used. Each item was rated on a 7-point Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree. The participants' responses to the 10 expressive and 10 instrumental items were summed to form a feminine and masculine score, respectively. Higher scores on the Masculinity subscale indicate greater levels of masculinity gender-role traits. Higher scores on the Femininity subscale indicate greater levels of the femininity gender-role traits.

Zhang, Norvilitis, and Jin (2001) used the BSRI to investigate the gender-role traits of Mainland Chinese female college students ($N = 153$) and found Cronbach alpha internal consistency reliability coefficients of .81 (Masculinity) and .68 (Femininity), which suggests that women's responses to the masculinity items were more variable. Zhang et al. also reported evidence of construct validity and found that both the masculine and feminine items yielded six factors. These results suggest that Masculinity

and Femininity as assessed by the BSRI may be heterogeneous constructs for Chinese women.

In the present study, participants were asked to use the instrument twice, once to describe themselves and a second time to describe a “typical American woman”. The scores from the first rating indicated Chinese female students' own gender-role traits; the second score indicated their stereotypes of American White women's gender-role traits. Thus, participants' responses to the BSRI were used to generate the following six scores: (a) two self-descriptive scores, (b) two stereotype scores, and (c) two discrepancy scores. Self-descriptive scores were the women's own Masculinity, defined as the sum of the women's item responses to the relevant subscale items; and (b) own Femininity, defined as the sum of their responses to the BSRI Feminine subscale items. Stereotypes were the two gender trait subscale scores derived from the women's descriptions of American women's Masculinity and Femininity.

Discrepancies scores were calculated as the absolute differences between the women's own gender-traits and their stereotypes of American women (i.e., Masculinity gender role discrepancy = $|\text{Masculinity} - \text{Masculinity stereotype}|$ and Femininity gender role discrepancy = $|\text{Femininity} - \text{Femininity stereotype}|$). Hence, higher discrepancy scores were interpreted as higher perceived cultural differences in gender-role traits.

Attitudes toward Women Scale - Short Form (AWS- SF; Spence & Helmrich, 1978). The 15-items of the Attitudes toward Women Scale were used to measure participants' attitudes toward women's roles and rights in the society. The items describe normative expectations about appropriate responsibilities and rights with respect to the

vocational, educational, and interpersonal roles of women. Sample items include, "Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry" and "There are many jobs in which men should be given preference over women in being hired or promoted."

Respondents use 4-point Likert-type response scales, ranging from 1=strongly disagree to 4 = strongly agree, to describe themselves. Seven items of the AWS-SF are reverse-scored. The scores on the AWS-SF can range from 18 to 72, with higher scores representing more egalitarian attitudes towards women, and lower scores representing more traditional attitudes.

The AWS has been used to investigate attitudes towards women in Asian groups. (e.g., Kim, 2008). Kim investigated a sample of Asian American women ($N = 176$, age from 18 to 50 years) and reported a Cronbach alpha coefficient of .75. Spence and Helmreich (1972) also found evidence of construct validity in that the 15-item short version had a correlation of .91 with the original 55-item AWS in a sample of U.S. college students. However, no information has been found in Chinese samples using the AWS.

Like the Bem Sex Role Inventory, participants were also asked to use the scale twice, once to describe themselves and a second time to describe a "typical American woman." The score from the first ratings indicates Chinese female students' own attitudes toward women's gender roles. The second score indicates Chinese female students' stereotypes of American White women's attitudes toward women's gender roles. The absolute difference between the two scores was used to indicate gender-role

discrepancy. Thus, each participant had three scores derived from this scale: (a) their own attitudes towards women, (b) their stereotypes of American women's attitudes towards women, and (c) the discrepancy between their own attitudes and their stereotypes (i.e., $|\text{Attitudes towards women} - \text{Attitude towards women stereotype}|$). Higher discrepancy scores were interpreted as indicating higher perceived cultural differences with respect to women's liberal attitudes.

Procedure

Before the survey was administered, the Boston College Institutional Review Board approved the study. In order to recruit Chinese female international students, the Chinese Student Associations and International Student Office of universities in the Boston area were contacted and I followed the schools' procedures in order to send out recruitment letters (see Appendix F) from their email lists. The email messages invited participation in the study and had the research internet link (Quatrics survey) embedded within the research information. In addition to email invitations, recruitment letters with the research link embedded were also posted on social media websites (e.g., Facebook, Wechat). All of the survey items were translated into Chinese and back translated from Chinese to English by Chinese native speakers who are also fluent in English in order to make sure the Chinese translations expressed the same meaning in the both languages. Each instrument item was presented in both Chinese and English.

All of the participants were sent a study link via email; the consent form was located on the first page of the study link. Each participant was given an electronic consent form that was located on the first page of the survey link. Participants were

asked to provide consent by selecting the checkbox marked, "Yes, I provide consent to participate." After the participants provided their consent, the online study proceeded.

Participants were directed to the measures in the following order: (a) demographic data sheet, (b) Womanist Identity Attitude Scale (WIAS; Helms, 1990), (c) Acculturation Scale for Asian International Students (ASAIS; Gu, 2008), (d) Bem Sex Role Inventory (BSRI, Bem, 1974), and Attitudes toward Women Scale-Short Form (AWS- SF, Spence, Helmrich, & Stapp, 1973). After completing the survey online, each participant was asked if she would like to be entered in a raffle to win one of five \$20 gift cards. If she responded "yes", she was redirected to a different online survey where she could leave her email contact for the raffle. No identification information could be tracked between the two online surveys.

Ultimately, for reasons described subsequently, the final sample used for the main data analyses ($N = 192$) consisted of approximately 52% of the originally consenting participants ($N = 369$). Some participants were excluded because of (a) not being female or not being a single child of the family or (b) not completing the measures. One male participant (.5%) was excluded and five female participants (3%) were excluded because they were not the only child in the family. Thus, a total of six potential participants were eliminated because they did not meet demographic inclusion criteria. The rest of the participants were excluded because they did not complete any measures or dropped out of the study after completing or half completing the WIAS measure.

Chapter 4

Results

In the present study, the primary variables of interest were the participants' four womanist identity attitudes as measured by the Womanist Identity Attitude Scale (WIAS; Helms, 1990), four acculturation statuses as measured by the Acculturation Scale for Asian International Students (AS AIS; Gu, 2008), gender role identity variables and gender role discrepancy variables as measured by the Bem Sex Role Inventory Short Form (BSRI-SF; Bem, 1974) and Attitudes toward Women Scale (AWS-S; Spence & Helmrich, 1978).

Data Cleaning

Prior to conducting the canonical correlation analyses to investigate the main hypotheses, the data set was examined for missing responses and outliers. Additionally, analyses were conducted to test for violations of the multivariate assumptions of (a) linearity, (b) homoscedasticity, (c) normality of score distributions, and (d) multicollinearity.

Linearity. The assumption of linearity is that predictor and criterion variables are related to each other such that paired comparisons of them reveal shared regression lines and significant correlations. Scatterplots of predictor-outcome variable pairs and correlations between predictor-outcome pairs indicated that all predictors were roughly linearly related to criterion variables (See Table 3 for correlations coefficients between predictor and criterion variables).

Homoscedasticity. The assumption of homoscedasticity is that there is similar variability among predictor variables at all levels of the scores. To test whether

predictors met this assumption, regression analyses of pairs of predictor and criterion variables were conducted. Scatterplots of residuals (i.e., indicators of error) and predictor values were used to assess for systematic patterns of error variance, and revealed residuals to be randomly distributed, with no relation to independent variables, thus indicating homoscedastic relationships between predictor and outcome variables.

Normality. The assumption of normal distributions of the independent variables was assessed by evaluating the shapes of the histograms of the independent variables, as well as by examining levels of skewness. The scores of Preencounter, Separation and Assimilation subscales were roughly normally distributed. The womanist identity Internalization subscale score and acculturation Integration scores were moderately negatively skewed, which indicated a tendency for the aggregate sample to agree with the subscale items. Additionally, the scores for the womanist identity Post-encounter subscale, womanist identity Immersion-Emersion subscale, and Acculturation Marginalization subscale were moderately positively skewed, which indicated a tendency for the aggregate sample to disagree with the subscale items.

Outliers for the problematic predictor variables were analyzed to assess whether they were contributing to skewness. After moving outliers toward the scores in the distribution that they were closest to (i.e., winsoring outliers) and examining the skewness Z scores for excessive skewness (i.e., outside the range of ± 3), the Pre-encounter, Post-encounter, Immersion-Emersion, Internalization and Integration scores were roughly normally distributed (i.e., Z-skew was within ± 3). However, the skewness statistics of Marginalization did not improve. Given the fact that the transformation of

only one skewed variable would have been very hard to interpret, I used the winsored dataset, but did not transform any variables.

Table 3

Correlations between Womanist Identity Acculturation Styles, Gender-Role Self Descriptions and Stereotypes

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. PRE																
2. POST	.33**															
3. I-E	.47**	.53**														
4. INT	-.10	.03	-.13													
5. INTE	-.25**	-.04	-.21*	.34**												
6. ASSI	-.09	.07	.07	.15*	.51**											
7. SEPA	.33**	.29**	.16*	-.04	-.38**	-.59**										
8. MAR	.03	.18*	.29**	-.22*	-.39**	-.06	.01									
9. Mas-O	-.12	-.18*	-.23**	.09	.25**	.25**	-.32**	-.19*								
10. Mas-S	.09	.18*	.11	.06	.22**	.09	.09	-.07	.12							
11. Fem-O	.25**	.18*	.00	.23**	.26**	.05	.12	-.32**	.07	.20**						
12. Fem-S	.00	.06	-.07	.08	.22**	.17*	-.10	-.20**	.26**	.47**	.35**					
13. Mas-Dis	.13	.09	.16*	-.09	-.13	-.09	.14*	.13	-.46**	-.12	.11	-.24**				
14. Fem-Dis	.09	-.11	.01	-.19*	-.19*	-.08	-.03	.10	.03	-.19*	.08	-.46**	.28**			
15. Atti-O	.62**	.19*	.23**	-.13	-.18*	-.09	.29**	-.00	-.04	.03	.19**	.00	.09	.02		
16. Atti-S	.11	.05	-.02	-.09	-.06	.01	.10	-.00	-.06	-.32**	-.05	-.06	-.09	-.12	.44**	
17. Atti-Dis	.31**	.06	.12	-.12	-.16*	-.10	.16*	-.01	.04	.05	.03	-.08	.08	.14	.47**	.10

Note. * $p < .05$, ** $p < .01$. PRE=Preencounter, POST=Post-encounter, I-E=Immersion-Emersion, INT=Internalization, INTE=Integration, ASSI=Assimilation, SEPA=Separation, MAR=Marginalization, Mas-O=Own Masculinity, Mas-S=Stereotype of American women's Masculinity, Fem-O=Own Femininity, Fem-S=Stereotype of American women's Femininity, Atti-O=Own Attitudes towards Women, Atti-S=Stereotype of American women's Attitudes towards Women, Mas-Dis=Masculinity Gender Role Discrepancy, Fem-Dis=Femininity Gender Role Discrepancy, Atti-Dis=Attitudes towards Women Discrepancy.

Multicollinearity. The assumption of multicollinearity posits that independent variables are not too strongly correlated with each other, which would make it difficult to interpret each predictor's individual variance contribution. Multicollinearity was examined by using the variance inflation factors (VIF) and tolerance levels (TO). VIF and TO for the four womanist identity attitudes scores, and the four acculturation subscales were all in acceptable ranges. Also, as shown in Table 4, Pearson correlations between independent variables were not excessively high (i.e., $> .90$). Therefore, VIF and TO as well as Pearson correlations indicated that relationships among predictors would not suppress the contributions to predicted variance for any of the predictor variables.

Preliminary Analyses

To determine whether it was necessary to include or control for demographic characteristics, one-way between-groups analyses of variance (ANOVAs) were conducted to assess whether there were any between-group differences due to categorical demographic variables when gender role and attitudes toward women scores were the criterion variables. No significant mean differences were found with respect to participants' own education level and relationship status. However, group differences in own masculinity, and stereotypes of American women's masculinity were found with respect to mothers or fathers' educational levels.

Participants whose mothers' highest education level was middle school or lower ($M=55.38$, $SD=9.82$) had significantly higher own masculinity scores than participants whose mothers' highest levels of education were high school education ($M=50.65$,

$SD=7.40$), Bachelor's degree ($M=48.19$, $SD=8.78$), or Master's degree ($M=48.18$, $SD=8.34$), ($F(4, 187) = 2.90$, $p < .05$). Participants' stereotypes of American women's masculinity differed significantly by fathers' educational levels ($F(4, 185) = 3.00$, $p < .05$) such that participants whose fathers had middle school or lower education levels ($M=62.98$, $SD=5.72$) endorsed higher levels of stereotypes of American women's masculinity than those whose fathers had high school educations ($M=52.42$, $SD=11.86$), bachelor's degrees ($M=54.28$, $SD=8.51$), master's degrees ($M=56.61$, $SD=7.01$), or doctorates or other professional degrees ($M=54.23$, $SD=5.64$). The parents' educational levels were not consistently related to the same variables so I decided against using parents' educational level in the canonical correlations.

Tests of Hypotheses and Research Questions

Description of Analyses

Canonical correlation analyses were used to test all hypotheses (see details in Appendix G). In the analyses, a set of multiple predictors (e.g., womanist identity attitudes) was used to predict a set of multiple criterion variables (e.g., gender-role stereotypes and self-descriptions). Each analysis yielded a number of functions equal to the smallest number of variables in the predictor or criterion set. To determine whether the functions were significant and interpretable, I first examined the significance of Wilks' λ , which is the amount of variance not explained by the full model; therefore, $1 - \lambda$ indicates the amount of variance explained as indicated by R_c^2 .

Also, I examined the squared canonical correlation coefficients for each function to ensure that each accounted for a meaningful level of variance (i.e., $\geq 9\%$). Through dimension reduction analysis, the statistical significance of each set of functions was

tested after the variance accounted for by the preceding function had been removed. Thus, to determine whether identified functions should be interpreted, I examined significance levels of the overall model after each function was removed in combination with the percentage of variance explained.

For the three hypotheses tests, Tables 4 through 7 present standardized canonical function coefficients (“Coef”), structure coefficients (r_s), squared structure coefficients (r_s^2), and commonality estimates (h^2). Standardized function coefficients indicate how much each variable was weighted to form the function (i.e., latent construct), structure coefficients are the correlations between each variable and the latent construct, squared coefficients are the percent of variance explained by each variable and the commonality estimates are the percent of variance explained by each variable summed across the functions. Structure coefficients of at least $|\ .30 |$ rather than function coefficients were interpreted because they are less susceptible to issues of multicollinearity. Variables whose coefficients share the same sign are positively related to each other.

Womanist Identity Attitudes and Acculturation Analyses

Hypothesis 1. Chinese female students' womanist identity attitudes will predict their acculturation status attitudes. Hypothesis 1a, participants' processes of reacting to traditional gender-role identities (i.e., Preencounter, Post-encounter, and Immersion-Emersion) will be positively related to rejecting U.S. culture (i.e., Separation and Marginalization) and negatively related to participating in U.S. culture (i.e., Assimilation and Integration). Hypothesis 1b, participants' internalizing of a self-defined gender identity (i.e., Internalization) will be positively related to participating in U.S. culture

(i.e., Assimilation and Integration) and negatively related to rejection of U.S. culture (i.e., Separation and Marginalization).

In order to test this hypothesis, the predictor variables in the canonical correlation analysis were the four womanist identity scores and the four Acculturation scores were the criterion set of variables. For the process of developing gender role identity, increasingly large numbers reflected conformance to traditional norms for women (Preencounter), confusion about one's gender role (Post-encounter), and rebellion against traditional norms (Immersion-Emersion), respectively; and, for developing self-defined gender role identity (Internalization) higher numbers indicate higher self-actualizing identity as a woman (Internalization).

For acculturation, increasingly large numbers indicated higher levels of participating in both cultures (Integration) or only American culture (Assimilation). Increasingly large numbers also indicated acceptance of Chinese culture and not participating in US culture (Separation) or participating in neither Chinese nor American culture (Marginalization), respectively.

The analysis yielded four functions with squared canonical correlations (R_c^2), multiplied by 100, of 25.65, 15.98, 8.81 and 1.05 for each successive function. Collectively, the full model across all four functions was statistically significant using the Wilks' $\lambda = .564$ criterion, $F(16, 559.71) = 7.22, p < .0001$. Thus, for the set of four canonical functions, the R^2 effect size was .436, which indicates that the full model explained a substantial portion, about 43.6%, of the variance shared between the two variables sets.

As previously noted, the full model (Function 1 to 4) was statistically significant ($F(16, 559.71) = 7.22, p < .0001$). Function 2 to 4 was statistically significant, $F(9, 447.96) = 5.996, p < .0001$. Function 3 to 4 was also statistically significant, $F(4, 370.00) = 4.88, p < .05$. Function 4 did not explain a statistically significant amount of shared variance between the variable sets and did not account for a significant amount of variance, $F(1, 186.00) = 1.97, p = .16$. Given functions were interpreted if they accounted for at least 9% of the variance between predictor and criterion sets and/or the model containing them was significant, only the first two functions were interpreted.

Table 4

Summary of Canonical Correlation Analysis Using WIAS to Predict Acculturation Variables

	Function 1			Function 2			
Variable	Coef	r _s	r _s ² (%)	Coef	r _s	r _s ² (%)	h ² (%)
WIAS							
PRE	-.41	<u>-.71</u>	50.41	.15	.19	3.61	<u>54.02</u>
POST	-.61	<u>-.83</u>	68.89	-.59	<u>-.43</u>	18.49	<u>87.38</u>
I-E	-.24	<u>-.76</u>	57.76	.28	.15	2.25	<u>60.01</u>
INT	.17	.22	4.84	-.79	<u>-.86</u>	73.96	<u>78.80</u>
<i>R_C²</i>			25.65			15.98	
AS AIS							
INTE	.34	<u>.46</u>	21.16	-.95	<u>-.87</u>	75.69	<u>96.85</u>
ASSI	-.79	.01	.01	-.34	<u>-.46</u>	21.16	21.17
SEPA	-1.02	<u>-.68</u>	46.24	-.61	-.05	.25	<u>46.49</u>
MAR	-.35	<u>-.44</u>	19.36	-.05	<u>.33</u>	10.89	<u>30.25</u>

Note. Structure coefficients (r_s) greater than $|\cdot 30|$ are bolded. Community coefficients (h^2) greater than 30% are bolded. Coef=standardized canonical function coefficient; r_s = structure coefficient; r_s^2 = squared structure coefficient; h^2 = community coefficient. WIAS=Womanist Identity Attitude Scale, AS AIS= Acculturation Scale for Asian International Students, PRE=Preencounter, POST=Post-encounter, I-E-Immersion-Emersion, INT=Internalization, INTE=Integration, ASSI=Assimilation, SEPA=Separation, MAR=Marginalization.

Womanist identity and Acculturation Function 1

Womanist Identity. As shown in Table 4, the structure coefficients for Function 1 indicate that all of the Womanist identity schemas except Internalization were significant contributors to the Womanist identity predictor set signifying that the three sexism-defined schemas, Preencounter (-.71), Post-encounter (-.83), and Immersion-Emersion (-.76), were positively related to each other such that when one was high or low, so were the others. Post-encounter (i.e., confusion) accounted for the most score variation in the predictor set (68.89%).

Acculturation. For the criterion set of variables in Function 1, the results indicated that Separation (-.68) and Marginalization (-.44) were positively related to each other and negatively related to Integration (.46). Assimilation was not a significant contributor to this function, but its large function coefficient suggests that its variance may have been subsumed by the other acculturation variables. Separation accounted for the most score variation in the criterion set (46.24%).

Predictors and Criteria Combined. Across the Function 1 variable sets, Chinese women with lower levels of conforming to traditional gender stereotypes (Preencounter), gender-role identity confusion (Post-encounter), and active searching for alternative gender roles (Immersion-Emersion) also expressed lower levels of attitudes indicating separation from the host culture (Separation) and confusion about their culture identity (Marginalization), but higher levels of integrative identity defined by both Chinese and American culture (Integration).

Function 1 supported hypothesis 1a in that women who were in the process of maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-

encounter, and Immersion-Emersion) were also rejecting the U.S. culture (i.e. Separation and Marginalization) and were not attempting to integrate the Chinese and U.S. cultures (i.e. Integration) as aspects of their identities.

Womanist Identity and Acculturation Function 2

Womanist Identity. As shown in Table 4, the structure coefficients for Function 2 indicate that both Post-encounter ($-.43$) and Internalization were ($-.86$) significant contributors to the Womanist identity predictor set and were positively related to each other. Internalization accounted for the most score variation in the predictor set (73.96%).

Acculturation. For the criterion set of variables in Function 2, the results indicated that when Integration ($-.87$) and Assimilation ($-.46$) were low, Marginalization ($.33$) tended to be high. Separation was not a significant contributor in this function, but multicollinearity may have obscured its contribution to the function as suggested by its relatively large function coefficient. Integration accounted for the most score variation in the criterion set (75.69%). The collective results of the criterion variable set indicated that the Chinese women who were low in levels of Integration and Assimilation acculturation statuses, also tended to be somewhat marginalized with respect to Chinese and American cultures.

Predictors and Criteria Combined. Across the Function 2 variable sets, Chinese women's being less confused (Post-encounter) and less internalized with respect to their identity as women (Internalization) was associated with less acceptance of both Chinese and American cultures (Integration) and less identification with American culture (Assimilation), but higher levels of confused cultural identity (Marginalization).

Hypothesis 1b was partially supported. Womanist Internalization was associated with participating in the U.S. culture (i.e., Integration and Assimilation), and not rejecting the Chinese and U.S. cultures (i.e. Marginalization) (see Function 2). Yet contrary to prediction Post-encounter was also related to participating in the U.S. culture, and not rejecting the Chinese and U.S. cultures. Thus, when women were developing a self-identity as a woman (Internalization) and were also confused about their identity (Post-encounter), they were participating in the U.S. culture and were not feeling marginalized.

Womanist Identity Attitudes and Gender Role Analyses

Hypothesis 2: Chinese female students' womanist identity attitudes will predict their (a) gender-role traits, (b) attitudes, and (c) the discrepancies between their self-descriptive traits and attitudes and their stereotypes of U.S. women's gender-role traits and attitudes. Specifically, (Hypothesis 2a) When women's attitudes reflecting the process of maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-encounter and Immersion-Emersion) are high, their endorsement of traditional gender-role traits (i.e., own femininity, stereotypes of American women's femininity) will be high and their endorsement of non-traditional gender-role traits (i.e., own masculinity, stereotypes of American women's masculinity) will be low, but their self-defined identities (Internalization) will be positively related to both traditional and non-traditional gender role traits. (Hypothesis 2b) When women's attitudes reflecting the process of maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-encounter and Immersion-Emersion) are high, their levels of endorsement of liberal or non-sexist attitudes toward women's roles for themselves and American women (i.e. own attitudes toward women, stereotypes of U.S. women's attitudes toward women) will

be low, but their attitudes reflecting internalization of self-defined identities (Internalization) will be positively related to liberal attitudes for themselves and American women. (Hypothesis 2c) When women's attitudes reflecting maintaining or rejecting traditional gender-role identities (i.e., Preencounter, Post-encounter, and Immersion-Emersion) are high, they will perceive higher levels of gender-role discrepancies relative to American women and their internalizing gender-role attitudes (i.e., Internalization) will be related to lower levels of gender-role discrepancy.

Womanist Identity Attitudes and Gender Role Identity Model (Hypothesis 2a and 2b)

To test Hypothesis 2a and 2b, a canonical correlation analysis was conducted using (a) the four WIAS scores as previously described as predictors, and (b) a set of six gender-role attitudes (own femininity, own masculinity, own attitudes toward women's roles, and stereotypes of U.S. women for the same three variables) as criterion variables. For this analysis, increasing large numbers for the criterion set indicated higher levels of the measured variables.

The analysis yielded four functions with successive squared canonical correlations (R_c^2) of 44.44%, 12.23%, 8.27%, and 1.93%. Collectively, the full model across all functions was statistically significant using the Wilks' $\lambda = .439$ criterion, $F(24, 625.67) = 6.946, p < .0001$. Thus, for the set of four canonical functions, the full model indicated that about 56.1% of the variance was shared between the two variables sets (Table 5).

The model including Functions 2 to 4 was statistically significant, $F(15, 497.30) = 2.96, p < .0001$ as was the model including Functions 3 to 4, $F(8, 362.00) = 2.46, p$

<.05. Function 4 did not explain statistically significant amounts of shared variance between the variable sets, $F(3, 182.00) = 1.20, p = .31$. Given the R_c^2 effects for each function, only the first two functions were interpreted. Table 5 summarizes the results of the analysis. The column headings are as previously described.

Table 5

Summary of Canonical Correlation Analysis Using Womanist Identity Attitudes to Predict Gender Role Variables ($N = 192$)

Variable	Function 1			Function 2			$h^2(\%)$
	Coef	r_s	$r_s^2(\%)$	Coef	r_s	$r_s^2(\%)$	
WIAS							
PRE	1.02	.99	99.2	.18	-.06	.35	99.55
POST	.09	.34	11.76	.53	.25	6.30	18.06
I-E	-.11	.43	18.32	-.70	-.44	19.01	37.33
INT	-.01	-.09	.79	.71	.81	65.77	66.56
R_c^2			44.44			12.23	
Gender Role							
Mas-O	-.16	-.20	3.96	.28	.36	12.60	71.47
Mas-S	.02	.12	1.54	.14	.24	5.62	30.10
Fem-O	.23	.40	16.16	.94	.88	77.44	94.39
Fem-S	-.07	.00	.00	-.04	.41	16.73	16.73
Atti-O	.99	.93	86.49	-.43	-.12	1.51	4.01
Atti-S	-.26	.18	3.39	.30	.01	.01	.15

Note. Structure coefficients (r_s) greater than $|\cdot 30|$ are bolded. Communality coefficients (h^2) $\geq 30\%$ are bolded. Coef = standardized canonical function coefficient; r_s = structure coefficient; r_s^2 = squared structure coefficient; h^2 = communality coefficient.

WIAS=Womanist Identity Attitude Scale, PRE=Preencounter, POST=Post-encounter, I-E-Immersion-Emersion, INT=Internalization, Mas-O=Own Masculinity, Mas-S=Stereotype of American women's Masculinity, Fem-O=Own Femininity, Fem-S=Stereotype of American women's Femininity, Atti-O=Own Attitudes towards Women, Atti-S=Stereotype of American women's Attitudes towards Women

Function 1.

Womanist Identity Attitudes. As shown in Table 5 the structure coefficients for Function 1 indicate that all of the Womanist identity schemas except Internalization were significant contributors to the Womanist identity predictor set signifying that Chinese women's Preencounter (.99), Immersion-Emersion (.43), and Post-encounter (.34) schemas were all positively related. Preencounter accounted for the most score variation in the predictor set and defined the predictor set as indicated by its function coefficient.

Gender Role Characteristics. For the Function 1 criterion set of variables, participants' own attitudes toward women (.93) and own femininity (.40) were both significant contributors to the canonical solution in the same direction. Own attitudes toward women were the strongest criterion contributor to this function. The collective results of the criterion variable set indicated that the Chinese women who described themselves as demonstrating more feminine traits were also likely to report liberal attitudes towards women's gender roles.

Predictors and Criteria Combined. Across the function variable sets, Chinese women's Preencounter, Post-encounter and Immersion-Emersion were positively associated with their own femininity and own attitudes toward women. This result partially supported hypothesis 2a's premise that women who were in the process of reacting to traditional gender-role identity (i.e., Preencounter, Post-encounter and Immersion-Emersion) would express traditional gender-role traits (i.e., own femininity). However, contrary to hypothesis 2b, participants who were in the process of maintaining and rejecting traditional gender-role identity expressed liberal attitudes toward women (i.e., own attitudes toward women).

Function 2.

In function 2, Chinese women's Internalization (.81) and Immersion-Emersion (−.44) were significant contributors to the predictor set in opposite directions. When their use of the Internalization schema was high, their use of the Immersion-Emersion schema was low. In this function, Internalization accounted for the most variance in the predictor set (65.77%).

In the criterion set, own femininity (.88), stereotypes of American women's femininity (.41), and own Masculinity (.36) were the significant variables. Own feminine traits were the strongest contributors to the criterion set. These results indicate that when Chinese women perceived themselves and American women as having feminine traits, they also tended to describe themselves as having moderate levels of masculinity traits.

Combined Predictors and Criteria Combined. Integration of both the predictor and criterion variable sets indicates that Chinese women's Immersion-Emersion was negatively related to own masculinity, own femininity, and own gender-role attitudes, but Internalization was positively associated with the same gender- role variables. Function 2, support for hypothesis 2a and 2b was that self-defined gender-role identity (i.e. Internalization) was positively associated with both traditional gender roles (i.e. own femininity) and non-traditional gender roles (i.e. own masculinity and own attitudes toward women). In addition, one of the traditional gender role identities (i.e. Immersion-Emersion) was positively related to traditional gender roles (i.e., own femininity). Thus, when women were self-defining their own identity and not rebelling against traditional sex roles, they reported high levels of femininity and masculinity traits and liberal sex-role attitudes.

Womanist Identity Attitudes and Gender Role Discrepancy Model (Hypothesis 2c)

For Hypothesis 2c, womanist identity schemas were the predictor set and gender-role discrepancies were the criterion variable set. Gender-role discrepancies were the absolute difference between the women's own self descriptions of their gender traits and attitudes and those of U.S. women. Thus, larger numbers indicate greater perceived differences.

The canonical correlation analysis yielded three functions with squared canonical correlations (R_c^2) of 12.30%, 3.68%, and 1.40% for each successive function.

Collectively, the full model across all functions was statistically significant, Wilks' $\lambda = .833$, $F(12, 473.88) = 2.823$, $p < .01$, which indicates that the full model explained about 16.7%, of the variance shared between the two variables sets (Table 6). Although the full model accounted for significant variance, Functions 2 to 3 and Function 3 did not explain statistically significant amounts of shared variance between the variable sets, $F(6, 360.00) = 1.57$, $p = .16$, and $F(2, 181.00) = 1.28$, $p = .28$, respectively. Thus, only the first function, which accounted for 12.30% of shared variance, was interpreted.

Table 6

Summary of Canonical Correlation Analysis Using Womanist Identity Attitudes to Predict Gender Role Discrepancy Variables ($N=192$)

Variable	Function 1			$h^2(\%)$
	Coef	r_s	$r_s^2(\%)$	
WIAS				
PRE	-.88	-.86	73.96	73.96
POST	.26	.00	.00	.00
I-E	-.04	-.39	15.21	15.21
INT	.43	.53	28.09	28.09
R_C^2			12.30	
Gender Role Discrepancy				
Mas-Dis	-.26	-.43	18.49	18.49
Fem-Dis	-.37	-.56	31.36	31.36
Atti-Dis	-.79	-.86	73.96	73.96

Note. Structure coefficients (r_s) greater than $|\cdot30|$ are bolded. Communality coefficients (h^2) greater than 30% are bolded. Coef = standardized canonical function coefficient; r_s = structure coefficient; r_s^2 = squared structure coefficient; h^2 = communality coefficient. WIAS=Womanist Identity Attitude Scale, PRE=Preencounter, POST=Post-encounter, I-E-Immersion-Emersion, INT=Internalization, Mas-Dis=Masculinity Gender Role Discrepancy, Fem-Dis=Femininity Gender Role Discrepancy, Atti-Dis=Attitudes towards Women Discrepancy.

Womanist Identity and Gender Role Discrepancy Function 1.

Womanist Identity. As shown in Table 6, the structure coefficients for Function 1 indicate that all of the Womanist identity schemas except Post-encounter were significant contributors to the Womanist identity predictor set signifying that when Chinese women's Preencounter (-.86), and Immersion-Emersion (-.39) were low, their use of Internalization (.53) was high. Preencounter accounted for the most score variation in the predictor set (73.96%).

Gender Role Discrepancy. For the criterion set of variables in Function 1, all of the gender role discrepancy variables, attitudes towards women discrepancy (-.86), femininity discrepancy (-.56), and masculinity discrepancy (-.43), were significant

predictors. Attitudes towards women accounted for the most score variation in the predictor set. The collective results of the criterion variable sets indicated that the Chinese women who considered their attitude towards women as similar to those of American women also considered masculine and feminine traits as similar.

Predictor and Criteria Combined. Across the function variable sets, the canonical correlation model indicates that when Internalization was high and conforming to traditional culture and rebelling against it were low, the discrepancy between the women's self-descriptions and their descriptions of U.S. women were small for each kind of gender-role discrepancy (i.e., Masculinity Discrepancy, Femininity Discrepancy, and Attitudes toward Women Discrepancy). Alternatively, when Preencounter and Immersion-Emersion were high and Internalization was low, then the three kinds of gender- role discrepancy scores were large.

These results support hypothesis 2c in that developing an internalized gender role identity (i.e. Internalization) was related to small gender role discrepancies and expressions of traditional gender role identities (i.e., Preencounter and Immersion-Emersion) were related to large gender-role discrepancies.

Acculturation and Gender Role Analyses

Hypothesis 3. Chinese female students' acculturation status attitudes will predict levels of (a) gender-role traits, (b) sex-role attitudes, and (c) perceived Chinese and American women's gender-role discrepancies. Specifically, (Hypothesis 3a) Participating in the U.S. culture (i.e., Integration and Assimilation) will be related to higher levels of both traditional gender roles (i.e., own femininity and stereotypes of American women's femininity) and non-traditional gender roles (i.e., own masculinity,

stereotypes of American women's masculinity) and rejecting the U.S. culture (i.e., Separation and Marginalization) will be related to higher levels of traditional gender-role traits and lower levels of non-traditional gender role traits. (Hypothesis 3b) Participating in the U.S. culture (i.e., Integration and Assimilation) will be related to higher levels of liberal attitudes toward women's roles as reflected in self-reported attitudes and stereotypes of American women, and rejecting the U.S. culture (i.e., Separation and Marginalization) will be related to lower levels of liberal attitudes toward women for the participants and their descriptions of U.S. women. (Hypothesis 3c) Attitudes reflective of participating in the U.S. culture will be related to lower levels of gender-role discrepancies and rejecting the U.S. culture will be related to higher levels of gender-role discrepancy.

Acculturation and Gender Role Identity Model (Hypothesis 3a and 3b) In order to test hypothesis 3a and 3b, a canonical correlation analysis was conducted using the four Acculturation scores as predictors of the set of six gender-role identity criterion variables. The full model across all functions was statistically significant using the Wilk's lambda ($\lambda = .553$) criterion, $F(24, 623.18) = 4.803, p < .0001$, and four canonical functions were found. Thus, the full model with the four functions included explained 44.7% of the shared variance between the predictor and criterion variable sets. Each canonical correlation accounted for 24.18%, 21.75%, 4.81%, and 2.14% of the variance (R_c^2) (see Table 7).

The model containing Function 1 to 4 was statistically significant and accounted for 24.18% of the variance, $F(24, 622.18) = 4.803, p < .0001$, Functions 2 to 4 was also statistically significant and accounted for 21.75%, of variance $F(15, 494.54) = 4.000, p$

<.0001. However, the models containing Functions 3 to 4 and Function 4 did not explain statistically significant amounts of shared variance between the variable sets and were not significant, $F(8, 360.00) = 1.63, p = .116$; $F(3, 181.00) = 1.32, p = .269$, respectively.

Thus, only the first two functions were analyzed in the current study (see Table 7).

Table 7

Canonical Correlation Analysis Using Acculturation to predict Gender Role Variables (N=192)

Variable	Function 1			Function 2			
	Coef	r_s	$r_s^2(\%)$	Coef	r_s	$r_s^2(\%)$	$h^2(\%)$
ASAIS							
INTE	-.60	-.89	79.21	.52	.25	6.25	85.46
ASSI	.01	-.54	29.16	.25	-.12	1.44	30.60
SEPA	.35	.60	36.00	1.13	.77	59.29	95.29
MAR	.40	.65	42.25	-.11	-.31	9.61	51.86
R_C^2			24.18			21.75	
Gender Role							
Mas-O	-.58	-.68	46.24	-.33	-.32	10.24	56.48
Mas-S	-.12	-.27	7.29	.63	.52	27.04	34.33
Fem-O	-.53	-.50	25.00	.66	.70	49.00	74.00
Fem-S	-.12	-.51	26.01	-.29	.14	1.96	27.97
Atti-O	.64	.44	19.36	.21	.49	24.01	43.37
Atti-S	-.27	.15	2.25	.26	.17	2.89	5.14

Note. Structure coefficients (r_s) greater than $|\cdot30|$ are bolded. Communality coefficients (h^2) greater than 30% are bolded. Coef=standardized canonical function coefficient; r_s = structure coefficient; r_s^2 = squared structure coefficient; h^2 = communality coefficient. ASAIS= Acculturation Scale for Asian International Students, INTE=Integration, ASSI=Assimilation, SEPA=Separation, MAR=Marginalization. Mas-O=Own Masculinity, Mas-S=Stereotype of American women's Masculinity, Fem-O=Own Femininity, Fem-S=Stereotype of American women's Femininity, Atti-O=Own Attitudes towards Women, Atti-S=Stereotype of American women's Attitudes towards Women stereotype=stereotypes toward American women's femininity, Attitude Self-report=Self-report Attitudes toward Women, Attitude stereotype=stereotypes toward American women's attitudes toward women.

Acculturation and Gender Role Function 1

Acculturation. As shown in Table 8, the structure coefficients for Function 1 indicate that all of the Acculturation status attitudes were significant contributors to the predictor set indicating that Chinese when women's Integration (-.89) and Assimilation (-.54) were low, their Separation (.60) and Marginalization (.65) tended to be high.

Gender Role Identity. For the criterion set, when their own attitudes toward women were high (.44), their own masculinity (-.68), own femininity (-.50), and stereotypes of American women's femininity (-.51) tended to be low. The collective results of the criterion variable sets indicated that the Chinese women who described themselves as liberal tended to describe themselves as less feminine and less masculine, and they also perceived American women as less feminine.

Predictor and Criteria Combined. Across the function variable sets, function 1 indicated that the combination of high Separation and Marginalization and low levels of Assimilation and Integration were related to low levels of traditional and non-traditional gender-role traits (i.e., own masculinity, own femininity, and femininity stereotype) and liberal attitudes toward women's roles. The results partially supported Hypothesis 3a in that participation in the U.S. culture (i.e. Integration and Assimilation) was positively related to endorsement of both traditional and non-traditional gender roles (i.e., own masculinity, own femininity, and femininity stereotype). Rejecting the U.S. culture (i.e., Separation and Marginalization) was negatively related to non-traditional gender roles (i.e. own masculinity).

Acculturation and Gender Role Identity Function 2

Acculturation. In function 2, Chinese women's Separation and Marginalization were significant contributors. When their use of the Separation (.77) schema was high, their use of Marginalization (-.31) was low. In this function, Separation accounted for the most variance in the predictor set (59.29%).

Gender Role Identity. In the criterion set, own masculinity (-.32), stereotype of American women's masculinity (.52), own femininity (.70) and own attitudes toward American women (.49) were the significant variables. Thus, the criterion variable set indicated that when Chinese women perceived themselves as less masculine, they tended to think of American women as more masculine, and considered themselves as exhibiting feminine traits and liberal gender-role attitudes.

Predictor and Criteria Combined. Integration of both the predictor and criterion variable sets indicates that when Separation attitudes were high (i.e., participation in Chinese culture only), the masculinity stereotype, the women's own femininity traits and attitudes toward women were related to low levels of Marginalization attitudes (i.e., rejecting both Chinese and U.S. culture), own masculinity. Thus, results from function 2 partially supported hypothesis 3a and 3b in that rejecting the U.S. culture was positively related to traditional gender roles (i.e. own femininity), and negatively related to non-traditional gender roles (i.e. own masculinity, masculinity stereotype and own attitudes toward women). However, hypothesis 3a and 3b did not predict that rejecting the U.S. culture variables (i.e., Separation and Marginalization) would be related to the same gender role traits in opposite directions.

Acculturation and Gender Role Discrepancy Model (Hypothesis 3c)

To test hypothesis 3c, a canonical correlation analysis was conducted in which the four Acculturation attitude scores were used as predictors of the three gender-role discrepancy variables (differences between Chinese women's self-descriptions and stereotypes of U.S. women's femininity and masculinity traits and attitudes toward women). In the canonical model between Acculturation and gender role discrepancy variables, the full model explained 11.1% of the variance between two shared sets of variables ($\lambda = .889$, $F(12, 471.24) = 1.79$, $p < .05$), three functions were revealed. Each canonical function accounted for 6.16%, 4.26%, and 1.02% of the variance. However, given that none of the function explains more than 9% of the significant variance, the second canonical model will not be interpreted.

Hence, the Acculturation status attitudes did not significant predict the gender-role discrepancy variables and, therefore, Hypothesis 3c was not supported.

Summary

The results of the two canonical correlational analyses partially supported hypothesis 3a and 3b, but did not support hypothesis 3c. The first model revealed two functions that explained the relations between acculturation status and gender role traits. Specifically, participating in the U.S. culture was related to higher level of both traditional and non-traditional gender roles, and rejecting the U.S. culture was related to higher levels of traditional gender roles and lower levels of non-traditional gender roles. Some of the acculturation statuses were related to the gender role traits in directions that were contrary to the original hypothesis.

General Summary

Across the tests of the three hypotheses, seven canonical patterns were identified. Exploration of the relationship between womanist identity and acculturation (Hypothesis 1) revealed two significant and interpretable functions (a) “integrated acculturation and gender-role identity”, (b) “marginalized acculturation and gender-role identity” (see Table 4).

Second, exploration of the relationships between womanist identity attitudes and gender roles (Hypothesis 2a and 2b), as well as womanist identity attitudes and gender role discrepancy revealed three functions (Hypothesis 2c): (a) “traditional gender-role identity and traditional characteristics”, (b) “self-defining gender-role identity and integrated gender-roles,” and (c) “self-defining gender-role identity with low cultural conflicts” (see Table 5 and 6).

Finally, exploration of the relationships between Acculturation and gender role identity (Hypothesis 3a and 3b) revealed two functions: (a) “participating in U.S. culture with integrated gender roles” and (b) “rejecting U.S. culture and traditional gender roles”. In addition, Hypothesis 3c was not supported indicating that Acculturation was not related to perceived gender-role discrepancies.

Post Hoc Analysis

Canonical analyses reveal the relationships among variables, but not whether the women perceived themselves as demonstrating different levels of the measured variables relative to US women. Paired-sample t-tests were conducted to compare the differences between participants’ perceived own gender roles, and their stereotypes of American women’s gender roles. Means and standard deviations for these analyses are shown in

Table 2. Results showed that Chinese female students' stereotypes of American women's masculinity traits were significantly higher than their own masculinity traits, $t(191) = -6.48, p < .0001$. Their own femininity traits were significantly higher than their stereotypes of American women's femininity traits, $t(191) = 6.17, p < .0001$, and their own attitudes toward women were significantly higher than their stereotypes of American women's analogous attitudes, $t(191) = 4.28, p < .0001$. Therefore, the results indicated that Chinese female students considered themselves to be more feminine and more liberal than American women.

Chapter 5

Discussion

Growing evidence indicates that Chinese international students are under great acculturative pressure and adjustment challenges that are likely related to physical and psychological health symptoms (Fan & Ashdown, 2014; Yan & Berliner, 2009, 2011, Wang & Mallinckrodt, 2006). Of the limited empirical studies that have focused on Chinese female students' acculturative experiences, some researchers have suggested that unique acculturative stresses for these women are their manner of defining themselves as women and coping with potential disruptions in their gender roles as they transition from a Chinese cultural context to a U.S. cultural context (Qin, 2009; Zhou, 2000). Yet it is not clear what gender-specific mechanisms underlie Chinese women's acculturation process. Womanist identity theory posits that the women's gender-role identities develop or change in response to perceived gender-related cues in their environment, whereas acculturation theory posits that cultural identities are likely shaped by perceptions of general cultural cues in the environment (Berry, 1980; Helms, 1990).

Therefore, in order to address the questions of whether and how acculturative related experiences and womanist identities are related to Chinese female international students' gender roles, the current study investigated how acculturation and womanist identity attitudes were related to each other, and to Chinese female international students' perceptions of their own femininity and masculinity traits and attitudes toward women's gender roles, as well as their stereotypes of American women's gender-role traits and attitudes. Responses from a sample of Chinese female international students were analyzed to address the following research questions: (a) How are womanist identity

attitudes and acculturation status attitudes related to each other? (b) How are womanist identity attitudes related to gender-role traits and attitudes and gender-role trait and attitude discrepancies? (c) How are acculturation status attitudes related to gender-role traits and attitudes, as well as gender-role discrepancies?

In the following discussion, each research question will be addressed with respect to the results of the canonical correlation analyses. In the following sections, findings related to the research questions, methodological limitations of the study, and research implications are discussed.

Womanist Identity Attitudes and Acculturation

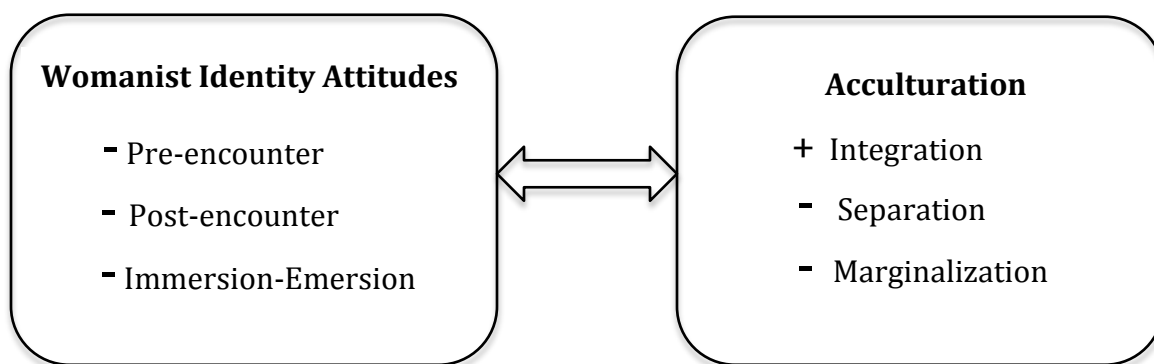
Theorists argue that, when experiencing acculturative stress, Chinese women living in the United States are likely to experience confusion regarding their sense of womanhood (e.g., Qin, 2009; Zhou, 2000). However, only one previous study (Alacron, 1997) has addressed the question of whether Asian women's identity is related to acculturation and it did not investigate Chinese female international students. In the current study, gender-role confusion was conceptualized as Chinese women's stereotypes of U.S. women, which might be the catalysts for gender-role confusion, and as the discrepancies between their descriptions of themselves and U.S. women.

Therefore, in hypothesis 1, I proposed that different types of womanist identity attitudes were associated with different types of acculturation status attitudes and found two significant and interpretable functions or profiles: (a) "Traditional gender-role identity and rejecting U.S. culture" (Figure 1), and (b) "Self-defining gender-role identity and participating in U.S. culture" (Figure 2) (Table 4). Thus, the results indicated that womanist identity attitudes and acculturation status attitudes were significantly related in

this sample. It is useful to discuss the functions as profiles or types of patterns that might define the ways in which these concepts might interact for One-Child women.

Integrated Acculturation and Gender Role Identity. The first identified profile (Figure 1) indicated that Chinese women's Preencounter, Post-encounter, and Immersion-Emersion womanist identity were negatively related to Integration, and positively related to Separation and Marginalization. This finding was consistent with hypothesis 1a in that Chinese women's processes of reacting to traditional gender-role expectations were positively related to rejecting U.S. culture (Separation and Marginalization) and negatively related to participation in U.S. culture (Integration). This finding was consistent with the previous research on other sojourner women who had doubts about their womanhood and reported feelings like an "outsider" living in the United States (Qin, 2009, p.103). In addition, acculturation theory argues that people who feel separated and marginalized in the host culture tend to maintain and confirm the values and social norms from their home culture (Berry, 1980).

Figure 1. Integrated Acculturation and Gender Role Identity

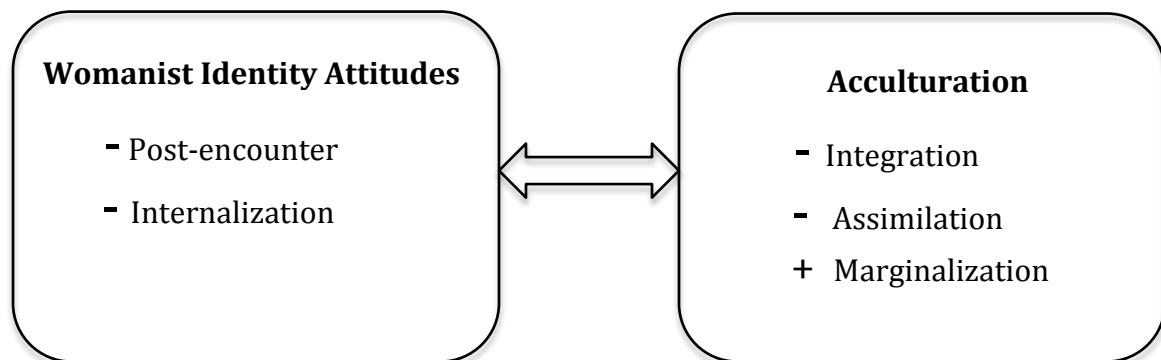


The obtained results for the first profile regarding the relationship between womanist identity and acculturation suggest that women who were participating in both cultures (Integration) were not dealing with issues related to maintaining (Preencounter)

or rejecting traditional gender-role expectations for women (Post-encounter, Immersion-Emersion. Alternatively, both Separation and Marginalization were positively related to all of the traditional womanist identity variables, supporting the notion that Chinese women who feel lost or uncertain with respect to their gender roles also feel isolated and confused about American culture (Qin, 2009).

Marginalized Acculturation and Gender-Role Identity. The second identified profile (Figure 2) indicated that women who viewed themselves as marginalized with respect to Asian and U.S. cultures were not confused about traditional sex roles and were not attempting to define an identity for themselves. Alternatively, one could interpret the pattern as indicating that Chinese women who were rethinking their conceptions of themselves as women and internalizing a self-defined gender-role identity also were participating in U.S. culture.

Figure 2. Marginalized Acculturation and Gender-Role Identity



Either interpretation of profile 1 and profile 2 supports Hypothesis 1b in that self-defining one's gender-role identity was associated with participating in the U.S. culture to some extent (i.e., Integration, Assimilation) rather than rejecting both Chinese and U.S. culture (i.e., Marginalization). These findings are consistent with previous research in that Internalization womanist identity, which is considered to involve the most complex

responses to gender cues, was associated with the Integration Acculturation (Alarcon, 1997).

However, Post-encounter womanist identity attitudes were unexpectedly also positively associated with participating in the U.S. culture, and negatively associated with rejecting the U.S. culture. According to womanist identity theory, Post-encounter is described as women's awareness of the gender-role social norms and confusion about how the norms should pertain to them (Helms, 1990). Thus, it is possible that Chinese female students who were questioning social gender-role stereotypes were also searching for alternative gender roles by participating in the host culture. This interpretation is consistent with the previous research in which Chinese women of unknown generation status reported in interviews that they had been through a process of change, confusion, and change after they moved to the United States (Qin, 2009). More generally, perhaps the acculturation process as related to Chinese women's gender role identity development is a non-linear process. Certainly, the discovery of two distinct types of women (i.e., functions) would support this observation.

Womanist Identity Attitudes and Gender-Role Characteristics

The second focus of the current study was whether womanist identity attitudes were associated with Chinese female international students' understanding of their own gender roles and their stereotypes of American women's gender roles, as well as the discrepancies between these two perceptions. A question underlying the study concerned whether One-child women, who contend with a diversity of gender-role expectations in their home culture, would view U.S. culture as requiring them to develop different gender-role identities as expressed through their gender-role traits and attitudes. Thus,

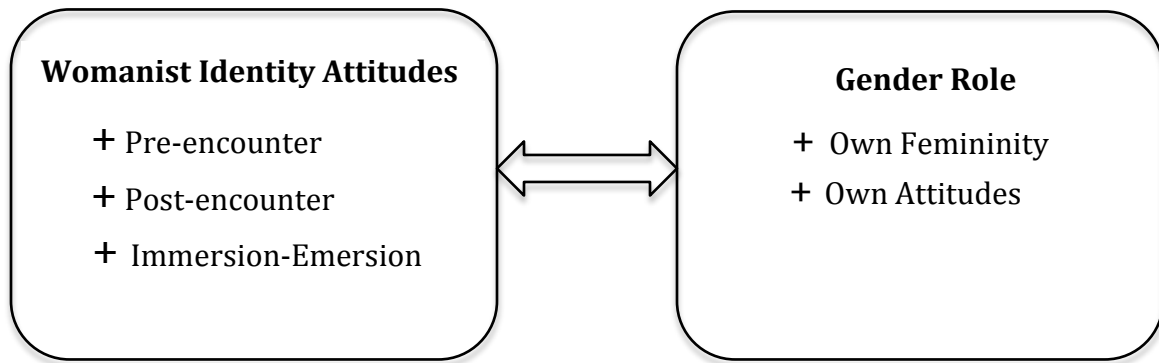
depending on whether they were responding to external or internal gender-role cues as indicated by womanist identity attitudes, one might expect participants' attitudes toward traditional and non-traditional gender role traits and gender-role attitudes, as well as levels of gender-role discrepancies to vary.

The results summarized in Table 5 and Table 6 and illustrated in Figures 3, 4, and 5 revealed three statistically significant functions: (a) "Traditional gender-role identity and traditional characteristics," (b) "Self-defining gender-role identity and integrated gender- role characteristics," and (c) "Self-defining gender-role identity and low cultural conflict."

Traditional gender-role identity and traditional characteristics. Figure 3 suggests that Chinese women who were in the process of maintaining or questioning traditional gender role identities (i.e., Pre-encounter, Post-encounter, Immersion-Emersion) viewed themselves as having high levels of traditionally feminine traits (i.e., own femininity) and liberal attitudes for themselves with respect to attitudes toward women's gender roles (i.e., own attitudes toward women). This pattern provided partial support for Hypothesis 2a, as the traditional womanist gender-role identity attitudes were related to traditional gender role traits. However, contrary to Hypothesis 2b, high levels of traditional gender-role identities were related to high levels of liberal attitudes toward women, too.

Consistent with Helms's womanist identity theory (Helms, 1990), this finding supports the notion that women who have not developed self-defined gender role identities still rely on social norms to identify their ideal womanhood.

Figure 3. Traditional Gender-Role Identity and Traditional Characteristics



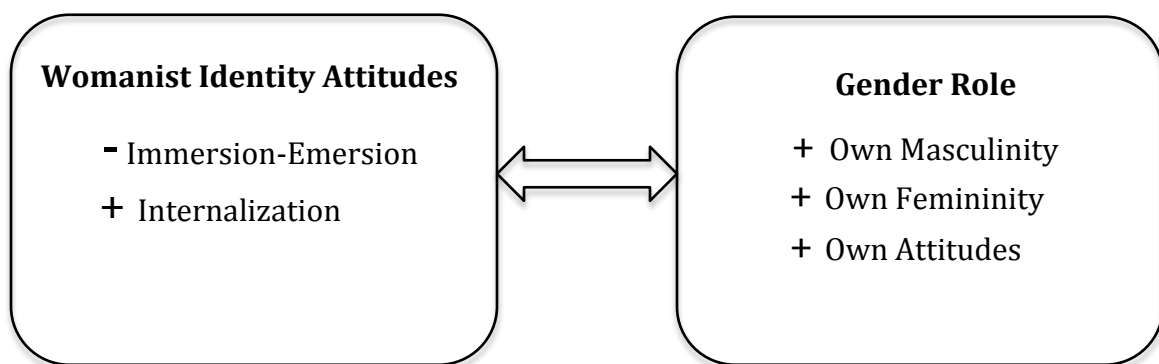
Interestingly, the results also indicated that, while describing themselves as traditionally feminine women, the participants, who were in the process of conforming or reacting to gender-roles defined by others, also tended to describe themselves as very liberal. The results of the post hoc analyses suggest that the women generally considered themselves to be significantly more liberal than American women, although such results may not pertain to the women described by Figure 3 specifically.

The inconsistency between the women's self-definitions of themselves as traditional women and their belief in liberal gender-roles might be due to the fact that these only-child Chinese international female students came from a special population in China who were born and raised middle or upper class in urban cities in China (Huang, 1997; Lee, 2012). In addition, research also has revealed that more and more women who are the only child of their family are carrying the burden of being the "only hope" of the family (Cameron et al., 2013). Thus, it is entirely reasonable that these women believed that men and women should have equal responsibilities and opportunities for education, work, and supporting one's family, which is consistent with the liberal attitude items contained in the Attitudes Toward Women Scale (Spence, Helmrich, & Stapp, 1972). Another possible reason for the seeming inconsistency is that recent studies have reported

more and more Chinese people tend to judge highly educated and independent women as “non-feminine,” and refer to single and highly educated women as “left-over women” (To, 2013). Thus, it is possible that although these women were in the process of searching for new gender roles, and agreed with the liberal attitudes toward women, they might still have felt embarrassed to be described as not feminine.

Self-defining gender-role identity and integrated gender roles. The fourth profile (Figure 4) partially supported Hypothesis 2a and 2b in that Chinese female international students with developing self-defined womanist gender-role identity attitudes tended to endorse both traditional (i.e., own femininity traits) and non-traditional (own masculinity traits and own attitudes toward women) characteristics. Consistent with Helms’ womanist identity theory, “Internalization” is a status when women are no longer struggling with conforming to traditional or sex-biased gender-role identities and are able to appreciate both feminine and masculine gender roles as aspects of themselves (Helms, 1990).

Figure 4. Self-defining Internalized Gender-Role Identities and Integrated Gender Roles

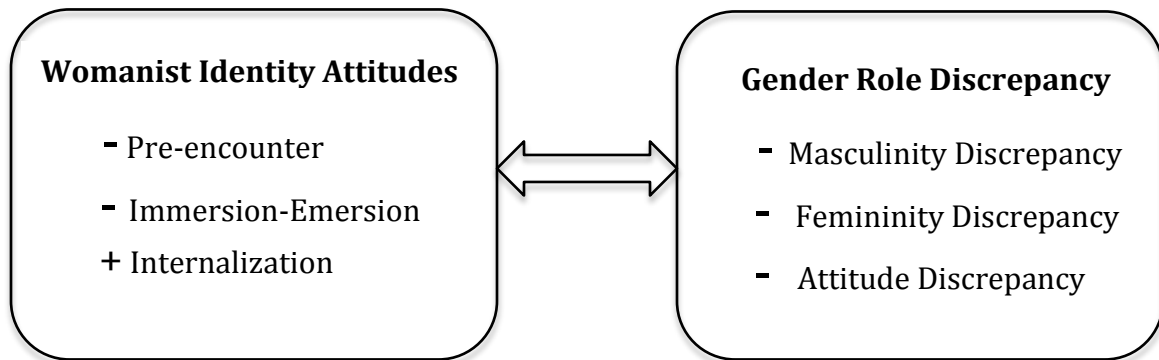


In addition, the results supported Hypothesis 2a and 2b in that low levels of traditional gender- role identity attitudes (i.e., Immersion-Emersion) were related to high levels of non-traditional gender role characteristics (i.e., own masculinity, attitudes

toward women) as well as traditional gender-role traits (i.e., own femininity). According to Helms's (1990) womanist identity theory, "Immersion-Emersion" is a schema characterized by rejecting traditional social norms and searching for alternative gender-role self-definitions. Nevertheless, it is the combination of Internalization and Immersion-Emersion that defines this profile, albeit in different directions. Thus, internalizing one's own self-definition of gender-roles, but not rejecting or rebelling against traditional gender-role expectations was associated with being feminine, masculine, and liberal. In liberal feminism, this combination might be called "androgyny" and is considered a desired outcome (Bem, 1974).

Self-defining gender-role identity and low cultural conflict. The fifth profile (Figure 5) characterized Chinese female students' perceived gender-role discrepancy and focused on how the women's gender role self-conceptualizations were related to their perceptions of U.S. women; that is, whether they felt pressure to change themselves to fit into U.S. culture. The depicted profile supported Hypothesis 2c in that the developing self-defining womanist identity attitudes (i.e., Internalization) were negatively related to each of the kinds of gender-role discrepancies and the traditional womanist identity attitudes were positively related to gender-role discrepancies. Negative relationships indicate that the women did not perceive much difference between themselves and U.S. women whereas positive relationships indicate the opposite.

Figure 5. Self-defining Gender-Role Identity and Low Cultural Conflict



The level of discrepancy between participants' own gender roles and their stereotypes of American women's gender roles showed the amount of perceived differences between themselves and American women, and thus may indicate their levels of perceived cultural conflict or stress when they were interacting with the American culture. Hence, these results may suggest that highly internalized gender-role identity is likely to be associated with low cultural conflict or acculturative stress. Of note, this finding is consistent with previous interviews of Chinese women immigrants of unknown generational or educational status in which the women reported that they felt more comfortable and reevaluated the American culture when they thought they had developed a more mature sense of womanhood (Qin, 2009). Moreover, the association between high traditional gender-role identity attitudes (i.e., Preencounter and Immersion-Emersion) and large gender-role discrepancies also indicated that womanist identity was an important factor that was associated with perceived cultural conflict regarding women's gender roles.

Summary

Overall, I found partial support for Hypothesis 2a, 2b, and 2c. As hypothesized, high levels of self-defined gender-role identities were associated with high levels of both

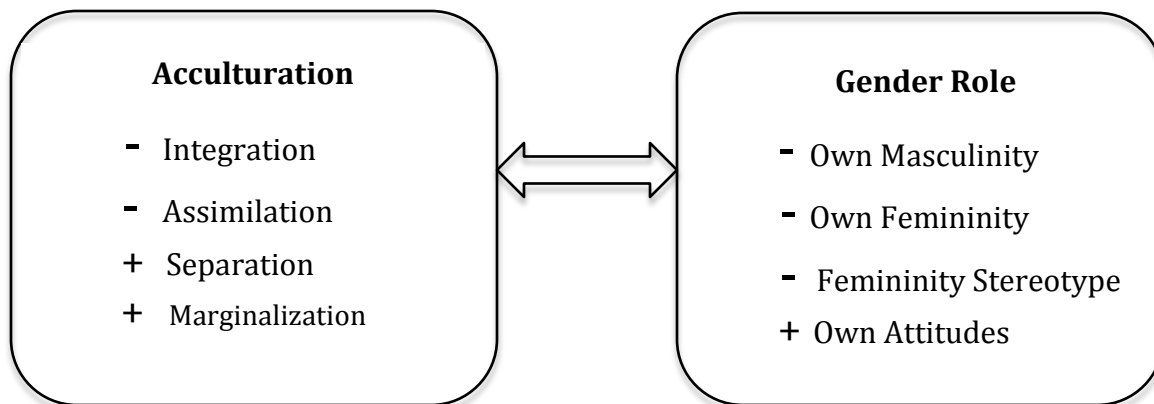
traditional and non-traditional gender roles and low gender role discrepancies, and high levels of traditional gender-role identities were associated with high traditional gender roles and high gender role discrepancies. Contrary to my hypothesis, liberal attitudes toward women's roles were positively associated with both traditional and self-defining womanist identities, and traditional gender-roles were negatively associated with "Immersion-Emersion" when self-defining gender-role identities were high. Together, these results suggest that a sophisticated, self-defining womanist identity is associated with the acceptance of integrated gender roles and less cultural conflict, conditions which liberal feminist and acculturation theory consider healthy adjustment (Bem, 1974; Berry, 1984).

Acculturation and Gender Roles

The third focus of the current study was whether acculturation was associated with Chinese female international students' gender roles and gender-role discrepancies, given that Berry's acculturation theory does not specifically address international women's adjustment issues. Specifically, in the present study, the acculturation status attitudes refer to the levels and types of participation in or rejection of the U.S. culture. The results summarized in Table 7 and illustrated in Figure 6 and 7 revealed two statistically significant profiles that describe acculturation and gender- role processes: (a) "Participating in U.S Culture with Integrated Gender Roles" and (b) "Rejecting U.S. Culture with Traditional Gender Roles." No significant function was found between Acculturation and gender-role discrepancies, which, at least partially, discounts acculturative stress as an explanation for gender-role development.

Participating in U.S Culture with integrated gender roles. The sixth overall profile (Figure 6), describing the relationships between acculturation and gender roles, yielded a profile of Chinese female students who were either participating in Chinese culture or neither culture and were not actively participating in American culture. Women using this acculturation style reported low levels of masculine and feminine traits and stereotypes of the femininity of U.S. women, but high levels of liberal attitudes. Alternatively, this profile could be interpreted as indicating that high levels of participating in U.S. culture (i.e., Assimilation and Integration) and low levels of distancing oneself from U.S. culture (i.e., Separation, Marginalization) were related to stereotyping U.S. women as feminine and oneself as masculine and feminine, but not liberal with respect to gender role attitudes.

Figure 6. Participating U.S. Culture with Integrated Gender Roles



The second interpretation partially supported Hypothesis 3a. As noted earlier, acculturation theory supports the relationship between participation in the host culture and acceptance of both traditional and host cultural values (Berry, 1980). Thus, this result indicated that high levels of sophisticated acculturation statuses were associated with the acceptance of both traditional and non-traditional gender roles.

However, the negative relationships between participation in U.S. culture and participants' own attitudes toward women, and the positive relationships between rejection of U.S. culture and own attitudes toward women did not support Hypothesis 3b. In other words, Chinese female students were more liberal when they rejected U.S. culture, and less liberal when they participated in U.S. culture.

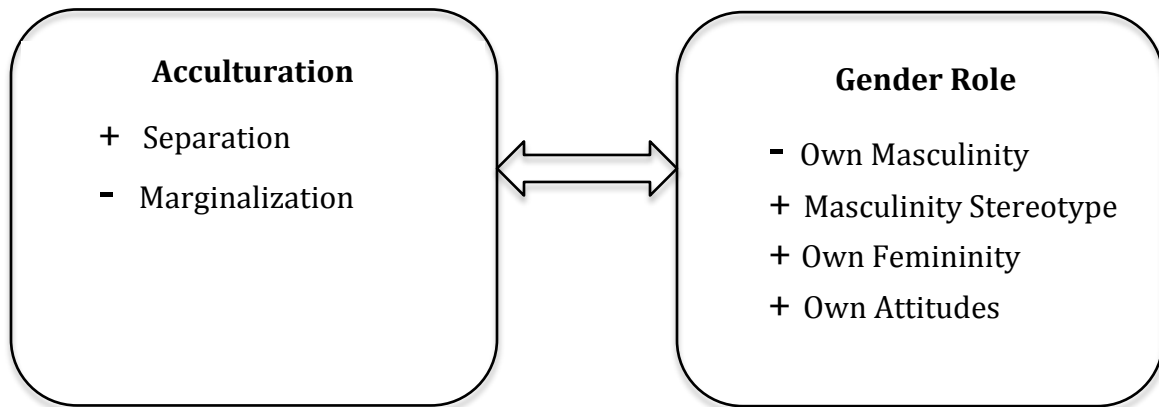
Given the fact that the results also showed that participants' stereotypes towards American women's femininity were positively related to participation in U.S. culture, one possible explanation is that their perceptions of American women's femininity might have been changing through their participation in the host culture. Perhaps participating in U.S. culture led them to challenge their prior masculine stereotypes of American women derived from Chinese social media (Xu, 2012). This contradictory experience between their previous stereotypes of American women's gender roles and their perceived American women's gender roles might thus have influenced their liberal attitudes towards women.

Another result that was different from Hypothesis 3a's prediction was the positive relationships between rejection of U.S. culture (i.e., Separation and Marginalization) and traditional gender roles (i.e. own femininity and stereotypes of American women's femininity). Theoretically, high levels of rejection of the host culture should be associated with high acceptance of traditional cultural values (Berry, 1980), which are the traditional feminine gender role traits in this study, if one supposes that expressions of feminine traits are stronger in Chinese culture than they are in U.S. culture. However, it is notable that both masculine and feminine gender role traits were negatively related to the rejection of the U.S. culture. In addition, from Table 8, one may notice that

Marginalization accounted for 42.25% of the variance among the variables in the predictor set. That is, the negative relationship between traditional gender roles and rejection of U.S. culture might have been due to the women's confusion about Chinese and U.S. cultures, which left them feeling rejected and not belonging to either culture.

Rejecting U.S. Culture with traditional gender roles. The seventh profile identified in the current study (Figure 7) revealed a pattern of acculturation and gender roles in which Chinese female international students were rejecting the U.S. culture and engaging in their own culture. This result partially supported Hypothesis 3a in that rejecting U.S. culture (i.e., Separation) was positively related to traditional gender roles (i.e., own femininity) and negatively related to non-traditional gender roles (i.e., own masculinity). This result is consistent with acculturation theory in that people in the "Separation" status tend to only accept the values from their original culture (Berry, 1980). However, contrary to Hypothesis 3a and 3b, participants' stereotypes of American women's masculinity and their own attitudes toward women's gender roles were also positively related to Separation. That is, the more participants rejected U.S. culture, the more likely it was that they considered American women masculine and themselves liberal. This profile is similar to the previous profile (Figure 6) in that the participants who rejected U.S. culture showed higher liberal attitudes toward women's gender roles. As previously noted, it is likely that the Chinese female students who were born after the "One Child Policy" came to the United States with liberal attitudes toward women's gender roles and masculine stereotypes towards American women, although the design of the study does not allow one to state this conclusion with certainty (Xu, 2012).

Figure 7. Rejecting U.S. Culture with Traditional Gender Roles.



Another result that did not support Hypothesis 3a and 3b was that Marginalization was high and Separation was low, non-traditional gender roles (i.e. stereotypes towards American women's masculinity, attitudes toward women) were low. In addition, the Marginalization profile was also related to high levels of the women's own masculinity. According to Berry's (1980) acculturation theory, people in the Marginalization status are feeling confusion about their original culture and the host culture. Thus, it is possible that this profile is ambiguous and reflects the confusion and struggle of Chinese female students' gender roles when they feel marginalized between the two cultures. Alternatively, it can be interpreted as traditional Chinese women who express beliefs and values consistent with traditional Chinese culture following the One Child policy.

General Summary

In sum, integrated traditional and non-traditional gender role traits were positively related to self-defining womanist identity and participating in U.S. culture. Participants' gender-role stereotypes of U.S. women were only related to different types of acculturation, and their levels of gender-role discrepancies (i.e., acculturation stress) were only related to their levels of internalized gender-role identities. Consequently, it does

not seem that Chinese women's perceptions of U.S. women were central to most women's gender identity development or acculturation status. That is, bi-gender womanist identity attitudes and bi-cultural acculturation were related to the acceptance of both traditional and non-traditional gender roles. Participants' cultural conflicts with respect to gender role traits were predicted by womanist identity attitudes, but not by their acculturation status attitudes. Moreover, Chinese female students expressed liberal gender role attitudes regardless of their types of womanist identity and acculturation. Thus, it is possible that the One-Child policy, liberal feminism, or parental expectations in China has encouraged them to be flexible with respect to gender roles.

Limitations

Given the fact that womanist identity attitudes and gender roles of Chinese female international students or, for that matter One Child women, rarely have been empirically examined in the literature, the current study may be described as exploratory in nature. Several limitations will be discussed concerning (a) theory and research design, (b) sampling methodology, and (c) measurement concerns.

Theory and Research Design

The purpose of the current study was to investigate womanist identity, acculturation, and gender roles of women born after China introduced the "One Child Policy" in 1979 and now seeking higher education in the United States. A central focus was to understand the effects of multiple perhaps contradictory expectations on the women's adjustment with respect to their gender-role adjustment in the US. The multiple expectations were presumed to come from (a) Chinese government policy, (b) parental

expectations, (c) Chinese men's gender-role preferences for women, and (d) possible gender-role stress in the US.

In the demographic questionnaire, the two questions related to the "One Child Policy" were participants' birth date and the number of children in their families. Although these questions probably identified women born in the intended time period, the study did not use a comparison design in which women born before the One Child policy were compared to those born afterwards. Thus, one cannot definitely say that women changed following implementation of the policy and, thus, one cannot conclude any causal relationship between the results and the "One Child Policy."

Moreover, the study did not use a longitudinal design in which women's gender role characteristics before leaving China were compared to their characteristics at different time periods after they arrived in the US. This type of longitudinal design would have made it possible to determine whether Chinese women changed as a result of being in the U.S. culture or merely express Chinese gender-role socialization wherever they are.

Finally, the results suggest that the Chinese women's perceptions or beliefs about U.S. women may not have mattered much, but previous theory suggests that parents and men may be important influences in how they define their gender-role identities. However, the research design did not include any questions pertaining to these potential sources of influence. Future studies should expand the focus to include men and parents' perceived expectations.

Sampling Methodology

In order to obtain an adequate sample of Chinese female international students, varied sampling techniques were used. Most participants were recruited via email list serves of various Chinese student unions, international student offices, or directly via the Quatrics survey link posted on social network websites. Thus, some of the participants were obtained via “snowball sampling”, and participated in the study when their friends invited them or shared the link on the social network websites. Thus, the sample was not random and it is difficult to know under what circumstances the participants decided to complete the online survey. Also, during the data collection process, about 48% of the participants dropped out before completing the survey. It is possible that some of the participants might not have had enough time to complete the entire survey, and the online survey site would have shut down if participants took too long to respond. It is also possible that some participants might have felt distressed when responding to the Acculturation scale (especially the items in the Marginalization subscale) given that a significant number dropped out of the study as they were responding to these items. None of these methodological considerations are measurable. Consequently, unknowable sample biases may have influenced the outcome of the current study.

Measurement Concerns

All measures were self-reported. As a result, all responses were subject to response bias, and it is possible that participants may have responded in manners consistent with the hypotheses or purposes that they thought the researcher was actually investigating. In addition, scores on the Marginalization subscale of the Acculturation Scale for Asian International Students (ASAIS) were still positively skewed even after

winsoring techniques had been applied, which indicates that participants may have tended to have low scores on their Marginalization subscales. Thus, Marginalization might not have been related to other variables as hypothesized due to the limited variability in the participants' responses, although it is worth noting that Marginalization was still implicated in several of the profiles nevertheless.

In addition, all the items in the survey were displayed in both languages (Chinese and English). The main reason for using both languages was to minimize the possible priming effects that might have been associated with their cultural identity or acculturation attitudes when using one language rather than the other. A second reason was to compensate for the fact that some words did not exist in both languages and might not have been translated exactly. Thus, presenting the measures in both languages allowed participants to confirm their understanding of the items. However, it is possible that some of the participants might have perceived the survey as too long and decided to drop out in the middle of the process as a result. Future researchers should explore whether presenting the measures in both languages is an asset or a hindrance.

Implications

There has been an increasing recognition that of all the international students in the United States, China has sent the largest number to American colleges since 2009 (Institute of International Education, 2013). This study might be the first research addressing the potential conflicts between China's "One Child Policy" and the development of globalization on Chinese women's struggle with gender roles. The present study demonstrated that womanist identity can be useful for predicting female international students' gender roles and perceived gender- role related cultural stress.

Typical studies of acculturative stress focus on general topics such as academic achievement, social support, and language barriers. Yet it is also crucial to recognize that Chinese female students' womanist identity development is a unique and important factor embedded in the acculturation process. The present study is perhaps the first to examine the gender identity related factors of a large sample of Chinese international female students.

In addition, there is limited research focused on the acculturation experiences of female international students' psychological transitions. Three of the canonical correlation models may be potential theoretical models that could explain female international students' unique acculturation stress. With the increasing number of female international students of color in American higher education, the current study embraces that diversity and offers a perspective for addressing the life and mental health of female students from different ethnic backgrounds. It may also help professional administrators and college faculties to raise their awareness of how female international students' acculturation and womanist identity development might influence their mental health and academic achievement. The impact of this research might therefore contribute to filling the research gap concerning the factors associated with the positive well-being of female international students and first generation immigrant women's acculturation in the United States. In a country seeking to increase its globalization by welcoming international students, more of this type of research is important.

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Appendix A

Demographic Questionnaire

1. Birth date (Year/Month/Day)

出生年月 (年/月/日)

2. Gender (please select one) Male Female Transgender

性别（请选择） 男 女 跨性别者

3. Current academic standing (please select one)

学历或就读学历（请选择）

- Bachelor 本科或本科在读
- Master 硕士或硕士在读
- Ph.D. or other professional degree (e.g. M.D., J.D., etc.) 博士或其它同等专业学历 (如医学博士，法学博士等)

4. How many children are there in your family?

您父母有多少个孩子？

5. Country of Birth

出生国家

- Main Land China 中国大陆地区
- Other Countries/regions (Please specify) 其它国家和地区（请具体说明）

6. What is the highest education of your mother? (Please select)

你母亲最高的教育程度是什么？（请选择）

- Elementary School or lower 小学或更低
- Middle School 初中
- High School 高中
- Bachelor 大学
- Master 研究生
- Ph.D. or Other professional degree (e.g. M.D., J.D., etc.) 研究生 博士或其它专
业学历（如医学博士，法学博士等）

7. What is the highest education of your father? (Please select)

你父亲最高的教育程度是什么？（请选择）

- Elementary School or lower 小学或更低
- Middle School 初中
- High School 高中
- Bachelor 大学
- Master 研究生
- Ph.D. or Other professional degree (e.g. M.D., J.D., etc.) 研究生 博士或其它专
业学历（如医学博士，法学博士等）

8. Relationship Status (please select)

情感状况（请选择）

Single (not involved in romantic relationship) Single (In a romantic relationship)

单身（无恋爱关系）

单身（有恋爱关系）

Married Partnered

已婚 伴侣关系

Separated/Divorced Widowed

分居或离异 寡居

9. How long have you been living in the United States? (Please enter the length of years and months)

你在美国生活了多长时间? (请精确到多少年多少月)

Year (年) _____

Month (月) _____

Appendix B

Womanist Identity Attitude Scale (WIAS, Helms, 1990)

This questionnaire is intended to measure people's social and political attitudes about women and men in society. There are no right and wrong answers. Use the scale below to respond to each statement. In the column next to each item, circle the number that best describes how you feel.

以下问卷测量人们对男性和女性的社会或政治态度。每个问题没有正确或错误的答案。请用以下的量表对每个表述以你的感受评分。

1	2	3	4	5
Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
非常不认同	不认同	不确定	认同	非常认同

- _____ 1. In general, I believe that men are superior to women.
总得来说，我认为男性比女性更优越。
- _____ 2. I try not to take part in activities that make me appear to be un-lady like.
我尽量避免参与那些让我看起来不淑女的活动。
- _____ 3. I believe that being a woman has caused me to have much strength.
我认为作为女性我因此拥有很多优势。
- _____ 4. Women should not blame men for their problems.
女性不应该责怪男性所犯的问题。
- _____ 5. I would feel incomplete if I did not marry.
如果不结婚的话我会觉得不完整。
- _____ 6. I don't know whether being a woman is an asset or a deficit.
我不知道是否作为一名女性就是等于有了一种缺陷。
- _____ 7. I feel more comfortable being around men than I do being around women.
我和男性在一起的时候会觉得比跟女性在一起时更自在。
- _____ 8. I feel unable to involve myself in men's activities, and I am increasing my involvement in activities involving women.
我觉得无法参与男性的活动，同时我也试图多参与女性的活动。
- _____ 9. I am insulted when people call me a "feminist".
当人们叫我“女权主义者”的时候我觉得是一种侮辱。

- _____10. I am comfortable wherever I am.
我无论在哪里都觉得挺自在。
- _____11. Maybe I can learn something from women.
或许我可以从女性中学到一些东西。
- _____12. Sometimes I think men are superior and sometimes I think they're inferior to women.
我有时觉得男性更优越，有时又觉得男性比女性低劣。
- _____13. Women usually don't have anything intelligent to say about politics.
女性通常在政治上没有聪明的见解。
- _____14. In general, women have not contributed much to my society.
总的来说，女性对社会没有什么贡献。
- _____15. When I think about how men have treated women, I feel an overwhelming anger.
我一想到男性是怎么对待女性的就觉得非常愤怒。
- _____16. People, regardless of their sex, have strengths and limitations.
无论什么性别的人们都有长处和短处。
- _____17. A woman's most important role in life is to provide emotional support for others.
女性在生活中最重要的角色就是给他人提供情感的支持。
- _____18. Sometimes I am proud of belonging to the female sex and sometimes I am ashamed of it.
我有时为作为一名女性而感到自豪，而有时又觉得羞耻。
- _____19. Sometimes, I am embarrassed to be the sex I am.
有时我的性别让我觉得难堪。
- _____20. I am determined to find out more about the female sex.
我的使命就是为女性寻找更多的意义。
- _____21. I use the word "girl" to describe myself and/or my female friends.
我用“女生”这个词来形容我自己和我的女性朋友。
- _____22. Being a member of the female sex is a source of pride to me.
作为一名女性是我感到自豪的来源之一。
- _____23. Thinking about my values and beliefs takes up a lot of my time.

我用很多时间来思考我的价值和信仰。

- _____ 24. I do not think I should feel positively about people just because they belong to the same sexual group as I do.
我并不认为只要别人跟我是同一性别的我就应当对他们有正面的看法。
- _____ 25. A woman's appearance is her most important asset.
一个女性的外貌就是她最好的宣言。
- _____ 26. I would have accomplished more in this life if I had been born a man.
如果我生来就是男性的话我会更加有成就。
- _____ 27. Most men are insensitive.
绝大多数男性都是不感性的。
- _____ 28. Women and men have much to learn from each other.
女性和男性之间有许多要互相学习的地方。
- _____ 29. Women who think and act like men are a disgrace.
思考和行为像男性的女性是很丢人的。
- _____ 30. I'm not sure how I feel about myself.
我不清楚我是怎样看待自己的。
- _____ 31. Sometimes I wonder how much of myself I should give up for the sake of helping minorities.
有时我在想我究竟应当为帮助弱势（少数）群体付出多少。
- _____ 32. Men are more attractive than women.
男性比女性更有吸引力。
- _____ 33. I try to do only those things that increase my femininity.
我尽量只做那些让我更有女人味的事情。
- _____ 34. I reject all male values.
我拒绝一切男性的价值观。
- _____ 35. Men have some customs I enjoy.
男性有一些让我觉得不错的习惯。。

- _____36. Men are difficult to understand.
男性让人捉摸不透。
- _____37. It embarrasses me when other women act unfeminine.
当看到其它女性做一些没有女人味的事的时候我感到替她们丢人。
- _____38. I wonder if I should feel a kinship with all minority group people.
我不知道是否应该和少数（弱势）群体的人们建立关系。
- _____39. Women should learn to think and act like men.
女性应当和男性一样思考和行动。
- _____40. My most important goal in life is to fight the oppression of women.
我此生最重要的目标是推翻对女性的压迫。
- _____41. My most important goal in life is to raise healthy children.
我此生最重要的目标是养育健康的孩子。
- _____42. I enjoy being around people regardless of their sex.
我无论和什么性别的人在一起都很自如。
- _____43. I find myself replacing old friends with new ones who share my beliefs about women.
我发现与我对女性有相同观点的朋友慢慢取代了我以前的朋友。
- _____44. The burden of living up to society's expectations of women is sometimes more than I can bear.
社会对女性的期待让我不堪重负。
- _____45. I limit myself to male activities.
我限制我自己参与男性参与的活动。
- _____46. I don't trust women.
我不信任女性。
- _____47. Both sexual groups have some good people and some bad people.
论文什么性别的人都有好人和坏人。
- _____48. I feel anxious about some of the things I feel about women.
一些我对女性的看法让我觉得很焦虑。
- _____49. I feel like am betraying my sex when I take advantage of the opportunities

available to me in the male world.

当我在男性世界中占了机会优势时我感到背叛了我的性别群体。

- ____ 50. I want to know more about the female culture.
我希望了解跟多的女性文化。
- ____ 51. I think women and men differ from each other in some ways, but neither group is superior.
我认为女性和男性在一些方面是不同的，但是 谁也不比谁更优越。
- ____ 52. I find that I function better when I am able to view men as individuals.
我发现当我把男性看成是一个个单独的个体时，我会表现得更好。
- ____ 53. I limit myself to activities involving women.
我限制我自己参与女性参与的活动。
- ____ 54. Most men are untrustworthy.
绝大多数男性都是不可信任的。
- ____ 55. The society would be better off if it were based on the cultural values of women.
如果社会文化基于女性的价值观的话，社会会变得更好。

Appendix C

Acculturation Scale for Asian International Students (AS AIS, Gu, 2008)

Below are 49 statements, with which you may agree or disagree. Use the scale 1 to 7 to indicate your response to each statement and place the number on the line after that item.

以下有49个表述，你可以同意也可以不同意。用1到7来表达每个表述你的同意程度。

1	-----	2	-----	3	-----	4	-----	5	-----	6	-----	7
Strongly												Strongly
Agree												Disagree
非常不赞同												

1. I am good at writing in both my own language and English

我擅长用母语和英语写作。

2. I communicate effectively in both my own language and English

我可以用母语和英语进行有效的沟通。

3. I am good at listening comprehension, for both my own language and English

我母语和英语的听力都很好。

4. I am able to retain my own cultural heritage and participate fully in American culture.

我能够保留自己的文化传统且同时完全融入美国的文化。

5. I am able to make good friends with persons from my own and American culture.

我能够同时和来自我本土文化和美国文化的人都成为好朋友。

6. I accept values from my own and American culture.

我同时接受来自我本土文化和美国文化的价值观。

7. I love both my own and American cultures.

我热爱我自己的本土文化也热爱美国文化。

8. I am open to both Chinese and American religious beliefs.

我可以同时接受中国和美国的宗教信仰。

9. I have been academically successful in the U.S. and my own country.

无论在美国还是在我本国，我的学业都很优秀。

10. I feel comfortable with both Chinese and American styles of housing.

无论是中国还是美国风格的住房风格我都觉得很舒服。

11. I can contribute in either Chinese or American society.

无论是中国还是美国社会我都可以做出贡献。

12. I prefer to speak English rather than my own language.

比起母语来说，我更愿意说英语。

13. I prefer writing in English rather than in my own language.

比起母语来说，我更愿意用英语写东西。

14. I hang around more with Americans than with people from my own country.

比来自我本国的朋友来说，我跟美国朋友来往更多。

15. I find myself thinking more like an American.

我觉得我现在的思维方式更像美国人。

16. I am more successful in the U.S. education system.

我在美国的教育体制里更加成功。

17. I prefer American values more than Chinese values.

比起中国的价值观来说，我更倾向于美国的价值观。

18. I see myself as being more able to succeed in American society.

我觉得我在美国社会会更加成功。

19. I want to become American in the way I think, talk, and act.

我希望像美国人一样思考、说话和行动。

20. I want to be treated as an American.

我希望像美国人一样被对待。

21. I see myself being helped and supported more by American people than by those from my own country.

比起本国人来说，美国人对我的帮助和支持更多。

22. I am happier now that I am in the U.S.

我现在在美国比原来更快乐。

23. I prefer to use my English name rather than my Chinese name.

我更喜欢用我的英文名而不是中文名。

24. I prefer to speak my own language despite being in the U.S.

虽然身在美国，我还是更喜欢说母语。

25. I prefer to read materials written in my own language rather than in English whenever I have a choice.

如果有选择的话，比起英语我还是更喜欢阅读母语写的东西。

26. I prefer to write in my own language in the U.S., whenever I have a choice.

如果有选择的话，比起英语我更喜欢用母语写东西。

27. I prefer to be friends of people from my own country when I am in the U.S.

当我在美国的时候我更愿意与来自本国的人们交朋友。

28. I feel Chinese values are far more acceptable than American values (e.g., one should be humble instead of boasting).

比起美国的价值观，我更接受中国的（例如做人应当谦虚而不是夸耀）。

29. I am a very traditional Chinese person despite living in the U.S.

即使身在美国，我仍然是一个十分传统的中国人。

30. I feel I am more comfortable with the educational system in China.

我觉得我中国的教育体制更让我觉得舒服。

31. I feel I have more chances to obtain academic or career success in an Chinese society.

我觉得在中国社会我会有更多学术或就业的机遇。

32. I prefer Chinese-style living environments.

我更喜欢中国式的生活环境。

33. I pursue support from my family or people from my country rather than rely on American peers.

比起美国的同伴来说，我更倾向于向我的家人或来自本国的朋友寻求支持。

34. I should not question my professor or my advisor because he or she is the authority figure.

我不应该质疑教授或者我的导师，因为他们代表了学术权威。

35. I prefer a roommate from my own country or any other Asian international student if I need to have one.

如果要想找一个室友的话，我更倾向于找来自我自己的国家的或者亚洲的国际学生。

36. I would raise my children in traditional Chinese ways if I were a parent.

如果我当了家长，我会用传统的中国方式来培养我的孩子。

37. I wish I was living in my own country.

我希望我现在可以生活在我自己的国家。

38. I feel that I do not belong to either Chinese or American cultures.

我觉得我既不属于中国文化，也不属于美国文化。

39. I do not identify myself as either an Chinese or an American.

. 我觉得我的自我认同感既不是是中国人也不是美国人。

40. I dislike making friends with both Chinese and Americans.

我既不喜欢和中国人交朋友，也不喜欢和美国人交朋友。

41. I dislike both Asian and American academic/school systems.

我既不喜欢中国的教育制度，也不喜欢美国的教育制度。

42. I don't endorse either Chinese or American values.

我既不认同中国的价值观，也不认同美国的价值观。

43. I am lost in both Chinese and American cultures.

中国和美国的文化都让我感到迷茫。

44. I am not understood by people from my own country or the U.S.

无论是国人还是美国人他们都不理解我。

45. I am not supported by either Chinese or Americans.

我既不被中国人支持，也不被美国人支持。

46. I see nothing good for me happening in either Chinese or American societies.

我觉得我无论在中国还是美国社会我都看不到好的未来。

47. I feel like I am rejected by both Chinese international students and Americans.

我觉得无论是中国留学生还是美国人他们都排斥我。

48. I do not ask Americans or people from my own country for help.

我从不向美国人或来自我自己国家的人寻求帮助。

49. I often feel like an outsider.

我觉得我站在中国人和美国人的圈外。

Appendix D

Bem Sex Role Inventory (BSRI, Bem, 1974)

Please use the following characteristics to describe yourself or a typical American woman. Select a number from the scale (1 to 7) for how true of you and a typical American woman each of these characteristics is.

请用以下的形容词来形容你自己或一个典型的美国女性。并用1到7来判断该表述是否符合你自己的个性以及是否符合一个典型美国女性的个性。。

1 - - - - - 2 - - - - - 3 - - - - - 4 - - - - - 5 - - - - - 6 - - - - - 7

Definitely

Definitely

False

True

非常不赞同

非常赞同

1. Defends own beliefs

维护自己的信念的

Myself (符合我自己): _____

A typical American woman(符合一个典型的美国女性): _____

2. Independent

独立的

Myself (符合我自己): _____

A typical American woman(符合一个典型的美国女性): _____

3. Affectionate

深情的

Myself (符合我自己): _____

A typical American woman(符合一个典型的美国女性): _____

4. Assertive

说一不二的

Myself (符合我自己): _____

A typical American woman(符合一个典型的美国女性): _____

5. Strong Personality

个性强的

Myself (符合我自己): _____

A typical American woman(符合一个典型的美国女性): _____

6. Forceful

意志坚强的

Myself (符合我自己): _____

A typical American woman(符合一个典型的美国女性): _____

7. Sympathetic

有同情心的

Myself (符合我自己): _____

A typical American woman(符合一个典型的美国女性): _____

8. Has leadership abilities

有领导能力的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

9. Sensitive to the needs of others

对他人的需求敏感的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

10. Willing to take risks

乐于冒险的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

11. Understanding

善解人意的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

12. Compassionate

怜悯的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

13. Soothe hurt feelings

乐于抚慰受伤的感情

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

14. Dominant

强势的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

15. Warm

温暖的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

16. Willing to take a stand

愿意表明立场的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

17. Tender

温柔的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

18. Aggressive

有闯劲的有攻击性的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

19. Loves children

爱孩子的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

20. Gentle

温文尔雅的

Myself (符合我自己): _____

A typical American woman (符合一个典型的美国女性): _____

Appendix E

Attitudes toward Women Scale (AWS, Spence, Helmrich & Stapp, 1972)

The statements listed below describe attitudes toward the roles of women in society which different people have. There is no right or wrong answers, only opinions. You are asked to express your feeling about each statement, and your impression of what a typical American women would feel about each statement by indicating whether you (A) disagree strongly, (B) disagree mildly, (C) agree mildly, or (D) agree strongly

以下是一些女性角色的描述。他们没有正确或者错误的答案。请阅读每个描述以后决定你和一个典型美国女性是 (A) 非常不同意, (B) 有点不同意 (C) 有点同意, 或 (D) 非常同意

1	2	3	4
Disagree Strongly	Disagree Mildly	Agree Mildly	Disagree Strongly
非常不同意	有点不同意	有点同意	非常同意

1. Swearing and obscenity are more repulsive in the speech of a woman than a man.

咒骂和下流的语言女人说起来会比男人更令人厌恶。

2. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing laundry.

在现代经济条件下如果女性在职场活跃, 那么男性应当分担类似洗碗洗衣的家务活。

3. It is insulting to women to have the “obey” clause remain in the marriage service.

对女性来说在婚姻过程中总是被要求“服从”是非常侮辱人的。

4. A woman should be free as a man to propose marriage.

女性应当和男性一样自由地去求婚。

5. Women should worry less about their rights and more about becoming good wives and mothers.

女性应当少关心她们的权利而多关心如果当好一个好妻子和好母亲。

6. Women should assume their rightful place in business and all the professions along with men.

女性应当和男性一同争取在职场合理位置。

7. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.

女性不应该期待和男性享有同样的地位和自由。

8. It is ridiculous for a woman to run a locomotive and for a man to darn socks.

让女人开火车让男人补袜子都是无比可笑的。

9. The intellectual leadership of a community should be largely in the hands of men.

一个团队的智慧领导应当绝大多数掌握在男性手中。

10. Women should be given equal opportunity with men for apprenticeship in the various trades.

在很多贸易中女性应当获得和男性一样的学徒资格。

11. Women earning as much as their dates should bear equally the expense when they go out together.

如果一个女人和她得男友挣得一样多的话他们应当在约会时均摊消费。

12. Sons in a family should be given more encouragement to go to college than

daughters.

儿子应当比女儿多给与上大学的鼓励。

13. In general, the father should have greater authority than the mother in the bringing up of the children.

通常来说，在教养过程中父亲会比母亲对孩子有更高的权威。

14. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.

经济和社会自由对女性来说要远远高于成为被男性设定的理想女性形象。

15. There are many jobs in which men should be given preference over women in being hired or promoted.

有很多职业男性应当在招聘和升职中比女性更享有优先权。

Appendix F

**Womanist Identity Attitudes, Acculturation Status, and Gender Role Identity:
An Examination of Chinese Female Students in the United States
Recruitment Letter**

Hello!

My name is Qingyi Yu and I am a PhD student at Boston College. I am inviting you to participate in my dissertation research concerning the effects of acculturation and attitudes about women on Chinese female international students' gender role identity. The survey takes approximately 20 minutes. If you desire, you will have the chance to win one out of five **\$20 Amazon gift cards**.

Please participate if you are a woman, who is at least 18 years old, a Chinese citizen, and you are the only child in your family. In this study, I will NOT ask you to give any identifying information. Participation is completely anonymous.

If you have any questions about this research or wish to receive a summary of the results after it is completed, please contact Qingyi Yu at yuq@bc.edu or 617-913-1217.

Thank you for your time and consideration.

Sincerely,

Qingyi Yu

Institute for the Study and Promotion of Race and Culture

Department of Counseling, Developmental, & Educational Psychology

Lynch School of Education

Boston College

Anonymous Survey Link:

https://bclynch.az1.qualtrics.com/SE/?SID=SV_abNoII0ML5DUJvL

女性角色认同,文化融入与性别角色认同：留美中国女性留学生研究调查
研究邀请函

您好！

我是俞清怡，是一名来自波士顿学院的博士研究生。我诚挚邀请您参与一项有关留美中国女性留学生角色认同，文化融入与性别角色认同的研究。本研究大约需要占用您20分钟左右的时间。作为您参与研究的感谢，如果您愿意，您可以参与抽奖并得到五张**20美元亚马逊礼品卡**的其中一张。

如果您是一名女性，年满18岁，中国公民，并且是家庭的独生子女，您就满足参加研究的所有条件。在此研究过程中，我**不会**要求您提供任何个人资料。研究本着完全匿名参与的原则。

如果您对研究有任何疑问或希望得到之后的研究结果统计，请联系俞清怡 yuq@bc.edu或617-913-1217.

非常感谢您的配合与参与！

此致

敬礼！

俞清怡

种族与文化研究发展研究所

咨询，发展与教育心理学系

林奇教育学院

波士顿学院

匿名研究链接

https://bclynch.az1.qualtrics.com/SE/?SID=SV_abNoII0ML5DUJvL

Appendix G

1. Canonical Correlation Model Between Womanist Identity Attitude and Acculturation

Note: Statistical Significance Test for the Full Womanist Identity and Acculturation CCA Model Effect. Within Cells Regression Multivariate Tests of Significance.

<i>Test Name</i>	<i>Value</i>	<i>Approximate F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
Pillais's	.51	6.87	16.00	744.00	.000
Hotelling's	.64	7.29	16.00	726.00	.000
Wilks's	.56	7.22	16.00	559.71	.000
Roy's	.26				

Note: Canonical Correlations for Each Function Separately.
Eigenvalues and Canonical Correlations.

<i>Root No.</i>	<i>Eigenvalue</i>	<i>%</i>	<i>Cumulative%</i>	<i>Canonical Correlation</i>	<i>Squared Correlation</i>
1	.35	53.71	53.71	.51	.26
2	.19	29.60	83.31	.40	.16
3	.10	15.04	98.35	.30	.09
4	.01	1.65	100.00	.10	.01

Note: Hierarchal Statistical Significance Tests in Which Only the Last Canonical Function is Tested Separately.

Dimension Reduction Analysis.

<i>Roots</i>	<i>Wilks λ</i>	<i>F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
1 to 4	.56	7.22	16.00	559.71	.000
2 to 4	.76	6.00	9.00	447.96	.000
3 to 4	.90	4.88	4.00	370.00	.001
4 to 4	.99	1.97	1.00	186.00	.162

2. Canonical Correlation Model Between Womanist Identity Attitude and Gender Role Characteristics

Note: Statistical Significance Test for the Full Womanist Identity and Gender Role Characteristics CCA Model Effect. Within Cells Regression Multivariate Tests of Significance.

<i>Test Name</i>	<i>Value</i>	<i>Approximate F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
Pillais's	.67	6.09	24.00	728.00	.000
Hotelling's	1.05	7.76	24.00	710.00	.000
Wilks's	.44	6.95	24.00	625.67	.000
Roy's	.44				

Note: Canonical Correlations for Each Function Separately.
Eigenvalues and Canonical Correlations.

<i>Root No.</i>	<i>Eigenvalue</i>	<i>%</i>	<i>Cumulative%</i>	<i>Canonical Correlation</i>	<i>Squared Correlation</i>
1	.80	76.25	76.25	.67	.44
2	.14	13.28	89.53	.35	.12
3	.09	8.60	98.12	.29	.08
4	.02	1.88	100.00	.14	.02

Note: Hierarchal Statistical Significance Tests in Which Only the Last Canonical Function is Tested Separately.
Dimension Reduction Analysis.

<i>Roots</i>	<i>Wilks λ</i>	<i>F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
1 to 4	.44	6.95	24.00	625.67	.000
2 to 4	.79	2.96	15.00	497.30	.000
3 to 4	.90	2.46	8.00	362.00	.013
4 to 4	.98	1.20	3.00	182.00	.313

3. Canonical Correlation Model Between Womanist Identity Attitude and Gender Role Discrepancies

Note: Statistical Significance Test for the Full Womanist Identity and Gender Role Discrepancies CCA Model Effect. Within Cells Regression Multivariate Tests of Significance.

<i>Test Name</i>	<i>Value</i>	<i>Approximate F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
Pillais's	.17	2.78	12.00	543.00	.001
Hotelling's	.19	2.85	12.00	533.00	.001
Wilks's	.83	2.82	12.00	473.88	.001
Roy's	.12				

Note: Canonical Correlations for Each Function Separately.
Eigenvalues and Canonical Correlations.

<i>Root No.</i>	<i>Eigenvalue</i>	<i>%</i>	<i>Cumulative%</i>	<i>Canonical Correlation</i>	<i>Squared Correlation</i>
1	.14	72.82	72.82	.35	.12
2	.04	19.82	92.65	.19	.04
3	.01	7.35	100.00	.12	.01

Note: Hierarchal Statistical Significance Tests in Which Only the Last Canonical Function is Tested Separately.

Dimension Reduction Analysis.

<i>Roots</i>	<i>Wilks λ</i>	<i>F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
1 to 3	.83	2.82	12.00	473.88	.001
2 to 3	.95	1.57	6.00	360.00	.156
3 to 3	.99	1.28	2.00	181.00	.280

4. Canonical Correlation Model Between Acculturation and Gender Role Characteristics

Note: Statistical Significance Test for the Full Acculturation and Gender Role Characteristics CCA Model Effect. Within Cells Regression Multivariate Tests of Significance.

<i>Test Name</i>	<i>Value</i>	<i>Approximate F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
Pillais's	.53	4.60	24.00	724.00	.000
Hotelling's	.67	4.92	24.00	706.00	.000
Wilks's	.55	4.80	24.00	622.18	.000
Roy's	.24				

Note: Canonical Correlations for Each Function Separately.
Eigenvalues and Canonical Correlations.

<i>Root No.</i>	<i>Eigenvalue</i>	<i>%</i>	<i>Cumulative%</i>	<i>Canonical Correlation</i>	<i>Squared Correlation</i>
1	.32	47.65	47.65	.49	.24
2	.28	41.52	89.18	.47	.22
3	.05	7.55	96.73	.22	.05
4	.02	3.27	100.00	.15	.02

Note: Hierarchal Statistical Significance Tests in Which Only the Last Canonical Function is Tested Separately.

Dimension Reduction Analysis.

<i>Roots</i>	<i>Wilks λ</i>	<i>F</i>	<i>Hypothesis DF</i>	<i>Error DF</i>	<i>Significance of F</i>
1 to 4	.55	4.80	24.00	622.18	.000
2 to 4	.73	4.00	15.00	494.54	.000
3 to 4	.93	1.62	8.00	360.00	.116
4 to 4	.98	1.32	3.00	181.00	.269