CHINESE GRADUATE STUDENTS’ ATTITUDES TOWARD PERSONS WITH INTELLECTUAL DISABILITIES: AN ACCULTURATION APPROACH

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ABSTRACT

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Attitudes towards persons with disabilities have been one of the foci in disabilities studies. However, the majority of studies have been conducted in western countries, and it is uncertain whether the findings of those studies can be generalized to non-western countries. This study focuses on a Chinese cultural context, attempting to provide insights into how different people of varying cultural backgrounds perceive disabilities. In order to determine the influence of living and studying in the U. S. on Chinese graduate students’ attitudes toward persons with intellectual disabilities, an empirical investigation was conducted through an attitude survey of two groups of graduate students: Chinese graduate students at Bowling Green State University (BGSU) in the U. S. and Chinese graduate students at Shandong University (SDU) in the mainland of China. The present study concludes that there was no significant difference in attitudes toward persons with intellectual disabilities between BGSU and SDU participants. This may be attributed to the low rate of Chinese international graduates’ acculturation, and the increasingly favorable attitudes of Chinese graduates in China along with some positive Chinese legislative policies concerning people with disabilities. This thesis provides foundation for further research on Chinese Americans' attitudes toward disabilities and contributes to rehabilitation literature in a cultural context.
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Ideas are never developed in isolation; they always require the stimulation and the support of a community of people. In my case, the intellectual and emotional debt I have accumulated since I embarked on this thesis is enormous.

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CHAPTER I.: INTRODUCTION

Attitudes towards persons with disabilities have been one of the foci in disabilities studies. Over the past decades, the majority of the research on attitudes has focused on three areas: psychometric assessment of attitudes towards persons with intellectual disabilities, factors influencing those attitudes, and methods or policies targeted to alter negative attitudes toward this marginalized group. However, the majority of studies have been conducted in western countries, and it is uncertain whether the findings of those studies can be generalized to non-western countries.

The present study addresses all three of the aforementioned areas, and it emphasizes a cultural context, attempting to provide insights into how different people of varying cultural backgrounds perceive disabilities. Although there have been cross-cultural studies on attitudes toward people with disabilities, few have focused on an acculturative perspective to explore the influences of acculturation on attitudes toward those with disabilities. Acculturation is a process of immigrants adopting the values, beliefs, and attitudes of mainstream culture and maintaining those of the heritage culture (Huang, 2007). This study seeks to determine the difference of attitudes toward persons with intellectual disabilities between Chinese graduates studying in the U.S. and their counterparts in China. It also examines the factors which may affect Chinese graduates’ attitudes toward those who have intellectual disabilities. Intellectual disability, traditionally called “mental retardation,” is a disability characterized by significant limitations both in intellectual functioning (learning, reasoning, and problem solving) and in adaptive behavior (conceptual skills, social skills, and practical skills). This disability typically manifests before the age of 18 (Turnbull, Turnbull, & Wehmeyer, 2008).
The Research Questions

The following research questions are the focus of this empirical study of attitudes toward people with intellectual disabilities held by a group of Chinese graduate students in the U.S. and those in China:

1. Are attitudes toward persons with intellectual disabilities significantly different between Chinese graduate students in the U.S. and China?
2. What are the factors that might affect Chinese graduate students’ attitudes toward persons with intellectual disabilities?
3. What factors might affect Chinese international students’ acculturation regarding their attitudes toward persons with intellectual disabilities?

Hypothesis

This study will focus on the effects of the American sociocultural context on Chinese international graduate students’ attitudes toward persons with intellectual disabilities. The following hypothesis will be tested: experience in the U.S. has significant influence on Chinese international graduate students' attitudes toward persons with intellectual disabilities, and Chinese graduate students in the U.S. have more positive attitudes about such persons compared with their counterparts in China who have never been to the U.S.

Significance of the Study

There are a number of benefits of this study. First, Chinese graduates are one of the fastest growing foreign student groups in the U.S. According to the statistics provided by the Institute of International Education (2009), over 623,000 international students were enrolled in institutions of higher education in the U.S. during 2007-2008, and 61 percent of them are from Asia. Chinese international students represent more than 21 percent of the Asian students in the
U.S. In 2007, the Chinese international student population alone in the U.S. was above 90,000, occupying 14.3 percent of all the foreign students in universities and colleges in the U.S. However, in contrast to the large population of Chinese international students, little research has been conducted on their attitudes toward disabilities. The results and subsequent implications of this study can contribute to the literature about examining Chinese graduate students' attitudes toward persons with intellectual disabilities from an acculturative perspective. Furthermore, the findings of this study can also guide further research on Chinese Americans' attitudes toward disabilities and contribute to rehabilitation literature in a cultural context.

Second, the findings will aid policy-making about whether special education courses or training should be recommended for Chinese graduate students either in the U.S., in China, or both. According to Chiang and Hadadian (2007), Chinese people perceive the birth of a child with a disability as a sign of their parents’ bad karma or a curse from ancestors. Because Chinese international graduate students studying in the U.S. were born and raised in China, their attitudes towards disabilities are more likely to be influenced by this Chinese traditional perception. Huang (2007) argues that during the acculturation process, while accepting the new culture, immigrants maintain part of their home culture. If that is the case, training or a course about people with special needs in the U.S. would be valuable for Chinese international students. As international students in the U.S., Chinese students must recognize the policies and practices of their host country, and be respectful of policies of equality towards all persons with or without disabilities.

Third, along with the soaring economic development and fundamental social changes in China, there have been many dramatic developments on the integration of people with disabilities in the 2000s. In 2006, the State Council initiated China’s 11th Five-Year
Development Programs for People with Disabilities (2006-2010) and established the objective of further inclusion of people with disabilities in education, employment, entertainment, and rehabilitation by the year 2010 (State Council, 2006). However, Hampton and Xiao (2009) also reported that, in spite of the positive changes, negative public attitudes toward persons with disabilities still stubbornly exist and pose the primary challenge to the integration of persons with disabilities into society. Therefore, it is important to further investigate factors which affect people’s attitudes toward people with disabilities and to cultivate a positive alteration of attitudes toward this population. The ultimate goal of such an investigation is to enable full integration in society for persons with disabilities.

Finally, in the long run, this study could serve to provide some insights for the improvement of the social service systems in a multi-cultural context because it is well-reported that Chinese Americans make little use of resources provided by the mainstream service system, and the intervention programs are considered their last resort (Bui & Turnbull, 2003; Chiang & Hadadian, 2007; Choi & Wynne, 2000; Hampton, 2000; McCallion, Janicki, & Grant-Griffin, 1997; Ryan & Smith, 1989; Yu, Huang, & Singh, 2004). As these studies demonstrate, it is the negative attitudes held by those with disabilities and their families that hinder them from utilizing the resources. The results of this study can improve knowledge and understanding of Chinese Americans’ attitudes toward people with disabilities so that professionals and social workers know better how to work effectively with clients from a Chinese cultural background.

Limitations of the Study

The present study has a number of limitations. The study used a convenient sample of Chinese graduate students from two universities: Bowling Green State University (BGSU) in the U.S. and Shandong University (SDU) in China, so the representativeness of the sample was
limited. In terms of social and economic development, there are demographic and geographic differences across regions and areas within both China and the U.S. Shandong University is located in Shandong Province, one of the most developed provinces in China. Bowling Green State University lies in Northwest Ohio, a comparatively rural area in the U.S. The samples from Shandong University and Bowling Green State University were restricted to Chinese students at graduate level majoring in various academic disciplines, so the demographics of the samples from both institutions were similar. However, the results of the study may not be easily generalized to Chinese graduate students in other geographic regions of China and the U.S. Future researchers may want to use a different sampling method, such as stratified sampling among different regions and areas of the two countries.

Second, the study developed its measurement from instruments created in the U.S. to assess Chinese graduates’ attitudes toward people with intellectual disabilities. Although those instruments have gained increasing popularity in western countries, they may not explore some important cultural components among Chinese graduate students, such as virtues like benevolence and a sense of justice. Therefore, the results of the study should be used with caution, and future studies may consider employing an instrument developed for the Chinese cultural context.

Third, the population of Chinese graduate students at BGSU is relatively limited, and in order to draw comparable samples, the sample size for both groups is relatively small. In addition, this study did not consider students’ degree majors as a variable, as participants were from different academic disciplines. This may have different influences on students’ attitudes toward people with disabilities. Future investigations should use a broader sample that represents
groups of different majors and investigate possible influences of various academic disciplines on participants’ attitudes toward people with disabilities.

Finally, the present study addressed only intellectual disability. Different types of disabilities, such as physical disabilities and multiple disabilities, may yield different findings. Thus, the results of this study cannot be generalized to other disabilities.

Organization of the Thesis

The remainder of the thesis falls into four chapters. Chapter II reviews the research of literature related to the research questions. Chapter III describes the methodology and theoretical framework used in this study. Chapter IV clarifies the findings of the study. Chapter V discusses the findings and how they relate to the literature and the theoretical framework. In Chapter VI, conclusions drawn from this study are discussed.
CHAPTER II.: LITERATURE REVIEW

This chapter presents a review of research and literature related to the research questions. Though this research focuses on persons with intellectual disabilities, in order to investigate this type of disability in a broader context, the following literature review will also touch upon general disabilities. This literature review is organized into the following areas: (1) how attitudes towards persons with disabilities affect their ability to participate in society; (2) how cultural context influences people’s attitudes towards persons with disabilities in China; (3) the development of special education in China and the challenges it faces; (4) how disabilities are perceived in American society; (5) the development of special education in the U.S., and (6) acculturation of Chinese-American students and its influences on their attitudes towards persons with disabilities.

There are many different ways that people might view disabilities or people with disabilities. McCallion, Janicki, and Grant-Griffin (1997) gave an example to illustrate people’s different perceptions of disabilities. During an interview, a mother said her son who had a disability was a special gift from God, and another woman said her disabled son was punishment from God. As Sherrill (1998) summarizes, “The key to changing behaviors toward people who are different is attitudes” (p. 225). The two mothers’ different perceptions definitely would bring about different treatment toward their sons, which consequently would have different influences on their sons’ development. In a broader context, individuals’ attitudes can impact the decisions they make in social interactions with persons with disabilities. From the perspective of society, different perceptions of disabilities play significant roles in inclusion of persons with disabilities into mainstream society. In the section that follows, literature on the significance of people’s attitudes toward persons with disabilities is explored.
Attitudes toward Persons with Disabilities

In recent decades, attitudes in general have been studied extensively. As cited by Rice (2009), between 1991 and 2000, there have been more than 5,000 articles published with the word “attitude(s)” in the title. According to Antonak and Livneh (1988), attitudes can be defined as “an idea charged with emotion which predisposes a class of actions in a particular class of social situations” (p. 109). Many researchers have conducted studies on the impact attitudes have on people’s decision-making and behaviors. Antonak and Livneh (1988) explain that “attitudes may be conceived as bridging elements, formed by an interplay of both genetic factors and experiential learning, which influence the individual’s behavior” (p. 13). Shannon, Schoen, and Tansey (2009) state that attitudes may intensify personality stereotypes, which may lead to anticipated behaviors of individuals. Within the numerous studies on attitudes, some researchers have emphasized the influences of social context on people’s attitudes. Hergenrather and Rhodes (2007) talk about “social distance” as a component in the measurement of attitudes. They define social distance as “the relative willingness of one person to participate in relationships of varying degrees of intimacy with a person who has a stigmatized identity” (p. 67). People who are stigmatized, no matter what the reason, are perceived as being separated socially from people who are not stigmatized. Hergenrather and Rhodes argue that social context and attitudes are closely related and influenced by one another and advocate that attitudes should be examined within their respective social contexts. Some previous studies have focused on specific aspects of social context. For example, Huesmann, Moise-Titus, Podols-Ki, and Eron (2003) report that attitudes may be influenced by the media, while Chan, Hedl, Parker, Lam, Chan, and Yu (1988) found that attitudes may be affected by personal experiences with those who are stigmatized.
Specific studies have been conducted on attitudes towards individuals with disabilities (e.g., Hergenrather & Rhodes, 2007; Hinton, 2003) and some are particularly focused on attitudes towards persons with intellectual disabilities (e.g., Rice, 2009; Burge, Ouellette-Kuntz, & Lysaght, 2007). According to Shannon et al. (2009), there are some positive changes and improvements. As a result of legislative policies, such as the Individuals with Disabilities Education Act (IDEA) in the U.S. and the Law of the People’s Republic of China on the Protection of Disabled Persons, the inclusion of persons with disabilities in schools, workplaces, and communities is much more common. These laws have provided persons with disabilities better access to education, employment, and other areas of social life. As a consequence, the contact between people without disabilities and those with disabilities in social interactions has dramatically increased. According to Shannon et al. (2009), legislation, to some extent, can shift how disabilities are perceived and treated. However, legislative policies alone cannot force people to change their attitudes towards persons with disabilities. Regardless of the recent trend toward a shifting consciousness and awareness in legislative policies for persons with disabilities, negative perceptions and attitudes toward the disabled persist. These pose invisible barriers that hinder harmonious social interactions with disabled persons, and in turn, provoke corresponding negative attitudes in people with disabilities, which occurs within other marginalized populations as well (Chan et al., 1988).

Most recent reviews of literature on the subject clearly document the existence of negative attitudes toward persons with disabilities and the way those attitudes prohibit the disabled from integrating into mainstream society. All, Fried, Roberto, and Shaw (2001) found that attitudes toward people with disabilities have a significant influence on self-perception, anxiety, and fear related to one’s disability, and it can also aid or hinder the utilization of social services and
rehabilitation outcomes of individuals with disabilities. Hampton and Xiao (2007) state that people with disabilities are often regarded as crippled, immature, incapable, threatening, and strange based on differences in physical appearance and/or mental competence. Vash (2001) concludes that the public attitudes rather than personal, physical, or mental limitations are a primary source of the difficulties and barriers encountered by persons with disabilities.

Even rehabilitation students are reported to hold negative attitudes, according to Rosenthal, Chan, and Livneh (2006), and these negative attitudes may restrain those rehabilitation professionals and students from thoroughly performing their duties for people with disabilities who seek their services. Wong, Chan, Cardoso, Lam, and Miller (2004) conducted a study on rehabilitation counseling students’ attitudes toward people with disabilities. They found that rehabilitation counselors are as likely to hold negative attitudes as the general population, and due to their special roles in rehabilitation, these biases may impact their professional services they provide to individuals with special needs.

Many previous studies suggest that people’s attitudes toward persons with disabilities have improved over the past decade. The factors which might attribute to these changes have also been examined extensively. In their comparative study of Chinese rehabilitation and business students, Chan, Lee, Yuen, and Chan (2002) found that rehabilitation students had significantly more positive attitudes towards persons with disabilities. Their findings imply that people who are more knowledgeable about disabilities may have more positive attitudes than those who have less knowledge. Some others stated that it was because of more media exposure concerning persons with disabilities (Huesmann et al., 2003). For Rice (2009), the positive changes in people’s attitudes may be attributed to the inclusion of persons with disabilities into mainstream
society. Moreover, Hampton and Xiao (2007) found that personal experience and contact with persons with disabilities may lead to more positive attitudes toward this population.

The purpose of the present study is to examine how cultural factors affect Chinese graduate students’ attitudes toward persons with disabilities. Specifically, this study compares attitudes toward persons with disabilities between Chinese graduate students at Bowling Green State University (BGSU) and those at Shandong University (SDU). It focuses on how American culture affects Chinese-American graduate students’ attitudes toward the disabled. To show the connection between cultural differences and people’s perception of disabilities, the following review of the literature will focus on the current status of people with disabilities in China, how Chinese cultural factors influence people’s attitudes toward the disabled population, the disabled population in the U.S., and the development of special education in China and the U.S. The last section will examine how acculturation influences Chinese people’s attitudes toward people with disabilities.

Development of Special Education in China

The hierarchical feudal structure which dominated China for 2,000 years limited people with disabilities to the lowest social status. Piao (1996) states that there was no evidence that special education existed in China until the late 19th Century, when the U.S. and European missionaries established the first special schools in China. They also introduced Braille and sign language to China and aroused the social awareness of the educational and civil rights of persons with disabilities (Piao, 1996). However, during the first three decades of the People’s Republic of China, Mao Zedong advocated extreme egalitarianism and competition, so that individual differences were ignored. During the Great Cultural Revolution (1966-1976) (Pang & Richey, 2006), education was centered on memorizing Mao’s sayings, and every student was expected to
have excellent high academic performance “in an all-round way” (McCabe, 2003, p. 18). During the period of the Great Cultural Revolution (1966-1976), much of the whole educational system, including special education, was shut down.

After Deng Xiaoping initiated the Reforming and Opening in 1978, the equal rights of people with disabilities began to be emphasized, and the development of special education was reinitiated. Special schools for children with intellectual disabilities, visual impairment, and hearing impairment were opened in some major cities (Chen, 1997). In 1988, the China Disabled Persons’ Association (CDPA, Zhongguo Canjiren Lianhehui) was established and the son of Deng Xiaoping, Deng Pufang, who had become disabled during the period of the Great Cultural Revolution, was appointed to be the president of CDPA.

The most representative landmark in the history of special education in China is the enactment of the Compulsory Education Law of the People’s Republic of China (Zhonghua Renmin Gongheguo Yiwu Jiaoyufa) on April 12, 1986 (Mcloughlin, Zhou, & Clark, 2005). This was the first law which ensured that all children, including those with disabilities, would have free primary education. Other milestones in the development of Chinese special education were the passage of the Law of the People’s Republic of China on the Protection of Disabled Persons (Zhonghua Renmin Gongheguo Canjiren Baozhangfa) in December 1990 and the 1994 Regulations on Education for Persons with Disabilities (Canjiren Jiaoyu Tiaoli). Both the disability laws advocate that nine compulsory years of education should be compulsory for children with disabilities, and they should have the same education as those without disabilities (Pang & Richey, 2006).

Since the establishment of these laws, various types of educational programs have thrived, including special schools, special classes, and “inclusion” (Suiban Jiudu). “Inclusion” has been
commonly adopted in relatively poor areas where neither special schools nor special services for students with disabilities are available (McCabe, 2003). *Suiban Jiudu* is not formal inclusion but an expedient. Students’ disabilities are not addressed and no professionals with expertise in teaching children with special needs are available in *Suiban Jiudu*. Educators who teach in the *Suiban Jiudu* classrooms do not have any basic and necessary knowledge about children with disabilities.

According to McCabe (2003), disabilities in China are categorized into the following three types: hearing impairment, visual impairment, and mental retardation. Approximately five percent of the Chinese population of 1.3 billion is disabled. According to Stratford and Ng (2000), a child with a disability is born in China every 40 seconds, amounting to 2,000 new babies with disabilities being born each day. The Ministry of Education of the People’s Republic of China in 2003 estimates that 364,740 students with hearing impairments, visual impairments, and mental retardation were enrolled in 12,881 classes, among which 12,146 classes were in special education schools with 123,169 students; 727 were special education classes in general education schools, serving 5,094 students; and eight of them were special education classes in junior high vocational schools, serving 66 students. Disabled students currently constitute five percent of the student population in China (Ellsworth & Zhang, 2007). Despite the positive changes and improvements in China, there are still difficulties and challenges. One of the major sources of difficulty is the public’s perception of the disabled, which can be attributed to cultural factors, governmental policies, and economic and social factors. These factors will be examined in the following sections.
Cultural Factors that Influence People’s Attitudes toward People with Disabilities in China

With regard to the influence of cultural values and practices on attitudes toward persons with disabilities, previous studies have found that some traditional Chinese values may have a negative impact on these attitudes. An examination of some Chinese cultural beliefs and traditions which may influence the perception of disabled people in China is, therefore, warranted. Confucianism is the dominant philosophy in Chinese society. Mcloughlin et al. (2005) state that Confucianism encourages tolerance, obedience, virtue, and courtesy. Confucian philosophy classifies people into three categories according to their intelligence: people of ‘great wisdom’, people of ‘average intelligence’, and people of ‘little intelligence’ (Zhang, 1988, p. 3). It emphasizes discrimination between people on the basis of individual merits and personalities. On the one hand, this philosophy encourages people to work hard and contribute to the development of society. On the other hand, it has contributed to an elitist social system with social stratification and “structural segregation” (Mcloughlin et al., 2005, p. 275), which ignores individual needs and stifles the desires of people with disabilities.

Moreover, according to Hampton (2000), Confucianism puts the focus on the harmony of society. The harmony of Confucianist society is based on the stability of the hierarchical structure and the fact that the authorities maintain power. This philosophy can encourage people to sacrifice their individual interests for the common good of society and keep society in harmony. At the same time, it causes a negative impact on people with disabilities because it ignores individual rights and special needs. Individuals with disabilities, therefore, are often neglected under this philosophy. This belief may cause the disabled to feel ashamed of being unable to make significant contributions to society. In addition, due to the hierarchical social structure, Confucianism advocates that people with disabilities rely on the help and mercy of
those who are competent and powerful. As a result, their individual rights are limited and their potential capabilities are stifled.

Another significant value system in Chinese culture is Buddhism. According to Bui and Turnbull (2003), Buddhism encourages self-restraint, self-deprivation, self-abnegation, self-effacement, and humbleness. Consequently, these cultural values create barriers to the development of people with special needs because they are encouraged to accept their social role as a marginalized population. The perception that disabled persons are inferior to others prevails in China, and persons with disabilities mostly accept their stigmatized roles in society. In addition, Hampton (2000) argues that Buddhists’ belief in *karma* also affects their perception of persons with disabilities. *Karma* is the belief that good deeds will cause positive consequences and bad deeds will bring about negative consequences. *Karma* teaches that if a family has a child born with a disability, the family must have behaved negatively or the family must have bad spirits (Bui & Turnbull, 2003). According to Chiang and Hadadian (2007), Chinese people generally perceive the birth of a child with disabilities as a sign of their parents’ bad *karma* or a curse from their ancestors. Therefore, the concept of *karma* usually makes people with disabilities feel ashamed of being disabled and makes their family members feel ashamed of having such a disabled relative.

Hampton (2000) argues that one common characteristic among Asian-Americans and Pacific Islanders is the emphasis on “filial piety”, which means being loyal, obedient, and dedicated to one’s family. As stated by Hui and Triandis (1986), when a majority of the population is collectivist, the society is labeled collectivist. Chinese society is widely viewed as collectivist (Hampton, 2000; Hui & Triandis, 1986; Gardiner & Kosmitzki, 2008). In a collectivist culture such as China, conformity is highlighted and the evaluation of a person’s worth is often based on
how much he/she contributes to the society (Hampton, 2000). In such a society, to have a person with a disability is not a personal issue, and the person with a disability is not only worried about the consequences of being disabled, but also the influence of his/her disability on the family. The individual may be concerned about whether he/she would become a burden to the family or whether he/she had brought shame to the family.

To most families, the birth of a child with a disability is a traumatic event (Ryan & Smith, 1989), but the universal stress of most parents is especially emphasized for parents in Chinese culture. Chinese parents have to confront the general sadness and frustration of having a child with disabilities, but beyond that, because China lacks an advanced or well-developed service system for disabilities, the parents have to face the responsibilities of taking care of the child themselves. In addition, due to the negative perception of disabilities in Chinese culture, persons with disabilities have to endure shame, personal guilt, and the blame and pressure of the whole community.

McCallion, Janicki, and Grant-Griffin (1997) conducted an empirical study on parental perceptions of disabilities in a broad range of ethnic groups, which further demonstrated the difficulties that Chinese culture presents to disabled people. Among African Americans, Chinese Americans, Haitian Americans, Hispanic/Latino Americans, and Korean Americans, they found that Chinese and Korean parents were more likely to consider disabilities to be shameful, and they “felt uncomfortable acknowledging their child’s disability and their need for services in their own communities” (p. 354). In extreme cases, some parents may try to hide their children who have disabilities.

Similarly, Holroyd (2003) conducted a study on how cultural factors affect parental perceptions of children with disabilities in Hong Kong. She concluded that parents of disabled
children felt the child’s disabilities disturbed the natural order in the family tradition, especially when the child with a disability was a male. Parents sensed shame so much that they thought their family did not deserve any respect in terms of their family life. Chiang and Hadadian (2007) also report that it is always mothers who take the responsibility to take care of the disabled children because mothers believe they should take the blame for children’s disabilities. Ow, Tan, and Goh (2004) state that when Chinese mothers give birth to disabled children, people believe that their children’s disabilities are attributed to their mothers disobeying some kind of cultural restriction, such as using sharp tools, visiting a cemetery, or eating some wrong kind of food.

In addition, it has been widely reported that Chinese Americans make little use of resources provided by the mainstream service system, and the intervention programs are considered to be a last resort (Chiang & Hadadian, 2007; Choi & Wynne, 2000; Hampton, 2000; Ryan & Smith, 1989; Bui & Turnbull, 2003; Yu, Huang, & Singh, 2004; McCallion et al., 1997). Anderson (1986) argues that within different cultural frameworks, certain values, beliefs, and philosophies may lead to negative attitudes toward rehabilitation services. These negative attitudes may result in ineffective treatment for those who seek assistance and low self-esteem for the health care givers. Hampton and Xiao (2008) state that the Chinese cultural tradition puts emphasis on taking care of one’s parents, children, and siblings who have disabilities. As a result, in China, most persons with disabilities live with their families. Only a minority of them live in institutions run by the government or grass-roots community institutions, which poses a serious challenge to the development of special education in China. People with disabilities tend to rely on their care-givers rather than special education institutions which can help them live and work independently. Special education is a major way to promote educational and possible employment opportunities for the disabled people so that they can be better integrated into
society. The following section will review variables that influence the development of special education in China.

Variables Influencing the Development of Special Education in China

China has a huge population with disabilities, so a shortage of qualified special education teachers and mental health professionals, including school psychologists, is one of the most serious problems facing the disabled population. According to Yang and Wang (1994), almost 400,000 special education teachers are required to meet the needs of children with disabilities, but every year there are fewer than 100 students graduating with special education majors. Special education is always one of the last choices of majors for college students. What factors contribute to this phenomenon?

First, there is a general lack of understanding and knowledge about the benefits of educating children with disabilities. In addition to the traditional beliefs and barriers already mentioned, Chen (1996) argues that in China, it is commonly accepted that limited educational resources should be allocated to those who are capable of learning and contributing to the society in the future, instead of being provided to those who require assistance for their daily lives and activities.

Second, parents’ lower educational expectations and investments in the education of disabled students constitute another disadvantage to special education. As a developing country, China, especially its rural and remote areas, has very limited financial and educational resources. According to Buchmann and Hannum (2001), in developing countries, educational inequality is shaped by a wide range of factors on multiple levels. It results from dynamic correlations between family decisions about education and educational opportunities. In an area with limited economic and educational resources, when parents are making decisions about their children’s
education, they will consider the educational outcomes of their investment, so they would prefer to invest in the ones that they think are more capable of learning. Therefore, children with disabilities, who are unlikely to master knowledge as proficiently as other children, are disadvantaged in obtaining educational opportunities. Even for those disabled children who have been enrolled in an educational institution, people’s educational expectations of them are lower compared to non-disabled children.

Third, teachers of special education are also stigmatized in China. According to the *Taiyuan Daily* (2005), teachers in special education have lower self-esteem, higher anxiety, and more feelings of frustration than other teachers. There are several reasons for this. First, the aforementioned lower educational expectations for disabled children make teaching disabled students an undesirable and unpromising profession. In addition, a general perception is that only those teachers who are not capable of teaching regular education would choose special education. Secondly, McCabe (2003) states that large group teaching is the dominant teaching method in the Chinese classroom, which is not suitable for special education. This makes it difficult for teachers to teach students with disabilities, which requires teachers to consider students’ individual needs and modify assignments accordingly. Third, a lack of professional training in special education makes being a special education teacher a very difficult and frustrating job. Without professional training, special education teachers in China find it difficult to achieve expected educational outcome, and to deal with emergencies which happen frequently in teaching some mentally challenged students. Thus, special education teachers are reported to suffer certain degrees of anxiety and depression. The negative attitudes towards teaching in special education can cause these teachers to have low self-esteem.
Fourth, the Chinese examination-driven educational system, which emphasizes on competition, prevents children with disabilities from being included in regular education. McCabe (2003) states that the evaluation of students is based on their test results, so students with disabilities and their families and teachers hold negative attitudes toward their educational development because they are unable to achieve desirable academic outcomes. In addition, in China, those who want to enter higher education have to achieve high scores on the College Entrance Examination (gaokao), which places huge pressures on students with disabilities who have difficulty mastering even basic knowledge.

Finally, the influences brought by the market transition in China have increased the opportunity cost of investing in special education. Since the beginning of Deng’s 1978 Reforms, China has experienced a transition from a government-controlled economy to a market economy with soaring economic development. This reform enlarged the disparities between the profits of different industries. Special education is regarded to be without significant financial returns, so few see the need to invest in it. Moreover, compared with the more profitable majors, such as business management or finance, the choice of teaching disabled students is more unappealing to college students.

In addition to the above factors, the limited coverage of disability-related issues in regular education poses another hindrance to inclusion of people with disabilities into mainstream society (Hampton & Xiao, 2009). Students in general education programs have little access to formal knowledge about disabilities, which may lead to students’ negative attitudes toward people with disabilities. Chan et al. (1988) found that, among Chinese students, those who have some contact with persons with disabilities were reported to hold more favorable attitudes toward the disabled group. As for teacher education or training programs, curriculum content
does not cover even the main concept of inclusive education and services. The lack of knowledge about disabilities among regular education teachers and students could lead to their negative attitudes toward persons with disabilities, which could hinder the integration of students with disabilities into general education classrooms.

Disabilities in the U.S.

According to Young, Adler, and Shadiow (2005), the core values of American culture are: “Puritan morality, work-success ethic, individualism, achievement orientation, and future-time orientation” (p. 27). A focus in American culture is the advancement of individuals instead of the collective achievement of groups. In a study conducted to compare the values of American, Chinese, and Indian students, Hui and Triandis (1986) stated that Americans ranked highest in self-centered orientation. Therefore, American culture is often identified as an individualistic culture (Gardiner & Kosmitzki, 2008).

As for disabilities in the U.S., generally speaking, people are encouraged to disregard traditional discrimination and consider disabilities to be human differences. Gargiulo (2009) states, “Individuals with disabilities are more like their typical peers than they are different” (p. 10). This perception encourages people to see the person first instead of the disability, and to put emphasis on things people can do instead of things that people cannot do. Likewise, Turnbull, Turnbull, and Wehmeyer (2007) encourage people to use person-first language when speaking about people with disabilities. For example, we should say “people with visual impairment” instead of “blind people”.

When discussing these individuals in American society, it is important to mention the two education laws that have significantly influenced services for people with disabilities. These are the Americans with Disabilities Act (ADA) of 1990 and the Individuals with Disabilities
Education Act (IDEA) of 1975. Under the protection of these laws, a system of intervention and accommodation was established to help people with disabilities to make their achievements within acceptable levels and to participate in the community activities despite disabilities of any category or degree (Chiang & Hadadian, 2007). As has been said about perspectives of disabilities in the U.S., people with disabilities are much more respected and their rights and benefits are more likely to be addressed in American society compared with the traditional perception of disabilities in Chinese culture. However, the development of a fully developed social system for people with disabilities in the U.S. has taken decades of struggle and efforts by many people. In the section that follows, a review of the development of special education in the U.S. is presented.

**Development of Special Education in the U.S.**

Before World War II, children with disabilities were not educated in U.S. public schools. They were placed in special schools or institutions. According to Scruggs and Mastropieri (1996), in Brown v. Board (1954), the Supreme Court decided that “separate-but-equal” educational environments were a violation of the 14\(^{th}\) Amendment of the U.S. Constitution. Although this lawsuit was about race, families of persons with disabilities and their supporters employed this as the foundation of their argument that children with disabilities should receive free and suitable education (Turnbull et al., 2007). After that, the voice for inclusive education became strong. Cook, Semmel, and Gerber (1999) argue that it was morally necessary for children with disabilities to be integrated into general education classrooms and that integration could bring about positive social benefits to children’s development. In 1975, the U.S. Congress passed the Education for All Handicapped Children Act (EAHCA) which is now referred to as the Individuals with Disabilities Act (IDEA). It enhanced the role of the federal government by
employing incentives and sanctions as inducements for states to insure the educational rights of children with disabilities. The law requires that all children with disabilities between the ages of three and 21, as long as their disabilities are qualified for a certain level of education, are provided a free and appropriate public education (FAPE) in the least restrictive environment (LRE) (IDEA Regulations, 34 C. F. R. 300. 13).

The concept of a least restrictive environment meant that children who have disabilities should have the opportunity to study with their peers who are without disabilities to the maximum extent possible. IDEA regulations state the following:

special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily” (34 C. F. R. 300. 550). In cases where separation is inevitable, “each public agency shall ensure that a continuum of alternative placements is available to meet the needs of children with disabilities for special education and related services. (IDEA, 34 C. F. R. 300. 551)

As a result of IDEA, children with disabilities can study in a mainstream environment as much as possible. The majority of children with disabilities are being included into general education environments (U.S. Department of Education, 2007).

After the EAHCA, the Americans with Disabilities Act (ADA) may be the most significant piece of disability legislation. ADA was passed by the U. S. Congress in 1990, and it was meant to eliminate discrimination against individuals with disabilities (Chiang & Hadadian, 2007). The ADA covers five major areas to ensure that individuals with disabilities enjoy opportunities and accommodations. These areas include: employment, public services, public
accommodations, and services operated by private entities, telecommunications, and miscellaneous provisions (Hadadian & Duncan-Malone, 1994).

Another significant piece of legislation which has influenced the development of special education in the U.S. is the No Child Left Behind (NCLB) act which was enacted in 2002. The federal government sought to ensure quality education through the enactment of NCLB. NCLB requires that only when all schools within a state act in accordance with the general education provisions, can they obtain funds from the federal government (Kalaei, 2008). Kalaei (2008) also states that NCLB requires standardized testing but allows for reasonable adaptations and accommodations for students with disabilities. In this way, Congress intends to find suitable testing standards for students with disabilities of various categories and degrees.

The aforementioned legislative policies have contributed to a positive environment for people with disabilities in the U.S. This may influence the attitudes and acculturation experience of Chinese people who live in the U.S. toward the marginalized group.

How Acculturation may Affect Chinese People’s Attitudes toward Persons with Disabilities

Chinese Americans are one of the fastest growing minority groups in North America, according to the statistics provided by the U.S. Census Bureau (2002), over 10 million Asian people live in the United States, and China is the top source country, representing about 24 percent of the Asian population (see Figure 1). Some findings of previous studies revealed that cultural factors such as Confucian tradition and collectivistic adaptation may contribute to the negative attitudes of the Chinese toward persons with disabilities. According to Hui and Triandis (1986), Chinese culture values interdependency and sacrifice for others in a society, and such an emphasis has led to shame or fear that one might not be able to make contributions to society. This belief could be responsible for the highly negative attitudes toward persons with disabilities
among Chinese (Hampton & Xiao, 2007). If cultural adaptation indeed plays a role in influencing people’s attitudes toward persons with disabilities, then will changing values and cultural practices during the process of acculturation promote attitudinal change? In the following section, this paper will investigate how a cross-cultural experience in the U.S. may influence Chinese graduate students’ attitudes toward persons with disabilities.

Figure 1: Asian Population by Different Categories: 2000 (U.S. Census Bureau, 2002)

Conflicting definitions of acculturation were found in the literature on the subject. Some scholars, such as McCallion et al. (2004), state that acculturation is a process by which immigrants adopt the values, beliefs, and attitudes of mainstream culture and give up those of the heritage culture. However, my choice for the definition of acculturation relies on Huang (2007)
which contends that the two dimensions of acculturation are accepting the host culture and maintaining the home culture. Young, Adler, and Shadiow (2005) state that “cultures represent different but legitimate ways of dealing with essentially similar human problems and needs” (p. 35). Therefore, it is not possible for people to totally abandon their heritage cultures. Instead, as Huang (2007) has pointed out, cultural contact can affect not only the immigrant group but also the host society. Immigrants can also influence the receiving culture by maintaining their original culture. In the event that the receiving culture and the original culture are too different, the process of acculturation can involve stress and challenges (Huang, 2007; Lai & Ishiyama, 2004). To understand Chinese students who are studying in western contexts, it is helpful to examine how acculturation influences the first-generation Chinese-American parental perception of children with disabilities.

Based on an empirical investigation of Chinese-Canadian mothers of children with disabilities, Lai, and Ishiyama (2004) describe the feelings of acculturation experienced by the mothers. Some aspects are more positive in Canadian than in Chinese culture. Canadians are generally more accepting of people with disabilities, and have a more inclusive educational system. At the same time, the mothers have to confront stress and frustration as a result of the dramatically different culture and language. As for the literature on Chinese-American parents’ acculturation, conflicting findings are apparent across different studies. Parette, Chuang, and Huer (2004) conducted a qualitative study on six Chinese-American families with children with disabilities and examined the influence of acculturation on those parents’ attitudes toward disabilities. This study found that through the process of acculturation to the U.S., Chinese-American parents’ perception of and attitudes toward disabilities have changed. During their empirical research on the six families, none of these family members consider disabilities as a
shame or punishment of sin. They all held very positive attitudes toward their children’s
disability, and were confident that their children could make progress. As for the utilization of
service systems, Parette et al. (2004) report that all members of all six families highly valued the
intervention programs provided by public educational institutions or private clinics, and that they
actively sought assistance for their children outside their families.

According to Parette et al. (2004), the following factors could explain their findings. First,
at least one of the parents in most Chinese-American families has been educated in institutions of
higher education in the U.S. They have obtained an enhanced knowledge and a better
understanding about their children’s disabilities, so the traditional Chinese perception of
disabilities as a shame has been abandoned. Second, compared to China, the resources for special
education and services for people with disabilities are much more abundant. Those available
resources make parents feel secure and more confident that their children can improve. Third, the
U.S. special education system provides legal protections to people with disabilities, so Chinese-
American parents have a better awareness of the individual rights of their disabled children.
Finally, the community that those Chinese-American parents have been exposed to is more
accepting toward people with disabilities, so they are less likely to confront pressure from
negative public attitudes.

In contrast, there are many studies with outcomes which conflict with these positive
findings. Many studies report that many Chinese Americans with disabilities are reluctant to
report their disabilities and they tend to avoid contact with the existing service system in the U.S.
(McCallion et al., 1997; Hampton, 2000; Ryan & Smith, 1989; Bui & Turnbull, 2003; Yu et al.,
2004). McCallion et al. (1997) report that many immigrant families are resistant to the efforts of
services provided for people who are aging or who have developmental disabilities. Ellahi and
Hatfield (1992) state that one third of Asian-American families did not receive any support when they first discovered that their children had disabilities.

As to what has been said about acculturation, it is not a simple process, with the host culture replacing the heritage culture, because it is impossible for people to abandon all their heritage culture. There is maintenance of the heritage culture involved in the process of acculturation, and in addition to successful social or psychological adjustments, there are experiences of stress and frustration. One of the main causes of struggle is language. According to Matsumoto and Juang (2008), language determines the existence of human cultures. That cannot be more true because culture can only exist and be transferred through certain mediation. The most common form of mediation is language. Linguistic difficulty is one of the major barriers between Chinese-American parents and access to service systems in the U.S. Lack of language proficiency among Chinese-American parents has made services less accessible to them and has discouraged them from utilizing services available for individuals with disabilities (Choi & Wynne, 2000; McCallion et al., 1997; Ryan & Smith, 1989; Hampton, 2000; Lai & Ishiyama, 2004).

In this section, the acculturation of Chinese people in the U.S., especially the Chinese parents of children with disabilities has been discussed. What follows is an introduction of acculturation of Chinese international students in the U.S.

Acculturation of Chinese International Students in the U.S.

According to Ye (2006), China is one of the top five countries of origin for international students in the U.S. Heppner (2006) states that international students play a major role in facilitating cross-cultural cooperation and knowledge exchange between domestic and international cultures. However, as for Chinese international students in the U.S., according to
Wei, Heppner, Mallen, Ku, Liao, and Wu (2007), their journey to obtain their degrees can be both exciting and challenging because they have to deal with various educational, cultural, and social problems and difficulties. The students have to try to adapt to the sociocultural system in the U.S. that is different from their own (Zimmermann, 1995), a process often referred to as acculturation.

Ye (2006) states that acculturation “involves many changes in identity, relationships, routines, and ideologies about self, work, and families” (p. 3). Although all international students may experience a certain level of acculturation, the greater the cultural distance is, the more effort the process of acculturation requires (Ye, 2006). Hofstede (1984) created an index to measure a culture’s location on the individualism-collectivism scale. Hui and Triandis (1986) found that culture in the U.S. was at the extreme of individualism and Chinese culture was close to the opposite end in that it had a strong collectivist orientation. This demonstrates that there are some major differences between the cultural value system in the U.S. and the Chinese value system, which indicates that Chinese international students in the U.S. usually have to make more efforts in the process of adaptation to the new environment (Ye, 2006).

Most of the previous studies put emphasis on the problems related to Chinese international students’ acculturation to the U.S. Those problems include: a lack of English proficiency, academic problems, cultural differences, problems of social adjustment, and particularly, stress caused by all the above issues. As previously mentioned about first generation Chinese-American parents of children with disabilities, language poses one of the major sources of barriers for them to adapt to mainstream American society. As for Chinese students, although English competence is usually a prerequisite for their academic admission, especially at the graduate level, there are still linguistic hurdles to their social adaptation in the U.S. (Ying, Han,
& Wong, 2008). In addition to language issues, the cultural barrier is another important factor that hinders Chinese students from integrating into American society. There have been many studies conducted on the negative social and psychological consequences related to moving to and acculturating in the U. S., referred to as “acculturative stress” (Ye, 2006; Wang & Mallinckrodt, 2006; Ying et al., 2008; Wei et al., 2007).

Some previous studies have demonstrated that the experience of acculturation affects international students’ attitudes toward people with disabilities. Tseng (1972) conducted a cross-cultural study on Asian students’ attitudes toward the disabled in terms of cultural orientation, manifest anxiety, and locus of control. He found that manifest anxiety and the length of time the Asian students stayed in the U.S. were significant factors influencing their attitudes toward people with disabilities. He concluded that the higher the students’ anxiety level, the more negative their attitudes toward the disabled; and, the longer they stayed in the U. S., the more positive their attitudes toward the disabled.

There are very few studies on how acculturation influences Chinese students’ attitudes toward persons with disabilities. In fact, there are a few studies on how acculturation affects these perceptions at all. The only significant studies on the subject focus on Korean students and Greek students studying in the U. S. Although they do not directly address Chinese students, their findings and insights can at least facilitate a better understanding of the influence of acculturation on international students’ attitudes toward persons with disabilities in the U. S. Choi and Lam (2001) investigated the effects of acculturation on Korean students’ attitudes toward people with disabilities. They conducted a comparative study among Korean students and Korean-American students and found that Korean-American subjects showed more positive attitudes toward people with mental disabilities than their Korean counterparts. One explanation
for the negative attitudes held by Korean students is that in Korea, people with mental disabilities are not legally classified as people with disabilities. They are very likely to be institutionalized, which constitutes the high stigmatization of persons with mental disabilities. Another reason is the belief that mental illness is a punishment for sin, which is commonly believed by most East Asians. The authors explained the reason why Korean-American students held more favorable attitudes was that the process of acculturation played an important role in influencing Korean students’ attitudes toward people with disabilities.

Similarly, Zaromatidis, Papadaki, and Gilde (1999) conducted a comparative study on the attitudes of 101 Greeks and 98 Greek-Americans toward persons with disabilities, and found that Greek-American subjects had more positive attitudes than Greek subjects. They offer two explanations for their findings. One is that Greek society is categorized to be collectivistic, which type of society emphasizes group membership and the benefits of the community as a whole. Persons with disabilities are regarded as threats to the family and community, so Greeks are likely to feel ashamed about their disabled family or community members and try to hide them. The reason why Greek-Americans hold more favorable attitudes is that they have adapted more of the values of the individualistic American society. The authors’ second argument to explain their results is that the amount of contact with disabled people would positively influence attitudes toward persons with disabilities. The more contact with people with disabilities, the more positive attitudes toward them. Due to a more favorable social environment for people with disabilities in the U.S., there are more opportunities to interact with others who have disabilities in the U.S. than in Greece. Therefore, Greek-Americans, in general, have more positive attitudes toward the disabled than Greeks.
Even though they are one of the major ethnic groups of international students in the U.S., Chinese students’ attitudes toward persons with disabilities have not drawn enough attention in previous studies. This present research study, therefore, is intended to fill this gap.
CHAPTER III.: METHODOLOGY

The main research objective of the present study is to examine Chinese graduate students’ attitudes toward people with intellectual disabilities from an acculturation perspective. The overall goal of this study is to determine the influence of living and studying in the U. S. on Chinese graduate students’ attitudes toward persons with intellectual disabilities. In order to answer this main research question, a quantitative study has been conducted through an attitude survey of two groups of graduate students: Chinese graduate students at Bowling Green State University in the U. S. and Chinese graduate students at Shandong University in the mainland of China.

This chapter provides a description of the research methodology used in the study. Specifically, the chapter includes a discussion of the research design and the theoretical framework, provides definitions of variables and instruments, addresses the reliability of the survey instrument, and describes participant selection, data collection and data analysis procedures. Table 1 presents a summary of the study methodology in terms of the research questions, data collection instruments, and analysis.

Description of Methodology

Based on numerical measurements, quantitative research uses numbers and statistical methods to explore specific aspects of phenomena (Thomas, 2003). Quantitative research intends to test causal hypotheses or seek a general description from particular instances. At the same time, it seeks measurements and analyses that other researchers can easily replicate (King, Keohane, & Verba, 1994).

Apart from quantitative research method, qualitative methods were used to analyze the responses of an open-ended question at the end of the survey. Qualitative research intends to
make sense of personal stories or interpret phenomena in terms of the meanings people assign to them (Thomas, 2003). Qualitative research involves the collection and analyses of various empirical materials, such as case study, personal experience, life story, interview, etc.

Researcher Background

My background as a Chinese graduate student studying in the U.S. has shown both advantages and disadvantages during the process of this study. The advantages include that I share the same cultural background with the participants, which enables me to understand their points of view more easily, especially when interpreting the responses of the open-ended question. When adopting the instruments, my understanding of the Chinese cultural context has contributed to the selection of items. In addition, I have strong personal interests in the situation and development of persons with disabilities. In China, I have volunteered in a local blind school for one semester and in the U.S., I have worked as a volunteer and an intern at Wood Lane for two semesters. Wood Lane is a county agency providing educational, employment, recreation, and other support services on a daily basis, to people of all ages, who have developmental disabilities (http://www.woodmrdd.org). These experiences provide me necessary knowledge which helps me to conduct this study effectively. However, as a researcher of this study, these experiences can be a potential disadvantage, because I may project my own feelings and expectations to the participants. Since this study employs a quantitative method, this disadvantage can be reduced to a great extent.

Theoretical Framework

When I was searching for a theoretical framework, I hoped to find one that was designed to examine how sociocultural factors influence human cognitive development. Vygotsky’s sociocultural theory was chosen because the basic concepts of this theory, including scaffolding
and mediating in the Zone of Proximal Development, have been frequently applied to classroom instruction. This social constructivist perspective also has a strong impact in the field of psychology, education, and related areas (Harry, Rueda, & Kalyanpur, 1999). Additionally, Lim and Renshaw (2001) emphasize the significance and usefulness of Vygotsky’s theory. They state that “among the hybrid theories emerging, sociocultural theory appears to be one of the most promising and influential theories that is relevant to cultural diversity under changing local, national, and global conditions” (p. 11). Therefore, the sociocultural theory is beneficial to an exploration of how the Chinese and U.S. sociocultural environments have different influences on Chinese graduate students’ perceptions of persons with intellectual disabilities. However, within any cultural group (e.g., Chinese graduate students studying in the U. S.), it is inevitable that there will be variations among survey respondents in relation to their different social/economic status and/or personal experiences.

An introduction of Vygotsky’s sociocultural theory is presented here, and in the next chapter, Vygotsky’s theory of Mediated Activity and the Zone of Proximal Development is used to analyze the effects of Chinese graduate students’ cognitive development on their perception of disabilities. The theory, therefore, serves as a framework to discuss and analyze the findings of the study and will facilitate a deeper understanding of Chinese graduate students’ attitudes toward persons with intellectual disabilities.

According to Gardiner and Kosmitzki (2008), Vygotsky believes that cultural and historical factors significantly influence children’s cognitive development. He claimed that the major characteristic of development is the correspondence between a child’s request and the norms of the culture. Three major components in this process were proposed by Vygotsky: culture, the use of language, and the child’s Zone of Proximal Development (ZPD). In short, the
ZPD can be defined as “the distance between a child’s actual developmental level and the higher-level potential” (p. 34).

Vygotsky’s theory stresses that learning and development occur during interaction when those with more capability, such as adults, guide the actions of a child within the ZPD to do some things that are beyond his/her independent efforts, until the child is able to accomplish the task by him/herself (Harry et al., 1999). This process is referred to as “scaffolding” (Wood, Bruner, & Ross, 1976). Although Vygotsky never used this term, his ideas about interactional support and the process by which adults mediate children’s efforts to learn new things are similar to the notion of “scaffolding”.

According to Elliott, Kratochwill, Littlefield Cook, and Travers (2000), Vygotsky claims that a child’s cognitive development is achieved through social interactions with others. As stated in Kozulin (1998), in the opinion of Vygotsky, a learning process is a Mediated Learning Experience (MLE), and sociocultural influences serve as the mediation in the learning process. The three major mediators proposed by Vygotsky include “material tools, ‘psychological tools,’ and other human beings” (Kozulin, 1998, p. 62).

Measurement of Attitudes

Conceptually, attitudes are considered as multidimensional (Vignes, Coley, Grandjean, Godeau, & Arnaud, 2008). Antonak and Livneh (1988) define attitude in terms of two dimensions: abstractness and extensiveness. Regarding the dimension of abstractness, they state, “Attitudes are often regarded as latent or inferred psychosocial constructs or processes which are postulated as residing within one’s self” (Antonak & Livneh, p. 6). The second dimension, extensiveness, is analyzed in relation to three component categories, namely the cognitive, the affective, and the behavioral. The cognitive component relates to beliefs and knowledge, the
affective component reflects feelings and emotions, and the behavioral component addresses actions and behaviors (Vignes et al., 2008). Instruments are required to successfully measure the component categories. Since the 1850s, more and more scientific studies of attitudes have been conducted through the investigation of participants’ reactions to certain social activities. Thomas and Znaniecki (1918) suggested that attitudes could determine the individuals’ potential and actual behaviors, and Watson (1925) argued that the study of attitudes should be emphasized in the field of social psychology (Antonak & Livneh, 1988). As the term “attitude” becomes more and more popular among researchers, many have attempted to create psychometric techniques to measure it (e.g., Thurstone, 1931; Likert, 1932).

Related to the measurement of attitudes toward people with disabilities, Antonak and Livneh (1988) demonstrated three social circles or levels which interact but are different. The most inner circle consists of attitudes held by the families, friends, and peers of people with disabilities; the second circle comprises the attitudes exhibited by the rehabilitation professionals in contact with disabled people; and, the outermost circle depicts attitudes of the general public.

The improvement and assessment of attitude measurements have been emphasized by many researchers (e.g., Mussen & Barker, 1943; Rusalem, 1950; Horowitz, Rees, & Horowitz, 1965), and a number of instruments have been developed to measure attitudes toward people with disabilities. Among these instruments, the Attitude Toward Disabled Persons (ATDP) scale has gained increasing popularity and has been widely used. For the present study, the ATDP was adopted to measure attitudes of Chinese graduate students toward people with intellectual disabilities. Instrument items were selected or abandoned based on cultural or social consideration. Moreover, for the purpose of addressing Chinese graduate students’ attitudes toward social relationships with disabled people, some items from another instrument, the
Disability Social Relations Generalized Disability (DSRGD) were also incorporated. In order to answer the research questions and contextualize the scale into the particular cultural context of this study, a few modifications have been made when using these two scales. For example, one of the items of ATDP addresses whether the driving test given to a person with a disability should be more severe than the one given to the non-disabled. Since driving is not a common practice in China and a driving test may be an unfamiliar notion to some Chinese participants, so this item was not adopted.

Participants were asked to complete a short demographic questionnaire which included some questions related to their gender, age, educational institutions, and educational levels. It also covered their possible previous contact or experience with persons with intellectual disabilities. Following the demographic section, a survey based on the Attitudes Toward Disabled Persons Scale (ATDP) Form B and the Disability Social Relations Generalized Disability (DSRGD) scale was conducted. The survey ended with an open-ended question for participants to provide some qualitative insights about their experiences with people with intellectual disabilities.

The ATDP was originally created as a direct attitude measurement by Yuker, Block, and Campbell (1960) and later revised by Yuker, Block, and Young (1966). The scale consists of 30 Likert-type attitude items suggesting positive or negative attitudes towards persons with disabilities. Participants respond to the items which are assigned scores ranging from +3 (I agree very much) to -3 (I disagree very much). Considering the possibility that some people may neither “agree” nor “disagree,” I adjusted the scale by replacing the 6-point Likert scale with a 5-point Likert scale with “Not sure” as a central value and assigned the items scores from 1 (Strongly agree) to 5 (Strongly disagree), with the higher scores representing more positive
attitudes toward persons with intellectual disabilities. Antonak and Livneh (1988) reported that test-retest reliability of the ATDP Form B was to range from .71 to .83. The internal consistency, measured with Cronbach’s alpha in this study, ranges between .76 and .88 for different testing occasions and sample groups.

Based on the Disability Social Relations (DSR) scale created by Grand, Bernier, and Strohmer (1982), Hergenrather and Rhodes (2007) developed the Disability Social Relations Generalized Disability (DSRGD) scale. The DSR attempts to test the hypothesis that social context affects attitudes toward persons with disabilities. It comprises three six-item social relationship subscales identified as Dating, Marriage, and Work. Each of the eighteen items addresses the following four disabilities: amputation, visual impairment, cerebral palsy, and epilepsy. Hergenrather and Rhodes (2007) revised the DSR by altering the items so that they reflect disabilities in general instead of certain specific disabilities, thereby introducing DSRGD. Additionally, the original DSR used the Thurstone two-response scaling which consisted of statements about a particular issue and each statement was assigned a numerical value indicating how favorable and unfavorable it was considered to be. Participants checked those statements that they agreed, and a mean score was computed, representing their attitudes. Hergenrather and Rhodes (2007) modified the DSR by replacing the Thurstone scale with a Likert scale, which is commonly used as an attitude measurement in social sciences because the Likert scale is relatively easy to conduct. It is comparatively more appropriate for attitude measurement, which is complicated and multidimensional (Hergenrather & Rhodes, 2007). In Section 6 of the survey for the present study, seven items were adopted from DSRGD, which address students’ attitudes toward social relationships with those who have intellectual disabilities.
The present study combined some items adapted from each of the ATDP and the DSRGD to investigate Chinese graduate students’ attitudes toward persons with intellectual disabilities. The survey was first translated from English into Chinese by a bilingual Chinese graduate student, and then it was back translated from Chinese to English by another bilingual Chinese graduate student. The back-translated English version of the survey was compared with the original version to identify the translation equivalence. After clarifying and rewording several places during the process, such as replacing *ke lian* (pathetic) with *bu xing* (misfortunate), the survey was adequately translated to Chinese without the items losing their intended meaning.

Data Collection Procedures

This section describes the permissions obtained to conduct the study, the procedures used to recruit participants as well as a description of the participants, and the data collection and analyses processes employed.

*Institutional approval*

Prior to beginning data collection, this study was approved by the Bowling Green State University Human Subjects Review Board (BGSU HSRB) (see Appendix A). I also obtained permission for this study through emails from two instructors who taught courses for graduate students at Shandong University.

*Participant Recruitment*

Participants were recruited from Chinese graduate students at Bowling Green State University (BGSU) and Shandong University (SDU) in China. Both universities are public comprehensive research universities providing extensive academic programs at both undergraduate and graduate levels. They have been sister institutions since 1991 (Y. Wang, personal communication, June 11, 2010). Bowling Green State University has a total student
population of more than 20,000 among whom around 160 are Chinese graduate students (P. Hoffmann, personal communication, May 24, 2010). Shandong University has almost 60,000 students including about 14,500 graduate students in various disciplines (http://www.sdu.edu.cn). I expected to select 60 subjects among Chinese graduate students at BGSU and, to make the sample size comparable, I planned to recruit the same amount of graduate students in China. I created an introductory email and embedded the survey link within it for the willing respondents to use. At BGSU, I was able to reach most of the Chinese international students through the listserv of the Chinese Students and Scholars Association (CSSA). When obtaining too few respondents through CSSA, I tried to search Chinese students’ family names via BGSU website and send them the initiator email individually. At Shandong University, I obtained access to graduate students through university lecturers who are responsible for graduate English instruction on campus, and who were kind enough to pass the survey link along to their classes. After obtaining the approval from the two instructors at SDU, I obtained approval from a deputy director of their graduate school.

After having the approvals from the BGSU HSRB and instructors at Shandong University, I sent out emails with the on-line survey link to 150 Chinese international graduate students at Bowling Green State University and approximately the same number of Chinese graduate students at Shandong University. A total of approximately 300 students were approached, while 145 students completed the survey with 58 responses obtained from BGSU and 87 from Shandong University.

Participants Description

To explore Chinese graduate students’ attitudes toward persons with intellectual disabilities, Chinese graduate students were chosen based on the following two criteria. Chinese
graduate students are from a culture which is considered to be opposite to the culture in the U.S. Hui and Triandis (1986) explain that Chinese culture emphasizes conformity and interdependence and manifests collectivist features which are in direct contrast with the individual-oriented culture in the U.S. that highly regards individual identity and values. More importantly, the perception of persons with disabilities in China is very different from that in the U.S. When Chinese graduate students live in the U.S. as members of a minority group, they are likely to be influenced by the mainstream American culture and experience a degree of acculturation. Their attitudes toward the disabled population in general may be affected to a certain extent and the influence may be significant, which is an intriguing topic for investigation.

Another reason that I chose Chinese graduate students as my target population is that it is a group that will enter various professions where they may work with a variety of persons with disabilities (Hergenrather & Rhodes, 2007). According to Hampton and Xiao (2008), since 1978, China has been experiencing a market transition accompanied by soaring economic development and significant social changes. These changes have facilitated the adoption of a full rehabilitation model in China, with a focus on the integration of people with disabilities into society. In the U.S., the inclusion of persons with disabilities in education, employment, and social life has become common as well. More and more contact opportunities and access to mainstream society have been created and provided for people with disabilities. Chinese graduate students, in China or the U.S., will one day be the ones who influence the access of services and information about persons with disabilities, so their attitudes towards the disabled group are worthy of investigation.

Data Collection

The study was conducted through an on-line format. All potential participants received an informed consent letter via email before they decided to participate in the study. The informed
consent letter included a detailed introduction of the research objectives, procedures for data analysis, and my contact information (see Appendix B). The consent letter also emphasized voluntary participation and the confidentiality of the study. For those who wished to participate in the study, they were asked to click on a link which took them directly to the survey (see Appendix C). Subjects’ consent to participate in this study was confirmed by completing the online survey and its electronic submission.

Data Analysis

After data collection, the quantitative survey questions were scored, and the data were analyzed using the Statistical Package for the Social Sciences (version 17.0, SPSS, 2007). Perceived attitudes toward persons with intellectual disabilities are complicated and multidimensional. Therefore, in order to obtain a complete picture, the total summated scores were examined in separate $t$ tests, analyses of variance (ANOVAs), and correlations. The goal of $t$ tests is to measure the mean difference between two populations, ANOVA is used when there are more than two sample means and it can define and measure the size of the differences among the sample means, and a correlation is used to evaluate and describe a relationship between two variables (Gravetter & Wallnau, 2008). The research questions of this study included the following:

1. Are attitudes toward persons with intellectual disabilities significantly different between Chinese graduate students at BGSU and those at SDU?
2. What are the factors that might affect Chinese graduate students’ attitudes toward persons with intellectual disabilities?
3. What factors might affect Chinese international students’ acculturation regarding their attitudes toward persons with intellectual disabilities?
To address the first research question, scores were analyzed through descriptive statistics, including means, frequencies, and standard deviations. T-tests and ANOVAs were chosen to assess any significant main effects. The between subjects factors were educational institutions (BGSU, SDU), years of education, self-reported contact (none, at least some), and gender (male, female). To evaluate the second research question, correlation and t-tests were used to examine the relationship between attitudes and demographic variables including educational institutions, age, gender, years of education, and previous contact. To answer the third research question, Vygotsky’s sociocultural theory was used to interpret the results of data analyses in terms of the three mediators. In order to reduce the probability of a Type 1 error, the alpha was set at .05 for all tests. For additional insight, the open-ended responses obtained from the survey were examined through qualitative analysis. The responses were conceptualized, reduced, elaborated, and related to the research questions of this study, a procedure often referred to as coding (Thomas, 2003). I developed themes from the responses based on topics the respondents emphasized and I organized the responses according to the themes. In addition, to protect confidentiality, I eliminated or changed some personal information which could identify the participants. For example, I removed a response in which a participant indicated his/her email address due to the participant’s misunderstanding of the question.

Summary

This chapter discussed the methodology used for this study along with a description of the research instruments and participants. The research design, theoretical framework, and variables were also described. In addition, the reliability of the instruments was reported. The last section included an explanation of the data collection and data analysis procedures. Table 1
presents a summary of the study methodology in terms of the research questions, data collection instruments, and analyses. The following chapter presents the findings of the study.

Table 1

*Summary of Study Methodology*

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Instruments</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research question 1</strong> Are attitudes toward persons with intellectual disabilities significantly different between Chinese graduate students at BGSU and those at SDU?</td>
<td><em>Attitude Towards Disabled Persons</em></td>
<td><strong>Quantitative Data:</strong> Mean attitude scores, frequencies and standard deviation t-tests of independent samples ANOVAs</td>
</tr>
<tr>
<td></td>
<td>ATDP (Antonak, 1982)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Disability Social Relations Generalized Disability</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DSRGD (Hergenrather &amp; Rhodes, 2007)</td>
<td><strong>Qualitative Data:</strong> Coding and interpretation</td>
</tr>
<tr>
<td><strong>Research question 2</strong> What are the factors that might affect Chinese graduate students’ attitudes toward persons with intellectual disabilities?</td>
<td>ATDP (Antonak, 1982)</td>
<td><strong>Quantitative Data:</strong> Correlation t-tests of independent samples</td>
</tr>
<tr>
<td></td>
<td>DSRGD (Hergenrather &amp; Rhodes, 2007)</td>
<td></td>
</tr>
<tr>
<td><strong>Research question 3</strong> What factors might affect Chinese international students’ acculturation regarding their attitudes toward persons with intellectual disabilities?</td>
<td></td>
<td><strong>Interpretation of findings by applying Vygotsky’s Sociocultural Theory</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER IV.: FINDINGS

This chapter presents the statistical findings of the data analysis. The quantitative results are clarified by subscales: Attitudes, Behaviors, Relationships, and Expectations. The purpose of the study is to determine the influence of living and studying in the U. S. on Chinese graduate students’ attitudes toward persons with intellectual disabilities. To portray a comprehensive picture of this subject, the survey questions address the research purpose by examining the effects of institutions, educational levels, contact with people with intellectual disabilities, and gender. A set of statistical $t$ tests and correlations were employed for each of the 30 survey items as well as for the four subscales. In the last section, a qualitative analysis will be presented based on the responses of the open-ended question at the end of the survey.

The Quantitative Results

The 145 participants have a mean age of 26.26 years ($SD = 4.23$), among whom 69 (47.6%) are male, and 76 (52.4%) are female. All of them are Chinese graduate students from Bowling Green State University (BGSU) and Shandong University (SDU) majoring in various disciplines. Eighty-five (58.6%) participants are first-year graduate students, 38 (26.2%) are second-year graduate students, and all the remainder (15.2%) have been graduate students for more than two years. Of the 145 respondents, 73 (50.3%) reported having previous contact with an individual with an intellectual disability, 65 (44.8%) indicated having an individual with an intellectual disability in their schools, nine (6.2%) stated that they had a friend with an intellectual disability, and one reported having a family member with an intellectual disability. There were 30 multiple choice questions on the survey, and a number from one to five was assigned to each potential answer. The highest possible total score is 150, and higher scores imply more positive attitudes toward persons with intellectual disabilities. Table 2 presents some
descriptive statistics of the total scores and mean scores which indicate the general attitudes of Chinese graduate students toward persons with intellectual disabilities.

Table 2

*Descriptive Statistics of all Student Total Scores and Mean Scores*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total scores</td>
<td>145</td>
<td>77.00</td>
<td>57.00</td>
<td>134.00</td>
<td>97.26</td>
<td>12.93</td>
</tr>
<tr>
<td>Mean scores</td>
<td>145</td>
<td>2.57</td>
<td>1.90</td>
<td>4.47</td>
<td>3.25</td>
<td>.43</td>
</tr>
</tbody>
</table>

Among the 145 participants, 58 (40%) are from BGSU and 87 (60%) are from SDU. *T* tests were used to explore the effects of different institutions on students’ scores according to the four subscales. When comparing the mean scores for all the survey questions, the BGSU group scored higher with a mean score of 98.20 (*SD* = 11.67), and the SDU group scored lower with a mean score of 96.63 (*SD* = 13.74). Table 3 presents the means and standard deviations of mean scores of the four subscales by two institutions: BGSU and SDU.

Table 3

*Means and Standard Deviations of Scores on Four Subscales by Institutions*

<table>
<thead>
<tr>
<th></th>
<th>Attitudes</th>
<th>Behaviors</th>
<th>Relationships</th>
<th>Expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>BGSU</td>
<td>3.26 (.46)</td>
<td>3.37 (.72)</td>
<td>3.41 (.37)</td>
<td>2.74 (.57)</td>
</tr>
<tr>
<td>SDU</td>
<td>3.24 (.47)</td>
<td>3.33 (.69)</td>
<td>3.27 (.51)</td>
<td>2.71 (.69)</td>
</tr>
</tbody>
</table>

Four *t* tests of independent samples were conducted to compare subscale scores of BGSU and SDU participants, and no statistically significant differences between the two groups were found. Table 4 presents a summary of the *t* test results. An alpha level of .05 was used for all four tests.
Table 4

*T tests between Two Groups on Subscale Scores by Institutions*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>$t$ (145)</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>.14</td>
<td>.89</td>
</tr>
<tr>
<td>Behaviors</td>
<td>.55</td>
<td>.58</td>
</tr>
<tr>
<td>Relationships</td>
<td>1.84</td>
<td>.06</td>
</tr>
<tr>
<td>Expectation</td>
<td>.26</td>
<td>.79</td>
</tr>
</tbody>
</table>

In order to consider other possible factors which may have significant effects on participants’ scores, gender, contact, age, and educational level have also been employed as independent variables. A set of statistical correlation analyses has been conducted to determine any effects of the aforementioned factors. No statistically significant correlations were found.

Table 5 presents the results of the correlation matrix.

Table 5

*Correlations between Student Scores, Gender, Contact, Age, and Educational Level*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students (n = 145)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Scores</td>
<td></td>
<td>.04</td>
<td>.08</td>
<td>.06</td>
<td>.01</td>
</tr>
<tr>
<td>2. Contact</td>
<td></td>
<td></td>
<td>.10</td>
<td>.01</td>
<td>.13</td>
</tr>
<tr>
<td>3. Gender</td>
<td></td>
<td></td>
<td></td>
<td>.10</td>
<td>.05</td>
</tr>
<tr>
<td>4. Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74**</td>
</tr>
<tr>
<td>5. Education level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. **Correlation is significant at the .01 level (2-tailed).
$T$ tests were used for each of the 30 items, and four were found to be statistically significant according to the institution (BGSU or SDU). They were all in the subscale of Relationships. Specifically, they dealt with whether a respondent feels embarrassed when making friends with a person with an intellectual disability, and whether a respondent would consider marrying a person with intellectual disabilities. For all the four items, BGSU participants have significantly higher scores than SDU respondents. Table 6 presents the statistical results of the four items. An alpha level of .05 was used for all the statistical tests.

Table 6

*Results of the Four Items which Showed Significant Differences*

<table>
<thead>
<tr>
<th>Item</th>
<th>BGSU</th>
<th>SDU</th>
<th>$t$ (143)</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship #1</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(I WOULD NOT make friends with a person with an intellectual disability because I feel uncomfortable that other people might stare at me.)</td>
<td>3.84 (.67)</td>
<td>3.57 (.77)</td>
<td>2.17</td>
<td>.03</td>
</tr>
<tr>
<td>Relationship #2</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(I WOULD NOT make friends with a person with an intellectual disability because I would worry what others think.)</td>
<td>3.97 (.62)</td>
<td>3.59 (.84)</td>
<td>2.94</td>
<td>.00</td>
</tr>
<tr>
<td>Relationship #3</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(I would feel embarrassed eating lunch/dinner with a person with an intellectual disability in public.)</td>
<td>3.83 (.73)</td>
<td>3.52 (.90)</td>
<td>2.19</td>
<td>.03</td>
</tr>
<tr>
<td>Relationship #7</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(When dating a person with an intellectual disability, I WOULD NOT consider marrying him/her.)</td>
<td>3.40 (.84)</td>
<td>3.03 (.93)</td>
<td>2.38</td>
<td>.02</td>
</tr>
</tbody>
</table>
While no statistically significant differences were found in the total or subscale scores between the BGSU and SDU groups, there was some interesting information that emerged from the tests for individual items. The results of the above statistical tests can be summarized as follows:

1. No statistically significant differences were found in the total or subscale scores between the BGSU and SDU groups.
2. There were statistically significant differences in several items under the Relationships subscale according to the institution (BGSU or SDU).

The Qualitative Results

Among all the participants, 21 subjects responded to the open-ended question which asked for any further information that they would like to share on this subject. Seven of them were BGSU participants, and fourteen were SDU participants. Eight of the responses from both institutions were about the participants’ own experience with persons with intellectual disabilities, 10 were about their opinions and hopes, and three were asking questions about the issue.

Among the responses, the most common words include “help” (bangzhu), “concern” (guanxin), “respect” (zunzhong), and “pitiful” (kelian). “Help” and “concern” show compassion; “respect” indicates the way of treating the disabled group as equals; “pitiful” demonstrates relatively negative attitudes. Overall, the qualitative responses obtained from the survey were favorable except that a few stated that persons with intellectual disabilities were scary, or said those persons were unpredictable and extremely hard to understand.

Three major findings emerged from the qualitative responses. First, most of the respondents from both BGSU and SDU showed great concern for disabled individuals and agree that people
with intellectual disabilities need more assistance and attention. Second, a few SDU respondents stated that persons with intellectual disabilities were unpredictable, strange and even dangerous. Finally, many of the respondents from both institutions indicated their desire to obtain more information about how to get along with those who have intellectual disabilities, and many advocated that the government should take more responsibility to take care of this marginalized group and guarantee their human rights.
CHAPTER V.: DISCUSSION AND CONCLUSION

This chapter discusses the findings and how they relate to the literature and the theoretical framework. This study mainly conducted quantitative analysis on data from the survey questions distributed to Chinese graduate students at BGSU and SDU. Data analysis included t tests of independent samples, correlations, and descriptive statistics. In addition, qualitative analysis was also conducted on responses to an open-ended question in the survey. In this chapter, Vygotsky’s sociocultural theory is contextualized to analyze the effects of the U.S. sociocultural environment on Chinese international graduate students’ attitudes toward persons with intellectual disabilities.

Discussion of the Quantitative Findings

Although no major differences have been revealed on the total or sub-scale scores between the BGSU and SDU groups, the results of all the five t tests showed Chinese graduate students in the U.S. had relatively higher scores than those in China. Higher scores indicate the respondents hold more favorable attitudes toward individuals with intellectual disabilities. Therefore, the results of the study are coherent with its hypothesis which states that Chinese graduate students in the U.S. have more positive attitudes compared with those in China who have never been to the U.S. The reasons why no statistically significant differences were found from the data could be the sample size was too small or the measurement was not sufficiently sensitive. In addition to these methodological reasons, other possible factors could be a low rate of acculturation of Chinese international graduate students in the U.S. or relatively favorable attitudes of Chinese graduate students at SDU.

As stated in the literature review, due to the major differences between Chinese culture and American culture, Chinese international students in the U.S. usually experience acculturative
stress caused by lack of English proficiency, academic challenges, cultural differences, and difficulties with social adjustment. The above issues pose barriers that hinder Chinese international students from adapting to mainstream culture in the U.S., which promotes a low rate of acculturation. If the acculturation process is not successfully completed, the significance of its influence cannot be fully demonstrated in this study.

Hampton and Xiao (2009) have stated many dramatic developments on the integration of people with disabilities into Chinese society. Rapid economic growth and fundamental social changes have encouraged the establishment of thousands of rehabilitation centers which can provide assistance and services for persons with disabilities at the community level. These positive changes should influence Chinese people’s attitudes toward those with disabilities, which contributes to the increasingly favorable attitudes of Chinese graduate students. SDU is located in the capital city of Shandong province, Jinan, which is a comparatively well-developed city in China. Students there are more easily exposed to these social changes and foster a positive change of attitudes toward persons with disabilities, which may contribute to SDU students’ relatively positive attitudes toward people with intellectual disabilities. In this case, it is very likely that the differences of attitudes toward those who have intellectual disabilities between Chinese graduate students at BGSU and those at SDU are found not to be statistically significant.

T-tests on survey questions have indicated statistically significant differences by institutions (BGSU or SDU). While there are no statistically significant differences on total or sub-scale scores, statistically significant differences exist on responses to specific questions. All of the items fall into the Relationships subscale. For all those items, Chinese graduate students at BGSU were found to have relatively more favorable attitudes toward persons with intellectual disabilities than Chinese graduate students at SDU. The results reveal that when Chinese
graduate students in China consider making friends with persons with intellectual disabilities, they tend to show more concern about what others think than Chinese graduate students in the U.S. This finding is supported by the literature review on the collectivist feature of Chinese culture and the individualistic American culture. Chinese students in China possess consistent Asian values that individuals are members of a community or society, thus emphasizing interdependence and conformity with others. In contrast, Chinese graduate students in the U.S., under the influence of individualistic American culture, tend to pay less attention to what others would think of their relationship with persons with intellectual disabilities.

Discussion of the Qualitative Findings

The responses to the open-ended question indicated that the respondents from both institutions had great concerns about the quality of life and human rights of persons with intellectual disabilities. Comparatively speaking, BGSU respondents showed more favorable attitudes. A participant at BGSU stated the following:

Persons with intellectual disabilities deserve concerns from society. In current society, due to various reasons, they cannot be included smoothly into the mainstream society, but it does not mean that they have less valuable lives. We should respect them and provide them as much assistance as possible. At the same time, the government and social organizations should offer sufficient equipments and institutions to help them.

This quotation conflicts with the Chinese traditional perception of people with disabilities in that it promotes equity instead of marginalizing the disabled. One possible reason is that the respondent’s experience in the U.S. has contributed to his positive attitude.
One distinctive feature of responses from SDU participants is that they indicated their desire to know how the U.S. government treats persons with intellectual disabilities. One male stated,

In China, persons with intellectual disabilities have to rely on their caregivers who are usually their families. However, what would happen if they lost their families? Of course, society should take the responsibility to take care of them, but how? The U.S. is known as one of the countries that have relatively mature service systems for the disabled, so how does the U.S. government deal with this problem?

This respondent seemed to have concerns about the situation of the disabled in China, and at the same time, he showed eagerness to know about the situation of disabled people in the U.S. This comment indicated that he perceives the U.S. as having done a better job at integrating people with disabilities into the mainstream culture, and there must be something China can learn from the U.S. If this belief is common among Chinese graduate students, they may be more likely to adopt the perceptions and practices concerning people with disabilities when they come to the U.S.

However, negative attitudes do exist among responses to the open-ended question. Some Chinese students from SDU stated that persons with intellectual disabilities were unpredictable, strange, and even dangerous. A respondent said he was always very alert when he saw an individual who had an intellectual disability because he believed that the individual pretended to be disabled in order to hurt somebody. Another respondent stated she had a male classmate who had an intellectual disability. Some students made fun of him and sometimes beat him. Once he got hurt, he would be so angry that he beat those students even worse. This respondent said she thought this disabled student was very scary. Possible factors which contributed to these negative
attitudes could be the influence of Chinese traditional perception and the lack of knowledge about people who have intellectual disabilities. Contact with people with intellectual disabilities could be helpful for people to change these perceptions. The possible influence of contact can be demonstrated in the following example. A female BGSU subject said she used to volunteer in a community to assist people with intellectual disabilities, and she realized that these individuals were much easier to get along with than she thought they were. She stated, through that experience, her previous perception and prejudice were changed.

Contextualization of the Sociocultural Theory

The process of acculturation of Chinese international graduate students is actually a learning process by which they get to know American culture and gradually internalize some of its values. Vygotsky proposed that the learning process is a Mediated Learning Experience (MLE), and it is facilitated by three mediators: 1) material tools; 2) ‘psychological tools’ (Kozulin, 1998, p. 62); and, 3) other human beings. A detailed analysis of these three mediators will be explored in respect to this present study context.

First, when Chinese international graduate students begin to acculturate to American society, there are many material tools involved. For example, in a study conducted by Lai and Ishiyama (2004), the Chinese American subjects they interviewed always talked about their improved lifestyle. In this case, all the available resources that have made them feel their lifestyle improved served as tools for their acculturation. Those resources include things they own and things they see or hear about. Any equipment which provides access for handicapped individuals serves as a material tool, such as a sign for handicapped parking, a handicap-accessible elevator, and Braille signs posted near doorways. These material tools help newly arrived Chinese international students learn more about the environment for people with
disabilities in the U.S. Parette, Chuang, and Huer (2004) mention that abundant educational and community resources are available for people with disabilities in the U.S., and those resources also serve as material tools to mediate Chinese international students, learning about people with disabilities in American society and culture. Consequently, those material tools helped change Chinese international students’ perception of disabilities, and they feel more favorable toward those who have disabilities.

Second, according to Kozulin (1998), those material tools which have symbolic representation are called “psychological tools.” In the cross-cultural context of this paper, one typical psychological tool is language, a “higher-order symbolic mediator” (p. 63), as emphasized in Vygotsky’s theory. According to Gardiner and Kosmitzki (2008), language was proposed by Vygotsky as one of the major elements in the human developmental process. If a Chinese American can speak fluent English, the rate of his acculturation can be accelerated due to his proficiency of language as a mediator. If a Chinese American cannot speak English, then there is a deficiency of an important psychological tool because the English language cannot serve as a mediator. Instead, language becomes a barrier which separates him from American culture. As mentioned in Chapter II, although English competency is usually a prerequisite for Chinese students’ academic admission, especially at the graduate level, English still poses a hindrance to their social adaptation into U.S. mainstream culture (Ying, Han, & Wong, 2008). This will affect the rate of Chinese international students’ acculturation and possibly result in the lack of statistically significant effects in the present study.

Besides language, legislation can be another important psychological tool. U.S. legislation provides legal protection for people with disabilities (Chiang & Hadadian, 2007; Parette, Chuang, & Huer, 2004). If the laws highlight individual rights of people with disabilities, Chinese
graduate students in the U.S. are more likely to change their old schema which ignores individual rights of people with disabilities, and accept more positive attitudes about the individual benefits and development of the disabled.

The last mediator is other human beings. In this context, they include professionals, teachers, friends, and classmates of Chinese international graduate students. What these people believe will be reflected in the way they behave, which in turn, will affect the belief system of Chinese students through their interpersonal communication. For example, a respondent from BGSU stated that after seeing a young lady leading a group of people with intellectual disabilities in efforts to clean trash bins on campus, he realized that disabled people are able to contribute to society and deserve equal rights and opportunities to benefit from the society.

Vygotsky’s Zone of Proximal Development (ZPD) — the distance between a person’s actual ability and his/her potential ability is also applicable to the context of this study (See Figure 2).

![Vygotsky’s Zone of Proximal Development](http://www.parentcentredparenting.com/resources/ZPD2.gif)

Figure 2: Vygotsky’s Zone of Proximal Development (ZPD)
According to Kozulin (1998), during the process for people to develop from their actual level to their potential level, appropriate assistance and guidance are necessary. In children’s learning process, parents, teachers, or caretakers should guide their learning activities, so they may achieve a higher developmental level. In modern education, teachers who adhere to Vygotsky’s ZPD theory are encouraged to try to teach new skills before children show their readiness to develop their higher-level potential.

In the context of Chinese international students’ attitudes toward persons with intellectual disabilities, the zone that they are already familiar with is Chinese perceptions, and public attitudes toward people with intellectual disabilities in American culture are the zone into which they can potentially adapt. In order to help Chinese graduate students achieve the adaptation, professionals should serve as mediators, thus promoting more accepting attitudes and practices toward people with intellectual disabilities. This process is also referred to as “scaffolding” by Wood, Bruner, and Ross (1976). Examples of scaffolding can be a training session about people with special needs in campus orientation for Chinese graduate students, a course on the subject for Chinese students, and some required volunteer hours for Chinese students to work with people who have intellectual disabilities. Scaffolding plays a very important role in acculturation of international students, and, as Vygotsky explains, it can enhance their ability to adapt to the mainstream American culture.

The above analysis demonstrates that acculturation is not a mere process of natural cognitive development; as there are many cultural and social factors influencing its speed and direction. This influence can be positive assistance and guidance, and it can also be negative barriers and deficiency of tools. With better cultural understanding and appropriate assistance through mediation, Chinese graduate students in the U.S. can more easily adapt to the new
environment of American society, and their attitudes toward individuals with intellectual disabilities are more likely to be influenced by their experience in the U.S.

Conclusion

This section is divided into two sections. The first section summarizes the major findings of the study. The second section presents some suggestions for future researchers and implications for policy-makers.

Review of the Major Findings

In the present study, a cross-cultural approach was conducted to determine the influence of studying and living in the U.S. on Chinese international graduate students’ attitudes toward persons with intellectual disabilities. Major findings can be summarized as follows. First, there was no statistically significant difference in attitudes toward persons with intellectual disabilities between BGSU and SDU participants. This may be attributed to the low rate of Chinese international graduate students’ acculturation, due to linguistic hurdles and sharp cultural difference. Another reason might be the increasingly favorable attitudes of Chinese graduate students in China along with some positive Chinese legislative policies concerning people with disabilities. Second, statistically significant differences exist in responses to specific questions, and all the items are under the subscale of Relationships. These differences indicated that compared with Chinese graduate students in the U.S., their counterparts in China are more concerned about what others think about their relationships with persons who have intellectual disabilities. This finding seems to be consistent with the studies about the collectivism of Chinese culture and the individualism of American culture. Finally, the study analyzed the findings within the theoretical framework of Vygotsky’s sociocultural theory in terms of three mediators and the notion of ZPD. It may be effective to employ the mediators to assist
international students with their acculturation process so that they change their stereotypical thoughts about disabilities and become more accepting toward the marginalized population.

Suggestions for Future Researchers

Based on the findings of this study, it is possible to make several suggestions about future research about Chinese students’ attitudes toward people with disabilities.

First, attitudes are affected by numerous factors. The present study examined the influence of cultural factors on people’s attitudes toward the disabled, and more efforts to explore what factors may affect these attitudes is warranted. Future studies may investigate more precise and concrete factors which may affect people’s attitudes toward persons with disabilities, such as age, major, amount of knowledge about disabilities, and quality of contact with disabled people.

Second, the result of this study suggests that lack of knowledge is an issue among Chinese graduate students in China. Since publicizing more information about people with disabilities may help people change their previous perceptions about the disabled and cultivate favorable attitudes toward these often marginalized people. I would suggest that future researchers may consider exploring and assessing some programs or activities to promote Chinese students’ knowledge and awareness about individuals with disabilities.

Third, Chinese international students’ acculturation to the host culture is a gradual process that may take many years. Therefore, longitudinal research on international students’ experience of acculturation is recommended.

Finally, the present study found it fruitful to analyze the qualitative responses of the open-ended question in the survey, so future researchers investigating attitudes toward people
with disabilities may consider a qualitative approach with open-ended discussions, which helps more effectively understand the participants’ unique experiences and points of view.

*Implications for Policy-makers*

The results of the present study have implications for both policy-makers in China and those in the U.S. In the past several years, the Chinese government has made great efforts to improve educational equity and social justice. Integration of people with intellectual disabilities into regular education should be included in government policies and programs. Since Chinese graduate students will play significant roles in various areas of the society, and they are very likely to be the gatekeepers of information or services for the disabled, it is necessary to cultivate positive attitudes among graduate students in regular education. The findings of this study reveal that a lack of basic knowledge about disabilities poses a serious issue among Chinese graduate students. The study’s findings could draw attention of some deputies of the People’s Congress and these deputies could report to the National People’s Congress and appropriate decisions could be made on the problem. Therefore, while policy-makers are promoting favorable policies and programs for an inclusive education, they may also consider providing more opportunities for graduate students to have better knowledge of and awareness about persons with intellectual disabilities. For example, a course about people with special needs could be part of orientation for graduate students of all majors in China.

In the U.S., although Chinese international graduate students are experiencing the acculturation process, they may still possess consistent traditional values due to their low rate of acculturation. Their attitudes toward people with intellectual disabilities are not found to be significantly different from Chinese graduate students in China. Inclusion of those with disabilities has become common in the U.S., so Chinese international graduate students’
opportunities to have direct or indirect contact with persons with intellectual disabilities have increased. The findings of this study could aid decision making of administrators of universities or governmental departments regarding the need for Chinese graduate students to learn about people with special needs. Similar to the orientation about people with special needs provided in China, a direct and focused educational opportunity, like a workshop, could be a successful approach to promoting awareness and favorable attitudes toward persons with intellectual disabilities among Chinese international graduate students.
REFERENCES


Individuals with Disabilities Education Act Regulations, 34 C. F. R. 300. 13 et seq.

Individuals with Disabilities Education Act Regulations, 34 C. F. R. 300. 550 et seq.

Individuals with Disabilities Education Act Regulations, 34 C. F. R. 300. 551 et seq.


APPENDIX A.: BOWLING GREEN STATE UNIVERSITY –
HUMAN SUBJECTS REVIEW BOARD APPROVAL LETTER
March 1, 2010

TO: Hui Bi
   Lead. Studies

FROM: Hillary Harms, Ph.D.
       HSRB Administrator

RE: HSRB Project No.: H10T158GE7

TITLE: Chinese Graduate Students’ Attitudes toward Persons with Intellectual Disabilities: An Acculturation Approach

You have met the conditions for approval for your project involving human subjects. As of February 24, 2010, your project has been granted final approval by the Human Subjects Review Board (HSRB). This approval expires on December 21, 2010. You may begin subject recruitment and data collection.

The final approved version of the consent document(s) is attached. It is your responsibility to conduct the study as approved by the HSRB and to use only approved forms. If you seek to make any changes in your project activities or procedures (including increases in the number of participants), please send a request for modifications immediately to the HSRB via this office. Please notify me, in writing (fax: 372-6916 or email: hsrb@bgsu.edu) upon completion of your project.

Good luck with your work. Let me know if this office or the HSRB can be of assistance as your project proceeds.

Comments/Modifications:
Please put the text equivalent of the HSRB approval stamp at the ‘footer’ area of the informed consent document.

C: Dr. Patricia Kubow

Research Category: EXPEDITED #7
Dear Chinese graduate students,

I would greatly appreciate your participation in this research study titled “Chinese Graduate Students' Attitudes toward Persons with Intellectual Disabilities: An Acculturation Approach”. This study is to examine Chinese graduate students’ attitudes toward people with intellectual disabilities from an acculturation perspective. Acculturation is a process of immigrants adopting the values, beliefs, and attitudes of mainstream culture and giving up those of the heritage culture. Intellectual disability is defined as significant limitations in both intellectual functioning (learning, reasoning, and problem solving) and in adaptive behavior (conceptual skills, social skills, and practical skills). An intellectual disability originates before the age of 18.

To help me learn more about your experiences and opinions, you are being asked to complete a confidential web-based survey, which should take no more than 15-20 minutes of your time. Your completion and submission of this survey represents your consent to participate in this study.

As this is an on-line survey, I would like to assure you that your survey responses are confidential. There will be no way to identify you based on your participation in this survey. Completed surveys will be processed through the survey database, Survey Monkey. Please remember to clear your browser’s cache and page history after you submit the survey in order to protect your privacy. Access to the original data is limited to myself only. The data collected will
be kept in a password protected computer and password protected computer files during the course of this study. Any personal information that could identify the participants will be removed or changed, so that survey participants identities remain confidential. The findings of this study will be used solely for my thesis research and educational purposes, such as conference presentations and publications.

There are no more risks than those normally encountered in daily life. Your participation in this study is voluntary. You may choose not to participate or withdraw from the study at any time without penalty. Your decision to participate or not to participate will have no impact on your grades or class standing.

Very little literature exists related to this important topic, so it is hoped that the study findings will contribute to literature for researchers in the field of cross-cultural studies. The results of the study is also expected to assist consideration of a training or a course about people with special needs for international students on campus. Although there is no immediate benefits for you to complete this survey, I hope you will take this opportunity to share your perspectives on people with intellectual disabilities. If you have any questions, please feel free to contact me:

Hui Bi, Graduate Student and the Principal Investigator for the study

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Phone: 419-819-8433
Email: bihui@bgsu.edu
Or you can also contact my academic and project advisor:

Patricia K. Kubow, Professor

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If you have any concerns or questions about participant rights in this study, please call or write:

Chair, Human Subjects Review Board
Office of Research Compliance
309A University Hall
Bowling Green, OH 43403
Phone: (419)372-7716
Email: hsrb@bgsu.edu

Please note that completing the on-line survey and its electronic submission constitute your consent to participate in this study.
On-Line Survey for Chinese Graduate Students’ Attitudes toward Persons with Intellectual Disabilities: An Acculturation Approach

I. Informed Consent

II. Background Information

Please answer the following demographic information. Please click on the icon before the option you would like to choose.

1. Year of birth:

2. Gender:
   - male
   - female

3. Which institution are you in:
   - Bowling Green State University, the U. S.
   - Shandong University, China

4. Your educational level:
   - First-year graduate
   - Second-year graduate
   - Third-year graduate
   - Fourth-year graduate
   - Five-year graduate
   - Being a graduate student for more than five years

III. Experience

Intellectual disability is defined as significant limitations in both intellectual functioning (learning, reasoning, and problem solving) and in adaptive behavior (conceptual skills, social skills, and practical skills). An intellectual disability originates before the age of 18.

Please click on the icon before the option you would like to choose.
1. I have had and/or have an individual with an intellectual disability in my family.
   - Yes
   - No
   - I don’t know.

2. I have had and/or have an individual with an intellectual disability as my friends.
   - Yes
   - No
   - I don’t know.

3. I have had and/or have an individual with an intellectual disability in my school.
   - Yes
   - No
   - I don’t know.

4. I had and/or have interactions with an individual with an intellectual disability.
   - Yes
   - No
   - I don’t know.

IV. Attitudes

Intellectual disability is defined as significant limitations in both intellectual functioning (learning, reasoning, and problem solving) and in adaptive behavior (conceptual skills, social skills, and practical skills). An intellectual disability originates before the age of 18.

Please click on the icon before the option you would like to choose.

1. I think a person with an intellectual disability is very misfortunate.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

2. I feel sympathetic when I see a person with an intellectual disability.
   - Strongly agree
3. I feel helpless because I don’t know how to interact with a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

4. I feel uncomfortable with a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

5. I am afraid to look directly at a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

6. I feel uncertain about how to behave in social interactions with a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

7. I feel discomforted about my lack of a disability when I am with a person with an intellectual disability.
   - Strongly agree
   - Agree
8. I feel disgusted by a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

9. I keep myself alert when I am with a person with an intellectual disability because I am not sure what that person might do.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

10. I think a person with an intellectual disability must be a boring person.
    - Strongly agree
    - Agree
    - Not sure
    - Disagree
    - Strongly disagree

11. I CAN NOT get along really well with a person with an intellectual disability.
    - Strongly agree
    - Agree
    - Not sure
    - Disagree
    - Strongly disagree

12. I think a person with an intellectual disability is an aggressive person.
    - Strongly agree
    - Agree
    - Not sure
    - Disagree
    - Strongly disagree
13. I hate meeting a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

14. I DO NOT want a person with an intellectual disability to get to know me.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

15. I CAN NOT find anything interesting to talk about with a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

16. I think a person with an intellectual disability does NOT feel comfortable in conversations with me.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

V. **Behaviors**

Intellectual disability is defined as significant limitations in both intellectual functioning (learning, reasoning, and problem solving) and in adaptive behavior (conceptual skills, social skills, and practical skills). An intellectual disability originates before the age of 18.
1. I get up and leave when a person with an intellectual disability is nearby.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

2. I try to avoid making any contacts with a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

3. When I have to interact with a person with an intellectual disability, I try to make my contact very brief and finish interacting with him or her as quickly as possible.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

4. I find an excuse to leave a person with an intellectual disability in order to avoid further contacts with him or her.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

5. I DO NOT want to initiate any conversations with a person with an intellectual disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
VI. Relationships

Intellectual disability is defined as significant limitations in both intellectual functioning (learning, reasoning, and problem solving) and in adaptive behavior (conceptual skills, social skills, and practical skills). An intellectual disability originates before the age of 18.

Please click on the icon before the option you would like to choose.

1. I WOULD NOT make friends with a person with an intellectual disability because I feel uncomfortable that other people might stare at me.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

2. I WOULD NOT make friends with a person with an intellectual disability because I would worry what others think.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

3. I would feel embarrassed eating lunch/dinner with a person with an intellectual disability in public.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

4. I WOULD NOT have a friendship with a person with an intellectual disability.
   - Strongly agree
   - Agree
5. I would have a friendship with a person with an intellectual disability, but I **WOULD NOT** consider dating him/her.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

6. I would consider dating a person with an intellectual disability if I loved him/her, but I **DO** mind his/her disability.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

7. When dating a person with an intellectual disability, I **WOULD NOT** consider marrying him/her.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

**VII. Expectations**

Intellectual disability is defined as significant limitations in both intellectual functioning (learning, reasoning, and problem solving) and in adaptive behavior (conceptual skills, social skills, and practical skills). An intellectual disability originates before the age of 18.

Please click on the icon before the option you would like to choose.
8. I think a person with an intellectual disability would be dependent on his/her families.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

9. I believe a person with an intellectual disability CAN NOT be as successful as those without any disabilities.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly disagree

10. If you have any further information to add, such as a particular example, a situation, an interaction, attitudes or behaviors towards persons with an intellectual disability. Please include this information here. Please do NOT include any identifying information, such as your name, email address, and phone number, etc.