

# Attitudes Toward Persons with Disabilities: A Comparison of Chinese and American Students

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## ABSTRACT

Research indicates that societal attitudes toward persons with disabilities are largely negative. One approach to negative perception, the socio-cognitive model of stigmatization, states that when compared to emotional or social disabilities, attitudes toward individuals with physical disabilities are more favorable. The purpose of this study was to investigate attitudes toward different types of disabilities: congenital physical, acquired physical, and psychiatric. In particular, attitudes of American college students were compared to the attitudes of Chinese international college students in the United States. Participants completed the Attitudes Toward Persons with Disabilities Scale and a Q-sort by ranking nine cards describing individuals with varying disability types and severities according to preference. It was hypothesized that physical disabilities would be perceived more positively than psychiatric disabilities. Significant differences were found among the three disability types. It also was hypothesized that American participants would view persons with disabilities more positively overall than Chinese participants. However, the Chinese reported significantly higher scores on the ATDP scale, which corresponded with more favorable attitudes toward persons with disabilities.

## INTRODUCTION

Despite the fact that disability advocates are working to change attitudes toward persons with disabilities in the United States, public perception of such individuals is still largely negative (e.g., Pruett, Lee, Chan, Wang & Lang, 2008). Research indicates that negative attitudes interfere with the employment, self-esteem, and health care of persons with disabilities (Pruett *et al.*, 2008). This study investigated attitudes toward different types of disabilities: congenital physical, acquired physical, and psychiatric. In particular, the attitudes of American college students were compared with those of Chinese international college students at a mid-sized Midwestern university in the United States.

Attitudes are comprised of three components: affective, cognitive, and behavioral (Olson & Zanna, 1993). The affective component represents the emotional portion of an attitude, whereas the cognitive component refers to ideas, beliefs, and opinions (Antonak & Livneh, 1988). The behavioral component describes a person's willingness to interact with the subject at hand and the manner in which they do so (Cook, 1992). It is important to understand the components of attitudes since understanding attitudes should help predict behavior toward persons with disabilities. Furthermore, the relationship between attitudes and behavior is complex, and attitudes only account for a small part of behavior.

After reviewing research in the field, Grand, Bernier, & Strohmer (1982) concluded that disability attitude research can be categorized into three major areas: 1) assessing attitudes of persons without disabilities toward those with disabilities; 2) personal and demographic correlates (age, sex, occupation, etc.) of attitudes toward persons with disabilities; and 3) strategies for changing unfavorable attitudes toward persons with disabilities. Of these three areas, the first has received the most attention (e.g., Chan, Hedl, Parker, Lam, Chan, & Yu, 1988). In assessing attitudes toward persons with disabilities, most studies have either measured attitudes toward a single disability (Hartlage, Roland, & Taraba, 1971) or toward a general concept of disability (Gellman, 1959).

The concept of social stigma can be applied to a variety of groups, including those with disabilities. Social stigmatization and discrimination can cause a person with a disability to withdraw their participation in social life and ultimately lead to poor life satisfaction. In other words, the way in which society perceives such individuals affects their well-being and state of mind. This approach to stigma is called the socio-cognitive model. The model states that when compared to people with emotional or social disabilities, attitudes toward individuals with physical disabilities are more favorable (Corrigan *et al.*, 2000). The socio-cognitive model reinforces previous findings of

several studies using American participants. Harasymiw, Horne, & Lewis (1976a; 1976b) coined the term stigma hierarchy to refer to the order of preference of certain disability groups over others. Harasymiw *et al.* (1976a; 1976b) and others (e.g., Abroms & Kadera, 1979; Tringo, 1970) found that less visible disabilities (e.g., diabetes) are the most accepted, followed by visible disabilities (e.g., cerebral palsy) and disabilities involving mental functioning (e.g. depression), and that disabilities for which a person is perceived to be responsible (e.g., alcoholism) are the most stigmatized.

Corrigan's socio-cognitive model of stigmatization suggesting a stigma hierarchy can also be applied to Chinese society (broadly defined to include mainland China, Taiwan and Hong Kong). Similar to western cultures, the Taiwanese express more favorable attitudes toward physical disabilities, less favorable attitudes toward mental disabilities, and the least favorable attitudes toward social disabilities (e.g., drug addict) (Jaques, Burleigh, & Lee, 1973). More recently, Wang, Thomas, Chan, & Cheing (2003) found that Taiwanese students preferred social interactions with persons with physical disabilities over persons with mental illnesses. Moreover, Chinese students in Hong Kong gave more positive ratings to people who are physically disabled than to either cognitively delayed or emotionally disturbed individuals (Chan *et al.*, 1988).

Although a moderate amount of attitude research toward disability has been done in the U.S. and China separately, less has been done in the comparison of the two cultures. One study of Chinese, Italian, German, Greek, Arabic and Anglo Australian health practitioners found that attitudes toward persons with disabilities are more negative in collectivistic societies (China, Greece, Italian, and Arabic) than in individualistic societies (Germany and Australia), which are comparable to the United States (Westbrook *et al.*, 1993). Direct comparisons of Americans and Chinese are either dated (e.g., Jaques *et al.*, 1973) or speculative (e.g., Chan *et al.*, 1988).

The issue of cultural differences in attitudes toward disability has considerable practical implications. First of all, understanding cultural variations in attitudes toward persons with disabilities is particularly important for countries, such as the U.S., which receive large groups of immigrants from a variety of cultural backgrounds (Westbrook, Legge, & Pennay, 1993). Secondly, the cross-cultural study of attitudes toward persons with disabilities is crucial in understanding whether an attitude is universal or culturally specific. Because the majority of research on attitudes toward persons with disabilities has focused on Western industrialized populations, a considerable problem occurs when trying to generalize results to developing countries (Wang, Chan, Thomas, Lin, & Larson, 1997).

The present study investigated the influence of two factors on the perception of individuals with disabilities: (1) disability type (congenital physical disability, acquired physical disability, and psychiatric disability), and (2) nationality (American and Chinese). It was hypothesized that physical disabilities would be perceived more positively than psychiatric disabilities. Additionally, it was hypothesized that Americans would view persons with disabilities more positively overall than their Chinese counterparts. Furthermore, we explored the relative rankings of types of disabilities by nationality.

## METHOD

### *Participants*

Participants consisted of 138 college students from the University of Wisconsin-La Crosse—98 American students and 40 Chinese international students from the People's Republic of China and Taiwan. The American students were recruited voluntarily based on enrollment in various undergraduate psychology courses. The Chinese students were recruited on a volunteer basis from the English as a Second Language Institute. The sample's age ranged from 18 to over 24, including 49 men and 89 women.

### *Procedures and Materials*

Before conducting the study, all materials were translated into Mandarin Chinese by a visiting faculty member from China. Chinese participants had the option of completing the study in Mandarin Chinese or English. Respondents first filled out a demographic questionnaire that included items such as sex, age, and year in school. Participants were also asked to disclose whether they had a disability themselves and the extent to which they had personal contact with a person who has a disability. Next, participants completed the Attitudes Toward Disabled Persons (ATDP) Scale Form A, which was a reliable 6-point likert scale used to measure participants' overall attitudes toward persons with disabilities (Yuker, H. E., Block, J. R., & Young, J. H., 1966).

Following the completion of the ATDP Scale, individuals read a scenario describing a hypothetical mentoring program for persons with disabilities and completed a Q-sort. Q-sort analysis simulates real-life considerations and provides attitude scores that are more realistic, less abstract, and less tainted by social desirability. Participants were presented with 9 Q-cards with varying descriptions of persons with disabilities and asked to sort them according to personal preference for mentoring each person. Each card included a description of a 19-year old female with an IQ

of 100. Two factors—type of disability (congenital physical, acquired physical, or psychiatric) and level of severity (low, medium, or high)—varied among the cards.

## RESULTS

### *Contact with Persons with Disabilities*

Total contact with persons with disabilities was measured, and Americans had significantly more contact than the Chinese, ( $F(2,142) = 11.371, p < .001$ ). A Pearson Correlation measuring total contact was significant,  $T = -.290, p < .001$ , indicating that total contact with persons with disabilities might confound an analysis of attitudes. Therefore, the variable ‘total contact with persons with disabilities’ was used as a covariate in further analyses to ensure differences in findings were due to the attitudes of the participants, rather than the amount of contact with persons with disabilities.

### *ATDP Scale*

The scale has a baseline score of 90. A score higher than 90 indicates a more favorable attitude toward persons with disabilities; whereas, a score below 90 indicates a more negative attitude. Individual scores were summed for each nationality and analyzed. A MANOVA performed on the scores from the ATDP scale by participant revealed significant differences, ( $F(1, 125) = 36.846, p < .001$ ). Contrary to the second hypothesis, the Chinese reported significantly higher ATDP scores, which corresponded with more favorable attitudes toward persons with disabilities.

There were no significant differences for gender.

### *Q-sort*

Q-cards assigned to lower numbers received higher preference, whereas cards assigned to higher numbers received lower preference. The most preferred card was assigned “1,” and the least preferred card was assigned “9.” Mean scores (1 – 9) indicate preferences for each of the nine individual disabilities. A MANOVA performed on the set of nine disabilities was significant (Pillai’s trace  $F(9,125) = 4.638, p < .001$ ). Scheffe post hoc tests revealed that the Chinese had significantly more favorable attitudes toward the short leg ( $p = .001$ ) and cystic fibrosis ( $p = .018$ ). Americans had significantly more favorable attitudes toward depression ( $p = .001$ ). Across both participant groups, schizophrenia was the least preferred disability ( $x = 7.31$ ). Refer to Figure 1 for a summary of the specific disability results.

To investigate the statistical difference among the three types of disabilities, mean scores from each level of severity within a disability type were combined. For instance, the mean scores of the short leg (low severity), blindness (medium severity), and cystic fibrosis (high severity) were summed to form a combined Q-sort score for the congenital physical disability type. Combined Q-sort scores ranged 3 to 27. Chinese participants ranked the disability types from most to least preferred in the following order: congenital physical, acquired physical, and psychiatric. Americans ranked the disability types from most to least preferred in the following order: acquired physical, congenital physical, and psychiatric. Refer to Figure 2 for a summary of the disability type results.

Both nationalities showed higher preferences for different types of disabilities. A MANOVA performed on the three types of disabilities by participant type was significant (Pillai’s Trace  $F(3, 131) = .137, p < .001$ ). Congenital physical disabilities were most accepted by the Chinese participants ( $F(1,125) = 27.635, p < .001$ ). Psychiatric disabilities were most accepted by American participants ( $F(1,125) = 8.441, p < .0040$ ). There was no significant difference reported for acquired physical disabilities.

There were no significant differences for gender.

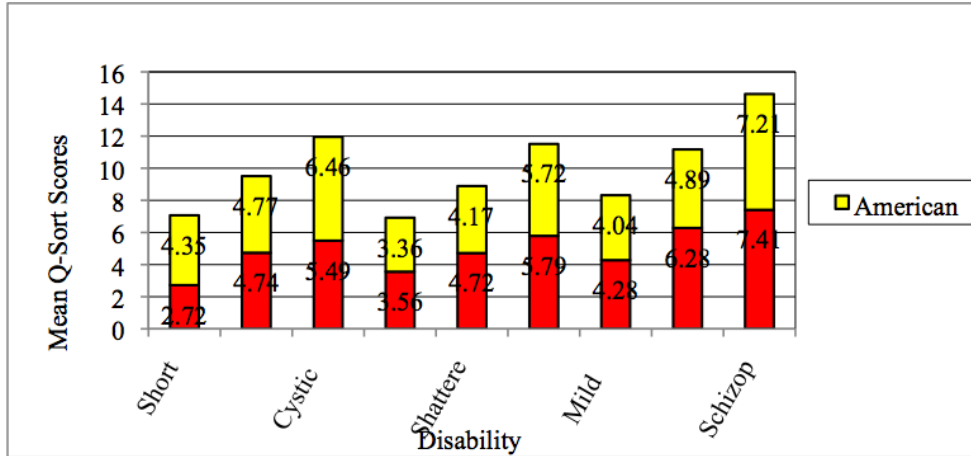


Figure 1. Mean Q-sort scores by specific disability

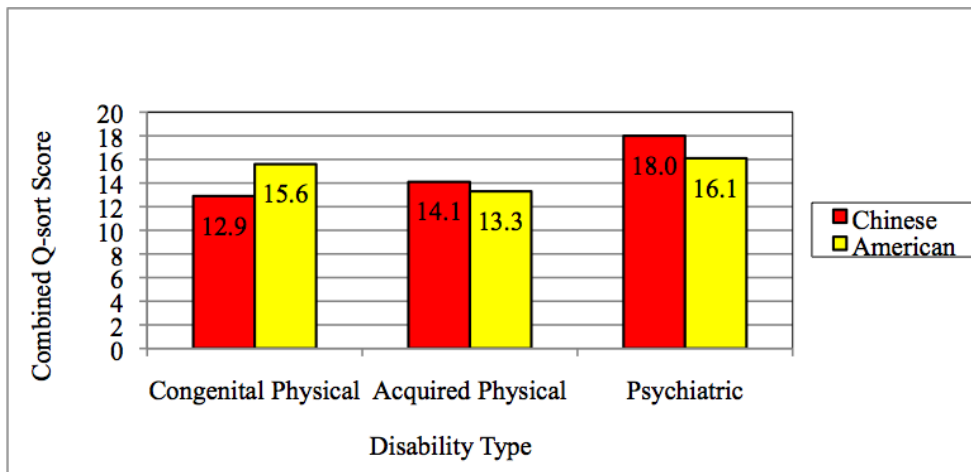


Figure 2. Combined Q-sort scores by disability type

## DISCUSSION

The results of this study indicate that the type of disability significantly affects attitudes toward persons with disabilities. The preference for mentoring people with physical disabilities (e.g. broken arm) over persons with psychiatric disabilities (e.g. schizophrenia) is consistent with the socio-cognitive model of stigmatization (Corrigan *et al.*, 2000).

The difference in Chinese and American participants' attitudes was reflected in the rankings of the nine disabilities. Depression was the only disability found to be statistically more favorable for American participants. High rates of depression in the United States may explain why its acceptance as a disability was found in the present study. In contrast, the Chinese see depression and other mental illnesses as either a character flaw or a punishment from other relatives' wrongdoings. Chinese participants rated short leg and cystic fibrosis significantly more favorable than American participants. This supplies evidence that the Chinese have a higher preference for persons with physical disabilities over those with psychiatric disabilities.

The present findings of Chinese and American preferences for persons with physical disabilities are consistent with previous research indicating more acceptance toward individuals with physical disabilities compared to those with cognitive or emotional disabilities (Chan *et al.*, 1988; Wang, Thomas, Chan, & Cheing, 2003). The Chinese preference may be explained by cultural reasons, in which persons with psychiatric disabilities are viewed as a source of shame and often kept at home, resulting in less interaction with society. The American preference may be explained by the fact that people with psychiatric disabilities are often more stigmatized and perceived to be responsible for the condition (Harasymiw *et al.*, 1976a, 1976b). The decreased interaction and stigmatization can lead to the formation of negative attitudes toward those with psychiatric disabilities (Murphy, 1995). Research

indicates that negative attitudes interfere with the employment, self-esteem, and health care of persons with disabilities (Pruett *et al.*, 2008).

However, there were some limitations to this study. The sample was not balanced by gender or nationality. Therefore, the results may be skewed in favor of female and American attitudes. Additionally, the participants were all college age students, so the findings cannot be generalized to all age groups. Furthermore, the Chinese participants had the option of completing the materials in English or Mandarin Chinese, where several Chinese participants chose to complete the materials in English. This may have affected the results due to their limited understanding of the English language.

Future research could include the study of different disability types such as cognitive or social disabilities, along with the congenital physical, acquired physical, and psychiatric disabilities. Because there is such a broad range of different disabilities, comparing these five disability types would give a more complete description of attitudes toward disabilities in general. Furthermore, a comparison of other cultures would supply a more extensive summary of global attitudes toward persons with disabilities. In diverse nations, like the United States, an understanding of different cultures' attitudes toward persons with all different disability types is essential in health care settings, workplaces, and schools.

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