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HURDLING BARRIERS

Labor and Employment Experiences of Asian Americans with Disabilities

A dissertation submitted in partial satisfaction of the  
requirements for the degree Doctor of Philosophy  
in Urban Planning

by

Peter Joseph Wong

2012

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ABSTRACT OF THE DISSERTATION

HURDLING BARRIERS

Labor and Employment Experiences of Asian Americans with Disabilities

by

Peter Joseph Wong

Doctor of Philosophy in Urban Planning

University of California, Los Angeles 2012

Professor Lois Takahashi, Chair

Asian Americans with disabilities are an invisible minority within an invisible minority. Approximately 12% of the Asian American population of 14.6 million has a disability. Unfortunately, this population has attracted very little attention in the research literature on disability policy and Asian American studies. In particular, the labor market experiences of Asian Americans with disabilities have received virtually no mention in the academic literature of immigrant labor markets and ethnic enclave economies. This is largely due to cultural, religious and language stigma associated with Asian Americans with disabilities, that people with disabilities should be kept out of the public view.

This dissertation aims to begin the identification and explanation of the challenges faced by Asian Americans with physical and developmental disabilities in their attempts to access the U.S. labor market. The dissertation starts with conceptual models delineating the challenges and

barriers Asian Americans with disabilities face in trying to find employment. The methodological approach utilized is a parallel mixed-methods design. Focus groups of English and non-English speaking Asian Americans with disabilities were conducted to gain insight into their labor market experiences. Data gathered from the focus groups was used to inform and formulate questions for the individual interview stage.

The second part is analysis of PUMS 2005 census survey data measuring the effects on employment and income, given disability, English-speaking ability, race, gender and location. The third part of the research consisted of open-ended qualitative interviews with 18 Asian Americans with disabilities to collect text data to further explain the causal relationships revealed by the focus groups and PUMS analysis.

The results of this research revealed that disability has a significant effect on labor market opportunities for Asian American with disabilities. Further, gender and English-speaking ability also have significant measurable effects. Arguably, disability, gender and English-speaking ability in combination produced the clearest results of labor market disparities.

The study concludes with recommendations for future research and implications for policy makers and practitioners. Potential audiences for this dissertation are individuals with disabilities and their families, community-based organizations, federal employment programs, work search programs, mainstream disability service organizations, legislators and planners.

This dissertation of Peter Joseph Wong is approved.

Leo Estrada

Don Nakanishi

Abel Valenzuela

Lois Takahashi, Committee Chair

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2012

## DEDICATION PAGE

First, to the Asian American men and women with disabilities I have met during this project, particularly individuals who were willing take part in the focus groups and interviews, thank you for sharing your experiences. In many ways you are the success stories because you broke through barriers to access supportive services at religious and rehabilitation organizations. My hope is that the current research into cultural barriers such as “stigma” and structural views such as the “model minority” will lay the foundation for future study including linkages to work search behaviors inside and outside of our ethnic communities. My hope is that one day society will view all people with disabilities from the standpoint not of limitations, but of possibilities.

Second, thank you to my dissertation committee members for their unwavering support. Professor Leo Estrada, who has an extensive following amongst students and policy practitioners, took valuable time from his demanding schedule to offer constructive suggestions and encouragement during the course of this project; Professor Abel Valenzuela who was my classmate at a fellowship institute at the University of Michigan; and Professor Shirley Hune, a pioneering researcher and teacher of Asian American Studies who sat on my field exam committee and encouraged me to add my research of Asian Americans with disabilities to the fabric of Asian American Studies. Unfortunately for me, Shirley was lured away along with her husband Kenyon Chan to the University of Washington and was unable to participate on my dissertation committee but I will always credit her with helping to lead me along the way. A generous thank you to Professor Don Nakanishi, the well known pioneering researcher and scholar in Asian American Studies, for graciously stepping in to fill Shirley’s vacancy on my dissertation committee.

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Wong, Peter J. "APIDC's Role in Advancing Self-Determination of Asian Americans and Pacific Islanders and Bridging the Disabilities and Non-Disabilities Communities." Plenary presentation at the 2010 Asians and Pacific Islanders with Disabilities of California Conference, Long Beach, CA, October 29th - 30th 2010.

- Wong, Peter J. and Lois M. Takahashi. "Employment Barriers for API Workers with Disabilities: Results from Long Interview Data." Poster presented at the 2009 American Public Health Association Annual Meeting Philadelphia, PA, November 7th - 11th 2009.
- Wong, Peter J. and Lois M. Takahashi. "Does Disability Affect Employment Inequities among Asian Pacific Islanders? Preliminary Results from National 2005 PUMS Data." Poster presented at the 2009 American Public Health Association Annual Meeting, Philadelphia, PA, November 7th - 11th 2009.
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- Wong, Peter J. and Lois M. Takahashi. "Asians and Pacific Islanders, Disability, and Economic/Health Disparities: Identifying the Causes of Severe Obstacles to Labor Market Participation." Poster presented at the NIH Summit: The Science of Eliminating Health Disparities, Washington D.C., December 16th -18th 2008.
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- Wong, Peter J. "Invisible Voices: Focus Group and Interview Data Related to Employment Experiences of Asian Americans with Disabilities." Panel presentation at the Society for Disability Studies, San Francisco, CA, June 9, 2005.

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## CHAPTER 1 INTRODUCTION

### 1.1 Introduction

It is a well-known but misleading fact that *in the aggregate*, Asian Americans enjoy a higher employment rate, as well as higher household and family income levels than other ethnic minorities. Closer analysis by scholars and advocates concerned with the broad generalization of the relatively invisible Asian American population provides a different analytical picture. Data disaggregated by ethnic subgroups and gender, reveal a very different picture. Broad sweeping generalizations of Asian Americans as the “model minority” have masked significant challenges faced by many Asian American communities—poverty, underemployment, lack of job mobility, lower salaries than whites of equal or less education, and the glass ceiling impeding promotion to decision-making positions. Previous studies, many conducted over a decade ago, have provided useful empirical evidence addressing questions such as the disparities of income and poverty within the Asian American population. Major themes that characterize the research include the manner in which Asians are first absorbed into the job market, job mobility, the role of native-born, foreign born and refugee status on themes, and ethnic enclave economies. However, these studies have missed a topic that has not yet been adequately addressed, which is the employment experiences of Asian Americans with physical and mental disabilities.

In many ways Asian Americans with disabilities are an invisible minority within an invisible minority. Similar to the general Asian American population, Asian Americans with disabilities are diverse in ethnicity, generation, language, culture and socioeconomic needs. Unfortunately, this population has attracted very little attention in the research literature on disability policy and Asian Americans. In particular, the labor market experiences of Asian

Americans with disabilities have received virtually no mention in the academic literature of immigrant labor markets and ethnic enclave economies. Part of the reason is that Asian Americans with disabilities are one of the most difficult populations to identify and reach. This is in large part due to cultural, religious and language barriers. There are social, cultural and religious stigmas associated with Asian Americans with disabilities, that people with disabilities should be kept out of the public view, are born as a way of punishing their families for past bad deeds, are contagious, and are a negative reflection on their families. Overlaid upon these stigmas are the language barriers found in many immigrant families.

Compounding these barriers have been beliefs held by many health and rehabilitation professionals. Many Asian health and rehabilitation professionals still practice the “medical model”, which emphasizes treatment and isolation rather than a holistic approach to empowerment and independence that is a right under Federal and state laws, including the Americans with Disabilities Act. Attitudes by non-Asian health and rehabilitation professionals have also not been particularly helpful; few understand or incorporate the cultural, social and religious stigma associated with Asians Americans with disabilities.

Why is this population an invisible population within a larger invisible population? What are the barriers preventing Asian American with disabilities from accessing rehabilitation services and job opportunities both within ethnic communities and the mainstream American community?

This dissertation is aimed to begin the identification and explanation of the challenges that Asian Americans with physical and developmental disabilities face in their attempts to access the U.S. labor market. This research aims to contribute to the policy debates of how best to assist this underserved population.

## 1.2 Research Questions

This section provides the research questions that guide the dissertation analysis.

The first research question is: **Why do Asian Americans with disabilities face greater barriers in the labor market than other groups?** The 1998-2000 California Work and Health Survey (CWHHS) reported that, if disability is considered, Asian Americans with disabilities have an employment rate of 27.4%, trailing behind disabled African Americans at 31.7% and Hispanics at 38.2% (Yelin 2002). However, these figures reported by the CWHHS on the employment rate of individuals with disabilities by race are not further disaggregated by other socio-demographic variables such as gender, English-speaking ability and residential location. In Chapters 5 and 6, disaggregation is addressed by using descriptive and multivariate regression statistical models of 2005 PUMS data, including socio-demographic variables of gender, English speaking ability and residential location.

The second research question is: **What are the causes of employment barriers for Asians Americans with disabilities?** Community-based conferences in California convened by Asians and Pacific Islanders with Disabilities of California (APIDC), in 1999, 2001, 2005 and 2010 addressed employment, health care, education and supportive issues faced by Asian Americans with disabilities.<sup>1</sup> Participants at these conferences voiced concerns about the causes of employment barriers for Asian Americans with disabilities. Many of the participants identified cultural and religious barriers, language barriers and the lack of accessible to

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<sup>1</sup> APIDC is a non-profit tax exempted organization. Government participants at the conferences included, the City of Los Angeles Department on Disability and the Los Angeles County Office of Affirmative Action Compliance; the Governor's Committee on Employment of Disabled Persons and the State Department of Rehabilitation; and the Federal EEOC. Private agencies included the Asian Pacific Counseling and Treatment Center, as well as Asian Rehabilitation Services, which provides job placement assistance to Asian Americans with disabilities.

rehabilitation services and job placement services as major culprits. Participants uniformly expressed concern about the lack of data and in-depth and scientific analyses to study the barriers to rehabilitation services and job opportunities for Asian Americans with disabilities. The conceptual model in Chapter 3 diagrams the barriers faced by Asian Americans with disabilities within the families, within their own ethnic communities and in the American mainstream. The interview data analysis in Chapter 7 provides qualitative interpretation to support the themes and concepts in Chapter 3.

### 1.3 Organization of the Dissertation

*Hurdling Barriers* is designed to serve as the first in-depth research study of Asian Americans with disabilities and the labor market in the United States that focuses on barriers to labor market access. It also aims to be a resource for researchers, policy makers and community service providers to better understand the unique challenges facing Asian Americans with disabilities.

This dissertation is organized into eight chapters. Chapter 1 is the introduction to the research project.

Chapter 2 presents a review of three areas of research to help frame the sparse academic literature that addresses Asian Americans with disabilities in the labor market. The first area focuses on disability and the labor. The second area of scholarship is closely linked to the first but is predominately focused on employment of persons with disabilities in light of policy interventions, e.g., the federal Americans with Disabilities Act (ADA), enacted in 1990. The last area of research examines Asian Americans in the labor market, with particular attention on ethnic perceptions and the model minority myth.

Chapter 3 presents a conceptual model of barriers in accessing rehabilitation services and job opportunities within their families, in their ethnic communities and the American mainstream faced by Asian Americans with disabilities. This chapter contains a conceptual framework for clarifying how cultural norms, attitudinal response, and behavior combine to create and reinforce barriers to labor market participation by Asian Americans, particularly those who are recent immigrants with disabilities.

Chapter 4 describes the mixed methods research design utilized in the subsequent three analytical chapters to address the research questions posed in this dissertation. It first summarizes quantitative empirical model specifications from the existing literature that have been used to explain variations in wages and labor market participation. The chapter next describes the PUMS 2005 dataset and the variable selection criteria and descriptive and multivariate statistical methods. Lastly, the chapter outlines the qualitative methods used to conduct and analyze 18 interviews with working age Asians with disabilities used in the qualitative analyses in Chapter 7.

Chapter 5 provides descriptive statistics of the 2005 PUMS from the Census data to assess the possible influence of disability, race, and other socio-economic variables, and residential location (in or out of metropolitan areas) on work characteristics (employment status, work history, income, and hours worked per week). These descriptive statistics (chi-squared and ANOVA tests) are used to ascertain which independent variables should be included in the multivariate models in Chapter 6.

Chapter 6 presents multivariate regression models using variables identified from Chapter 5 to ascertain the role of disability in labor force participation and wages earned. The multivariate models of each of the dependent variables were constructed and analyzed to

ascertain the particular explanatory power of disability in explaining differences in labor force participation and wage by race, gender, English speaking ability and residential location.

Chapter 7 uses semi-structured interviews conducted with 18 Asian Americans with disabilities to provide verbal text data to complement and support the conceptual model in Chapter 3. Further, the rich text data provided from the 18 interviews were also used to provide real life verbal examples of the themes and findings that emerged from the empirical analysis of PUMS 2005 data in chapters 5 and 6.

The final chapter of the dissertation presents conclusion and recommendations from the research. The conclusion section includes an integrated discussion of the conceptual model in Chapter 3, the findings from the two quantitative analyses in Chapters 5 and 6, and the findings from the qualitative analysis in Chapter 7. In addition, Chapter 8 also includes two recommendation sections resulting from the research in terms of future research stemming from these findings, and implications for practice and policy changes.



## CHAPTER 2 LITERATURE REVIEW: DISABILITIES, WORK AND ASIAN AMERICANS

### 2.1 Introduction

Three areas of research help frame the sparse academic literature that addresses Asian Americans with disabilities in the labor market. The first area focuses on disability and the labor market (Burkhauser 1982, Mashaw 1996, Bound 2002, DeLeire 2003). Central in this first area is a focus on employment trends, wage inequalities and poverty, education, and disability in combination with race and gender. The second area of scholarship is closely linked to the first but is mainly focused on employment of persons with disabilities in light of policy interventions, e.g., the federal Americans with Disabilities Act (ADA), enacted in 1990. The last area of research examines Asian Americans in the labor market with particular attention on ethnic perceptions and the model minority myth (Barringer 1993, Kitano 1973, Portes 1985, Light 1988, Osajima 1988, Ong 1993). The section also includes embryonic references the few studies from community-based conferences on Asian Americans with disabilities (Watanabe 1998, Pi 2001, Hampton 2004).

### 2.2 Disability and Work Literature

The opportunity to gain employment is one of the most significant factors affecting the life of a person with disabilities. Employment opens up the prospect of financial independence and the possibility of a rewarding career. The challenges and rewards of work, taken for granted by a large part of the population, can be daunting for people with disabilities; too often the job search is impeded by discrimination (French 2001). But other important factors such as the changing structure of the labor market and work disincentives in federal disability assistance

programs may also affect employment. This section contains a review of the literature on disability and work, including the empirical evidence concerning the disadvantages and trends faced by people with disabilities in the labor market.

### 2.2.1 Definition and Concept

To measure the employment of the working-age population with disabilities, it is first necessary to define that population. Unfortunately, unlike clearly defined attributes such as age, gender or race, the term “disability” has been used in a variety of contexts. For example, the term “disabled” has been used to refer to a person with a recognizable physiological attribute such as blindness, but the term “disabled” has also been used to refer to someone who due to a temporary injury or illness is “impaired” from working. Consequently, the population of people with disabilities is diverse, and consequently, difficult to measure.

Recent research on employment of people with disabilities comes from the economics literature where researchers’ definitions of disability frequently stem from available national representative data. In most surveys of employment and household income, health data comes from a small set of questions that elicit self-reported responses on whether a person’s health limits the kind or amount of work he or she can perform. For example, the three most important national survey data sets, the National Health Interview Survey (NHIS), the Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP), have questions to capture self-reported disabilities. As a result, the population of people with disabilities identified by each survey data sets varies slightly.

In an attempt to create a reasonable operational definition of disability from the national surveys, Burkhauser et al. (2003) suggested the following categories of disability definitions:

- Impairment: a physical or mental loss or abnormality that limits a person’s capacity to function. This population includes those who are working despite their impairments, and many who may not even report a work limitation, as well as those whose impairments, together with their social environment, lead them to report a work limitation. This category is most similar to the ADA’s broad definition of disability. Empirically, this population is defined using the National Health Interview Survey (NHIS) impairment definition, which includes the largest set of working-aged people captured in any data survey. Burkhauser et al. (2003) estimated that the disability rate from this definition is about 18% for women and 22% for men.
- Activity limitation: represents a sub-sample of people with impairments who report some type of activity limitation and whose boundary is much more likely to be affected by the social environment.<sup>2</sup> This measure of “disability” is more limited than the ADA measure in that it ignores the broader “population with disabilities” that has successfully integrated into society. Empirically, this population is defined to include all those who report a work limitation in the NHIS, CPS and SIPP. Burkhauser et al. (2003) estimated that the disability rate from this definition ranges from 6.2% to 10.9% for men and 6.7% to 11.4% for women.
- Longer-term activity limitation: persons with the most severe and long-term limitations.

The population with “longer-term activity limitation” is the most likely to be eligible for

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<sup>2</sup> This definition is the one most closely resembling the one developed by Nagi (1965, 1991) and the World Health Organization. The Nagi measure distinguishes among three states of diminished health. The first state describes the existence of a “pathology”, which is the presence of a physical or mental condition that interrupts the physical or mental process of the human body. The second level, an “impairment”, is a physical or mental loss or abnormality that limits a person’s capacity to function. The final state, “disability”, is an inability or limitation in performing roles and tasks that are socially expected.

Social Security Disability Insurance (SSDI) or Supplemental Security Income benefits (SSI) based on inability to perform any gainful employment.<sup>3</sup> Empirically, this population is defined as people who report a work limitation in both the CPS and the CPS follow-up survey one year later. Burkhauser et al. (2003) estimated that the disability rate from this definition is 5% for men and 4.9% for women.

### 2.2.2 Trends in Labor Force Participation of Persons With and Without Disabilities

Using data from the National Health Interview Survey (NHIS),<sup>4</sup> Yelin reported that labor force participation of persons with disabilities from 1970 to 1992 was tied to overall labor market dynamics, although with more pronounced swings, in both the long and the short term<sup>5</sup> (Yelin 1994a, 1994b; Yelin 1992). Between 1970 and 1992, the proportion of all working age adults, including non-disabled and disabled persons, in the labor force increased by 13.7%. For men without disabilities between the ages of 18-44 and 45-54, the labor market participation rates barely changed. However, for men without disabilities aged 55 to 64, the rate plummeted by 13.7%. In comparison, men with disabilities fared poorly at every age. Both the 18-44 and the 45-55 age groups recorded decreases of more than 13%. For older men with disabilities in the 55 to 64 age group, the rate dropped dramatically by almost 30%.

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<sup>3</sup> The 1998 Green Book published by the Committee on Ways and Means, which oversees the SSDI and SSI programs, defines disability as the inability to engage in "substantial gainful activity" by reason of a physical or mental impairment. The impairment must be medically determinable and be expected to last for not less than 12 months, or to result in death.

<sup>4</sup> The National Health Interview Survey is an annual cross-sectional survey of approximately 110,000 individuals in 40,000 households. This survey is the principal federal survey used to measure the extent and consequences of disability in the U.S. population.

<sup>5</sup> The long-term is defined as a time period that transcends economic cycle expansions and troughs. The short-term is defined as the period within the economic cycles.

In contrast, the labor force participation rate increase for women during the same period—especially younger women—benefited women with disabilities. Employment rates for non-disabled women between the ages of 18-44 and 45-54 increased dramatically by 45.5% and 39.3% respectively. Even the older cohort of non-disabled women aged 55-64 saw an increase of 16.8%. The employment rate for disabled women in the two younger cohorts showed the highest increases of 49.6% and 44.2% respectively. Women with disabilities between the ages of 55-64 realized a much more modest increase of 6%.

In the short term, persons with disabilities experienced proportionally larger gains during periods of labor market expansion than did those without disabilities, but suffered proportionally greater losses during times of contraction than did their counterparts without disabilities.

For example, during the recession period in the early 1980s, the NHIS showed a 4.5% decrease in employment for people with disabilities and a 1% decrease for people without disabilities. During the economic expansion period between 1983-1990, the labor force participation rate of people with disabilities increased by 14%, while 8.8% more people without disabilities were employed for the same period. A similar trend occurred during the 1990-92 recession period when the employment rate of people with disabilities decreased by 4.1% in comparison to the decrease of 0.8% in the employment rate of people without disabilities.

However, researchers noticed that beginning in 1990, the employment rate for working-aged adults with disabilities diverged from the general workforce trends of the past two decades (DeLeire 2000; Bound 2002). Houtenville and Daly (2003) reported that between 1989 and 2000, the employment rate of men with disabilities declined by more than 10%, from 44% in 1989 to 33.1% in 2000. The employment rate decline for women with disabilities was about half as large as the rate for men with disabilities at 5%, but was still sizeable. In comparison,

employment rates for men without disabilities fell by 1% while the rate for women without disabilities actually increased by 4.3%. The employment rate for younger men and women with disabilities fell from 57.5% to 40.9%, a drop of more than 16%. Declines in employment rates of older men and women with disabilities were more modest, dropping 3.8% for those between 45-54 years and 1.8% for those between 55-61 years. In contrast, the employment rates for all four age groups without disabilities recorded rising employment in the 1990s (Houtenville 2003).

### 2.2.3 Occupational and Industrial Structure of People with Disabilities

A useful indicator of the quality of employment of a disadvantaged group is how that group is represented in desirable occupations relative to a comparison group. The occupation a worker holds, or the industry in which someone works, can play an important role in that person's satisfaction and potential advancement in the labor market. For example, dual labor market theory suggests that some workers are relegated to undesirable low-paying jobs from which they cannot advance (Reich 1973; Doeringer 1971).

With respect to occupations, persons with disabilities are under-represented among the ranks of executive, administrators, and managers as well as among professional specialty occupations. Workers with disabilities are more heavily concentrated in service and laborer occupations with non-disabled workers more concentrated in managerial and craft occupations. Disabled workers are slightly more concentrated than non-disabled workers in the trade and service industries, which are on average lower-paying industries.

In comparison with persons without disabilities, those with disabilities are more likely to hold jobs as operators, among the highest paying blue-collar classifications albeit a sector that has been shedding jobs for close to two decades (Yelin 1992). Similarly, with respect to industries, persons with disabilities are under-represented relative to persons without disabilities

among workers in the finance, insurance and real estate (FIRE) sector, while being over-represented in another high growth sector, the business and repair services (Yelin 1996).

An examination of the distribution trend between 1981 and 2000 by Hotchkiss (2003) confirmed the general trend that Yelin found using his 1993-95 CPS data. However, beginning in 1992, the year the ADA was implemented, she noticed that the occupational disparities reported by Yelin narrowed slightly. She concluded:

“[a]nalysis found that non-disabled workers were more likely to be employed in high-growth occupations and in the highest paying occupations and industries. Consequently, concern about the disparity in distribution across occupations and industry is warranted, since non-disabled workers seem to be more concentrated in what might be considered desirable occupations and industries than are disabled workers. On the upside, there does appear to be modest movement of disabled workers into more high-paying occupations and industries since 1992.” (p. 101)

This may mean that disabled workers have been able to take advantage of opportunities not previously available, due to the legal obligations of employers to hire and accommodate persons with disabilities.

#### 2.2.4 Income and Wage Inequalities

Using data from the SIPP, Kaye (1998) found that in 1995, working men with disabilities earned on average only 72.1 percent of the amount non-disabled men earned annually. Disabled women with disabilities made 72.6 percent as much as those without disabilities. Kaye attributed part of the earning disparities to the fact that people with disabilities are more likely to hold part-time jobs and therefore have lower earnings than their non-disabled peers. Further analysis revealed that even among people employed full-time during the entire year, earning levels were

significantly lower for workers with disabilities. Median monthly income for men with work disabilities averaged \$1,880 in 1995, which was 20 percent less than the \$2,356 earned by their counterparts without disabilities (Kaye 1998).

The low earnings of people with disabilities presents a concern for policymakers and a puzzle to social scientists. One of the main concerns of the ADA is that if people with disabilities are unable to earn high wages, then they are likely to rely on government support to maintain living standards in order to avoid poverty.

#### 2.2.5. Disability and Poverty

Disability is a major cause of poverty. Bowe (1980) noted that 20% of families on welfare rolls have a head of the household who is disabled. A lower-income family member is twice as likely in any given year to become disabled as is a member of a middle-income family. More than 60% of all families living in poverty having at least a husband and wife at home include a disabled adult. Almost half of the adult disabled population are at or near the poverty level. Within the working-population of people between 16-64 years, 30% of people with work disabilities live below the poverty level, compared to 10.2% of those without work disabilities.

Yelin's (1996) analysis of 1993-95 CPS data confirmed that people with disabilities are much more likely to live in poverty. He reported that 30% of persons with disabilities reported family incomes below the poverty line and just under 45% reported family incomes below 150 percent of poverty. Persons with disabilities were 2.88 times as likely as those without to report family incomes below poverty. They were 2.26 times as likely to report family incomes between 100 to 124 percent of poverty, and 1.61 times as likely to report family income between 124 to 150 percent of poverty.



### 2.2.6 Part-time Employment

Persons with disabilities are much more likely to work part-time than persons without disabilities (Hotchkiss 2003, Kaye 1998, Yelin 1996). In his study using CPS data between 1993-95, Yelin (1996) reported that in 1993 more than a third of persons with disabilities at 34.2% worked part-time for all reasons, while fewer than a fifth of persons without disabilities, around 17.3%, worked part-time.

Yelin (1996) further divided the part-time employment into voluntary and involuntary. Voluntary part-time employment can certainly be an advantage to persons with disabilities by providing them with flexibility to work as much as their medical conditions allow. The proportion of persons with disabilities who work part-time voluntarily was 24.5% in 1993. This was more than twice as large as the proportion of persons without disabilities at 12%. However, persons with disabilities were almost twice as likely to report involuntary part-time employment at 9.4% versus 5.3% for the non-disabled. In addition, the proportion of persons with disabilities reporting involuntary part-time employment grew much faster in the last decade than the proportion of persons without disabilities (Yelin 1994b).

An analysis by Hotchkiss (2003) supported Yelin's finding that disabled workers were more likely than non-disabled workers to be employed part-time and that the disparity is growing. She estimated that having a work disability increased the probability of a worker being employed by 12 percentage points during 2000, which is double the 6 percentage point impact of a disability on being employed part-time in 1981. However, Hotchkiss' estimates diverged from Yelin's finding on the voluntary non-voluntary trends of part-time disabled workers. Hotchkiss estimated that after 1992, disabled part-time workers went from being less likely voluntarily

employed part-time to more likely.<sup>6</sup> She attributed this trend to two factors: 1) most of the growth in part-time employment was voluntary and 2) this may actually reflect the effect of the accommodation of a worker's disability as required by the ADA. Additionally, Hotchkiss also reported that the narrowing of the full-time/part-time wage differential is another indication that part-time jobs were becoming an acceptable alternative for employing disabled workers. She noted that the full-time/part-time wage differential among disabled workers was declining at a faster rate than for non-disabled workers. In 2000, full-time non-disabled workers earned 45 percent higher wages than part-time non-disabled workers, while the full-time/part-time wage differential between disabled workers was only 39 percent.

### 2.2.7 Role of Education in Employment and Earnings

Another factor identified by researchers that contributes to the poor showing of people with disabilities in the labor market is education (LaPlante et al. 1996; Yelin 1996). LaPlante et al. (1996), using 1995 CPS data, found that 82.4 percent of working-age people without disabilities had graduated from high school while only 66.7 percent of those with work disabilities had a high school diploma. They also reported that the disparity of the college graduation rate between non-disabled and disabled persons was even more striking, with 22.9% for non-disabled while disabled persons less than twice as likely to be college graduates at 9.6%. Yelin (1996) basically reported the same trend -- that people with disabilities were over-represented among the ranks of those with a high school education or less and under-represented among those with some college or more. Further, he found that in addition to lower levels of education, persons with disabilities appeared to experience lesser returns from the level of education they had than those without disabilities. For example, persons with disabilities with

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<sup>6</sup> Part of this divergence could be explained by the different period of analysis by Yelin (1981-1993) and Hotchkiss (1989-2000).

less than a high school education on average earned \$6.31 less per hour than their non-disabled counterparts. For the category with some college education, disabled persons earned roughly 40 percent less than non-disabled persons. Among those with at least some graduate school, the gap was less with the disabled worker earning 28 percent less than a non-disabled counterpart, suggesting that the income gap narrowed at higher levels of education. Accordingly to Yelin, the wage disparity among disabled and non-disabled workers with roughly the same education levels might suggest that disabled workers were facing some level of discrimination.

### 2.2.8 Wage Discrimination

The potential finding of wage discrimination against the disabled has important implications for public policy.<sup>7</sup> For example, wage discrimination may limit the success of rehabilitation efforts by reducing the disabled person's incentives to work. The disincentive effect of wage discrimination is reinforced by the benefits that many impaired persons can receive from social security disability insurance if they do not work.

Consequently, reducing wage discrimination against disabled workers could increase the number that work without lowering the benefits paid to those who are unable to work. In fact, the ADA was passed with the belief by elected officials that the disadvantages people with disabilities face in the labor market were primarily due to discrimination rather than the disabilities themselves. Therefore, whether the low wages and earnings of people with disabilities are due to discrimination, health, or other characteristics is crucial to public policy.

Measuring discrimination for disabled workers is more difficult than for other minorities because unlike race, ethnicity, or gender, an impairment may actually limit the worker's productivity. To date there have been only a handful of research papers that have attempted to

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<sup>7</sup> Discrimination occurs when persons of equal productivity are offered different wages or unequal opportunities for employment.

separate the effects of health from the effects of discrimination on the wages of people with disabilities. Johnson and Lambrinos (1985), the first published paper to estimate the extent of wage discrimination against people who are disabled, used data from the 1972 Social Security Survey of the Disabled to perform a wage decomposition between non-disabled and handicapped individuals — defined as a group of individuals with certain impairments which likely cause them to face prejudice.<sup>8</sup> They found that about 6.8 percent or 33 percent of the 44.5% wage differential between handicapped men and non-disabled men was attributable to discrimination. For women, they found a significantly higher discrimination rate of 22.7% or about 40% of 75.4% of the wage differential between the handicapped women and the non-disabled men was attributable to discrimination. They explained that a large part of the difference in wage discrimination rates between handicapped men and women was attributable to gender discrimination.

Three subsequent studies by Baldwin and Johnson in 1994, 1995 and 2000 updated and added to the Johnson and Lambrinos original analysis in 1984. In comparison to the 1984 study, Baldwin and Johnson (1994) using 1984 SIPP panel data found larger amounts of discrimination, which accounted for 15% or 47% of the 33% wage differential between handicapped and non-disabled men. Using similar 1984 SIPP data, Baldwin and Johnson (1995) found that about 40% or 66% of the 60% wage differential between handicapped women and non-disabled men was

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<sup>8</sup> According to Johnson and Lambrinos, the terms disability, impairment and handicap are often used synonymously, but there are important differences in their meanings. Impairment is a psychological, anatomical, or mental loss, or some other abnormality. Disability is any restriction on or lack (resulting from an impairment) of ability to perform an activity such as work in the manner or within the range considered normal. Handicap is a disadvantage resulting from an impairment or a disability. Therefore, an impairment subject to prejudice is a handicap, whether or not it is disabling (p. 265).

attributable to discrimination, with a significant portion of the difference accounted specifically to gender discrimination.

A more recent study by Baldwin and Johnson (2000) basically confirmed their earlier findings for disabled men. However, they also noted the decrease in the employment rate of disabled and non-disabled men was even more important than wage discrimination:

“Our comparison of differences in employment rates between disabled and non-disabled men suggest that employment is an even more important problem than wage discrimination. Only a small fraction of the large difference in employment rate are attributable to disincentives effects of wage discrimination, suggesting that the remainder is influenced by differences in employability and refusals to hire....Ultimately, the success of the labor market provisions of the ADA should be judged by their success in increasing employment rates among these workers.” (pp. 561-562)

### 2.2.9 Race and Disability

Disadvantages due to gender and race combined with disability status reduce labor force participation rates more than any one of these characteristics alone (Yelin 1994a; Yelin 2004). Much of the research on employment outcomes has focused on single characteristics such as race, gender, age, or health/disability in evaluating labor market success. However, there is evidence to suggest that the combination of compromised health or disability and these other characteristics is much more powerful than either alone. For example, Yelin (1996) reported that during 1995, disabled non-White men had significantly lower employment rates at 20.1% than White disabled men at 33.7%. This disparity was also evident in the comparison of employment between disabled non-White women at 18.1% versus disabled White women at 28.6%. Similarly, Bound et al. (1996) reported that poor health or disability status had a substantial

greater impact on the employment of African Americans than Whites and accounted for much of the employment rate difference between the two races. Overall, they found that African Americans in poor health were more likely to leave the workforce than Whites in poor health.

More recently, Yelin and Trupin (2002) in their study of California provided more detailed racial and ethnic breakdowns for disabled and non-disabled employment rates. They reported that during 1999 and 2000, 42.6% of the people with disabilities in California were employed, compared to 73.2% of non-disabled Californians. African Americans, Hispanics and Asian Americans with disabilities had lower employment rates in comparison with the population as a whole. Further, minorities in California had especially low employment rates relative to non-disabled persons of their own racial/ethnic group. The employment rate for African Americans with disabilities was 31.7% compared to non-disabled African Americans at 69.9%. Hispanics with disabilities at 38.2% recorded a slightly higher employment rate than their disabled African American counterparts but significantly trailed the employment rate of non-disabled Hispanics at 68.5%. Asian Americans with disabilities at 27.4% were roughly a third as likely to be employed as non-disabled Asian Americans at 74.4%.

Further, persons with poor health and low employment rates are at a disadvantage in preventing the onset of disability. They have less wealth at their disposal and are less able to secure either health care or job retraining. As a result, these persons with disabilities enter a cycle of low income, lack of financial resources for further education, poor health and unemployment. This cycle is more pernicious for persons or racial/ethnic minority status (Smart 1997).

### 2.2.10 Women and Disability

Studies of disabilities have noted that gender discrimination is greater for women with disabilities than for non-disabled women. The literature provides two rationales for these assertions: 1) a visible impairment is more disabling for women than for men because society emphasizes physical beauty for women (Hahn 1987); and 2) an impairment interferes with women's traditional role as caretakers and supporters of men (Fine 1988).

The first empirical study of discrimination against persons with disabilities showed that women with disabilities were subject to both disability and gender discrimination (Johnson 1985). Baldwin and Johnson (1995), using updated data, confirmed and added to Johnson's (1985) study, and found that women with disabilities were paid less than 85 percent of the wages offered to men with disabilities and only 60 percent of the wages offered to non-disabled men. They concluded that the total burden of discrimination faced by women with disabilities was largely due to the combination of disability and gender-related discrimination.

Non-White women with disabilities may in fact be prone to three levels of discriminatory effects. As Yelin (1996) showed in his analysis of labor force participation rates, non-White women with disabilities fared the worst overall, with an employment rate of 18.1% compared to non-White men with disabilities at 20.1%, White women with disabilities at 28.6%, and White men with disabilities at 33.7%.

### 2.3 History of Disability Legislation in the United States

Prior to the 1970s, disability was defined in predominantly medical terms as a chronic functional incapacity presumed to result from a physical or mental impairment. This "medical model" presumed that the primary problem faced by people with disabilities was the incapacity

to work (Scotch 2000). Government's role was to financially support citizens who could not do so through no fault of their own, and to help repair and rehabilitate their "damaged bodies and minds" (Scotch 2000).

In 1973, a major paradigm shift occurred in national policy on disability from the "medical model" to the "social model". Under the "social model," disability was seen as resulting not from an impairment per se, but from the interaction between the impairment and the surrounding structural and attitudinal environment. In other words, the environment—combined with the impairment—resulted in a societal evaluation labeling the person as disabled. As such, the consequences of physical and mental impairment for social participation were shaped by the expectations and attitudes of the larger society, often resulting in barriers for those who do not conform to expectations (Scotch 2000). Additionally, people with disabilities were regarded as a minority group that may be subject to unfair discrimination, and the role of government was deemed to be to protect the group's civil rights for political, economic, and social participation.

In 1990, the Americans with Disabilities Act (ADA) extended civil rights protections to physically and mentally disabled persons, by mandating that businesses modify jobs, facilities, programs and policies to ensure equal access and opportunity (Weaver 1991). The ADA has sparked considerable debate, with critics arguing that due to the costs associated with ADA compliance, the employment opportunities for people with disabilities has decreased (DeLeire 2003; Acemoglu 2001). Other researchers have countered that by controlling for the dramatic rise in the rate of people who are severely impaired and therefore cannot work, opportunities for people with disabilities who want to work actually improved during the 1990s (Kaye 2003, Kruse 2003).



### 2.3.1 Disability Legislation in the U.S. Prior to the American with Disabilities Act (ADA)

The federal government's role in providing services for the disabled became more formalized and took on greater importance after World War I, during the Great Depression, then after World War II. However, federal concerns with disabled persons began during the early days of the nation, mostly addressed at provision of health services. In 1798, in response to concerns about maintaining a strong merchant marine, President John Adams signed legislation for treating disabled sailors at a marine hospital in Boston.<sup>9</sup>

In the early 1900s, as the country was transforming into an urban industrial society, two new initiatives were developed to address disabilities caused by injuries resulted from the increasing industrial work: workers' compensation and vocational rehabilitation.

#### 2.3.1.1 Smith Fess Act of 1920

The Smith Fess Act of 1920 authorized services for physically handicapped persons, including vocational training, job placement, and counseling. These services were to be provided by state departments of education, with half of the cost assumed by the federal government. The Smith Fess Act expanded on two laws passed in 1916 and 1917. The first, the National Defense Act of 1916, provided for vocational education and training for the Armed Forces. The 1917 Smith-Hughes Act created vocational training programs for youth migrating from rural to urban areas.

The 1920 Smith Fess Act provided an annual one million dollar appropriation to be matched on a fifty-fifty basis by the states. Rehabilitation clients were to be at least sixteen years of age, and their disability had to be such that they had the potential for gainful employment.

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<sup>9</sup> Beginning in the 1830s, the Boston hospital was supplemented by hospitals in ports on the Great Lakes and Ohio and Mississippi River systems (Scotch 1984). The Marine Hospital Service, which operated the Boston and similar facilities, was later renamed as the federal agency known as the Public Health Service.

Within a year and a half after the enactment of the Act, thirty-four states had passed laws creating state vocational rehabilitation units.

#### 2.3.1.2 Barden-LaFollette (VR) Act of 1943 and the (VR) Amendments of 1954

The next major change in vocational rehabilitation programs took place in 1943, as part of the overall war effort in the civilian sector. The 1943 Act provided federal funds for medical and reconstructive services that had not previously been provided under vocational rehabilitation. Significantly, the Act also defined disability for the first time to include the mentally ill or mentally retarded individuals. Through the Act, Congress sought to channel disabled workers into war production and to develop comprehensive services for disabled civilians, with an eye toward assisting the reentry of disabled military personnel into the civilian workforce.

Vocational rehabilitation had evolved from simple vocational guidance for physically disabled persons to a wide range of services whose purpose was to integrate disabled persons into the economic mainstream. In recognition of this change, the vocational rehabilitation program was taken out of the Office of Education and became a separate office within the Federal Security Agency known as the Office of Vocational Rehabilitation (OVR). Later, in 1953, OVR was made part of the new Department of Health, Education and Welfare.

Amendments to the Vocational Rehabilitation Act in 1954 provided \$30 million in grants to the states, and funds for numerous purposes, including training of medical and rehabilitation professionals, research and development in rehabilitative medicine and rehabilitative engineering, and the development of in-service training programs for rehabilitation workers. Another important component of the 1954 Act was the creation of separate state departments of vocational rehabilitation outside of state education agencies.

### 2.3.1.3 Section 504 of the Rehabilitation Act of 1973: Marching Towards Civil Rights

The Rehabilitation Act of 1973 provided for the continuation of the vocational rehabilitation program first established by the Smith-Fess Act of 1920. At first glance, the new legislation simply authorized additional funding for existing programs and provided for new services to assist people with disabilities. However, the legislation contained a Section 504, which consists of one sentence:

“No otherwise handicapped individual in the United States, shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

At the time of its inclusion and throughout the consideration of the Rehabilitation Act by Congress, no one took particular note of the section.<sup>10</sup> Further, the authors of Act apparently viewed Section 504 as a routine non-controversial inclusion about equal access with no significant commitment of federal authority or expenditure. The Congressional Record reflected no public debate on the provision, and the lengthy House and Senate reports on the legislation refer only briefly to Section 504. The final report did not include any estimated costs for the implementation of Section 504, which indicated that the bill's authors expected that it would not entail any federal spending. This would change. Within a few years, Section 504 would become landmark legislation, bearing tremendous costs and benefits.

When Section 504 of the Rehabilitation Act of 1973 became law, it was not clear how this statement of nondiscrimination was to be translated into government policy and put into

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<sup>10</sup> Section 504 was unlike other social movements in which concerted lobbying by citizen advocates has resulted in legislation. Instead, the legislation was spontaneously introduced by a group of Senate aides who recognized an opportunity in a fairly standard piece of legislation to promote the increased participation of people with disabilities in the workplace.

effect. Responsibility for the section's implementation was assigned to the Department of Health, Education and Welfare (HEW) Office for Civil Rights, an agency whose staff was strongly committed to governmental activism and social change.<sup>11</sup> As a result of this assignment, Section 504 ended up going beyond simply an expression of support for people with disabilities and evolved into the basis for a far-reaching regulatory agenda.

In contrast to its original non-controversial inclusion, the regulations for implementing Section 504 were highly controversial. The first regulation, for programs funded by the Department of Health, Education and Welfare, was not issued until four years after passage of the law, and then only after a change of Presidential administration and sit-ins in the federal office buildings in Washington D.C. and San Francisco (Scotch 1984). Further, Section 504 regulations for programs funded by other federal departments were not published for several more years. Scotch (1984) attributed the implementation delay to the lack of participation of the disability groups or the recipient groups in the adoption of Section 504. For the most part these constituencies were not even aware of its existence at the time. However by the spring of 1976, disability activists began demanding immediate publication of the draft regulations without any weakening of its provisions. Scotch concluded:

“...[although] it would be going too far to say that Section 504 created the disability rights movement of the 1970s, but the existence of Section 504 did strengthen existing national and local organizations and contributed to the development of new ones.... the

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<sup>11</sup> The African American civil rights movement of the 1960s made powerful emotional demands for greater participation in white-dominated social institutions, and contributed to the momentum for those advocating greater access by many groups, including people with disabilities. By 1972, concerns about permitting greater participation by disabled people in social institutions had been building among those involved with the disability rights movement, as well as those involved with vocational rehabilitation programs.

adoption and implementation of Section 504 contributed to the growth of advocacy organization representing disabled people and help to orient them toward civil rights issues...Section 504 became a focal point for organizing among disabled people. The social movement of disabled people became better organized and more broadly based as the result of federal civil right activities. Even many established organizations with strong membership bases, such as those representing blind and deaf people,<sup>12</sup> gained significantly from participation in activities related to Section 504.” (p. 151)

One leading disability activist wrote that Section 504 was historic in its scope and depth, the single most important civil rights provision ever enacted on behalf of citizens with disabilities in this country (Bowe 1978). Scotch (1984) hailed it as the first major civil rights legislation for disabled people. Unlike earlier legislation that provided or extended benefits to disabled persons, it establishes full social participation as a civil right and represents a transformation of federal disability policy. In fact, Section 504 marked a transformational shift of federal policy that culminated in the enactment of the ADA almost two-decades later.

### 2.3.2 The American with Disabilities Act (ADA)

The passage of the American with Disabilities Act (ADA) of 1990 continued the civil rights movement begun with Section 504. Not limited to programs funded by the federal government, the ADA affirmatively requires employers, and as a result, society, to consider the full integration of people with disabilities into the workforce. The case for the ADA was based on two premises: first, the path to economic independence for people with disabilities is through

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<sup>12</sup> Until 1974, there had been little or no attempt by disability organizations to join together in attempts to influence public policy. For years several groups with active organizations, notably the blind people, deaf people, and disabled veterans, had sought to influence federal legislation, but they had not tried to affiliate or build coalitions in any formal way.

work, and second, the social environment is a more powerful factor in determining employment outcomes of disabled people than an individual's impairment (Acemoglu 2001).

As explained previously, in contrast to the old “medical model” where disability is conceptually located within the disabled individual, the new "social model" approaches disability as resulting not from the impairment per se, but from an interaction between the impairment and the surrounding structural and attitudinal environment (Krieger 2000). The ADA, premised on the “social model”, looks at the disability and the structural and attitudinal environment with the goal of increasing the employment of people with disabilities. On a structural environment level, it mandates that employers attempt to provide what are known as “reasonable accommodations”<sup>13</sup>, e.g., physical changes at the worksite such as assistive equipment that allows the hearing impaired to perform their jobs, as well as functional changes such as allowing a disabled employee to change his work hours to attend regularly scheduled medical appointments. Further, the ADA mandates that an employer shall not discriminate against disabled workers (Stapleton 2003).

The United States House of Representatives voted in the summer of 1990 377 to 28 in favor of the ADA. The vote in the Senate of 91 to 6 was equally overwhelming.

The overriding purpose of the ADA is to provide civil rights to the 43 million Americans with disabilities who have been unable to access communities and with the same ease as their peers without disabilities. In fact, some in the disabled community have hailed the ADA as the Magna Carta for disability rights (Wehman 1993).

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<sup>13</sup> The term “reasonable” refers to fact that the employer is not required to implement environmental changes which would impose an undue hardship, taking into account factors such as the size of the workforce, the type of business, and the size of the employer’s budget, and the job requirements.

### 2.3.2.1 Brief Description of the ADA

The ADA is comprised of five titles, two which are relevant in the employment context, Titles I and II.<sup>14</sup> Title I of the ADA states that an employer, employment agency, labor organization, or joint labor-management committee may not discriminate against any qualified individual with a disability with regard to any term, condition, or privilege or employment (Wehman 1993). Under Title I:

- Employers may not discriminate against a person with a disability in hiring or promotion if the individual is otherwise qualified to perform the job. The prohibition against discrimination applies to any term, condition or privilege of employment.
- Employers may ask about a job applicant's ability to perform a job, but cannot inquire if a person has a disability or require a person to take tests that tend to screen out persons with disabilities.
- Employers are required to provide "reasonable accommodation" to individuals with disabilities, i.e., making existing facilities used by employees readily accessible to and usable by individuals with disabilities. Reasonable accommodation may include job restructuring, part or modified work schedules, reassignment to a vacant position, acquisition or modification of equipment or devices, and adjustment of training materials; the reasonable accommodation requirement does not impose a duty for an employer to impose any changes for which an undue burden would result. The employer is required to engage in good faith discussions with a disabled employee to

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<sup>14</sup> The ADA has five titles. In addition to Titles I and II, Title III applies to public accommodations, Title IV is captioned "Telecommunications", and Title V is captioned "Miscellaneous Provisions".

find ways to accommodate the employee's disabilities; this is known as the good faith interactive process.

Title I clearly embodies the overarching goals of the ADA by requiring employers look beyond the physical or mental disabilities of applicants and employees; instead, employers must look to the abilities and willingness of the individual to perform the specific job. In determining the abilities of the applicant or employee to perform the job, the employer must utilize selection criteria that are job-related and consistent with business necessity (Rubenstein 1993).

Title II of the ADA addresses public services provided by state and local governments, including public transportation. The first part, relating to public services, fills in the gaps that were left open by Section 504, which as previously described prohibits discrimination by entities receiving federal financial assistance. Title II is more sweeping than Section 504 by specifying that no department, agency, special purpose districts, or other instrumentality of a state or local government may discriminate against a qualified person with a disability. In other words, Section 504 of the Rehabilitation Act addresses the problem of discrimination through the use of federal funds; the ADA is applicable regardless of whether the covered entity receives or benefits from federal funds (Wehman 1993).

Title II's public service obligation requires reasonable modification of rules, policies, or practices, the removal of architectural, communication, or transportation barriers, and the provision of auxiliary aids and services.<sup>15</sup> For example, in transportation services, new public transit buses must be accessible to individuals with disabilities. If existing buses are not accessible, transit authorities must provide comparable para-transit or other special transportation

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<sup>15</sup> Although this title uses the phrase "reasonable modification" rather than "reasonable accommodation", the two terms have similar meanings (Rubenstein 1993).



services to individuals with disabilities who cannot use fixed-route bus services. The legislation exempts transit authorities that can demonstrate corrective action would result in an undue financial and administrative burden.

A similar access rule applies to programs, including employment and training services. The public agency is required to find a method to ensure that individuals with disabilities receive the benefits or services provided by the public entity unless the agency can demonstrate in writing that the modification would result in a fundamental alteration in the nature of the service, program, or activity or in undue financial and administrative burdens (Rubenstein 1993).

### 2.3.3 Definitions, Critique and Enforcement of the ADA

In order for the provisions of Title I to be triggered:

- a) The person must have a disability with a physical or mental impairment that substantially limits one or more of that individual's major life activities.<sup>16</sup> An impairment is only considered to substantially limit the ability of a person if it significantly restricts the ability to perform a class or range of jobs. Environmental, cultural, or economic disadvantages are not considered impairments (Wehman 1993).
- b) There is a record of such an impairment. The ADA protects persons who have recovered from a disabling condition and persons who have been misclassified as having such a condition.
- c) Being regarded as having such an impairment. The ADA protects a person whose condition does not substantially limit his major life activities, but whose employer has regarded the person as having such an impairment. For example, this may include

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<sup>16</sup> “Major life activity” includes working and doing activities that are of central importance to most people’s daily lives, such as the ability to perform household chores, bathe or tend to personal hygiene.

persons who are burn victims, who have controllable diabetes or epilepsy, whose back X-ray shows an abnormality although no symptoms are present, and those who are asymptomatic HIV, or have a genetic predisposition towards a particular illness.

Thus, the ADA covers physical or developmental disabilities, and mental disabilities. Its definition of disability had been drawn broadly to cover not only those traditionally considered disabled such as individuals who were blind, or deaf, or used wheelchairs, but also people who had stigmatizing medical conditions such as diabetes and epilepsy. It covers not only people who are currently disabled, but those who have a record of disability, such as cancer survivors, who employers might be unwilling to hire for fear of increased medical insurance costs or future incapacity, and those perceived as having an impairment (Krieger 2000). These three definitions are very important aspects of the ADA and employment insofar as they establish a broad set of protections for as many people with disabilities as possible.

#### 2.3.3.1 Critique of the ADA

Critics of the ADA emerged immediately after its passage. In a 1991 book, several argued that adapting the workplace for the disabled could become expensive, and ADA related litigation could lead to significant negative employment effects (Weaver 1991, Oi 1991, Rosen 1991). To critics, the ADA was a case of ill-considered social engineering in which an overly broad category of putative victims could claim unreasonable accommodations from society. For example, Weaver (1991) noted the ambiguities within the law's provision that causes difficulties in determining who falls into the ADA's definition of disabled. She questioned the ADA's definition of disability as a physical or mental condition that substantially limits a "major life activity" as too vague and not administrable. These ambiguities are subject to varied interpretations by courts, policymakers, employers, and person with disabilities.

Critics also questioned the ADA's anti-discrimination reasonable accommodation approach as costly and inefficient and are likely to have undesirable distributional consequences (Weaver 1991). Instead, people with disabilities ought to adapt themselves to productivity demands set in the marketplace and that the efficiency concerns of firms should outweigh claims of disabled applicants despite any social costs that might be generated for society at large (Oi 1991).

Finally, critics were also concerned with the moral legitimacy of claims made by individuals with disabilities on employers and public officials. In particular, they were concerned that "un-deserving" people might benefit from public programs. For example, Dick Arney, Republican House Majority Leader in the 1990s, called the ADA "a disaster," predicting that, "Under my majority leadership, the disabilities act will be revisited and will be written properly so its focus and intent goes to people with genuine disabilities" (Vobejda 1995).

The argument about benefiting undeserving people has been successfully deployed in the debate on welfare recipients and resulted in the passage of the 1996 welfare reform legislation. It is much harder to apply the "un-deserving argument" to disabled individuals. In fact, Scotch (2000) concluded that despite some high-profile grumbling from political conservatives, the ADA appears to be in fairly good shape because there is still a reservoir of goodwill in larger society toward the concepts underlying the ADA and toward protecting people with disabilities from discrimination and unfair treatment.

#### 2.3.3.2 Enforcement of ADA Employment Provisions

Enforcement of ADA provisions is left to the Equal Employment and Opportunity Commission (EEOC) and the courts. Disabled employees or job applicants who believe that they have been discriminated against can file a charge with the EEOC, which will investigate and

in some instances try to resolve the charge or sue in court. If the EEOC decides not to sue on behalf of the charging party, if the EEOC determines that no discrimination occurred, or if the complainant requests from the EEOC a letter of permission to file a private lawsuit, the charging party is free to litigate at his or her own expense. The ADA provides for remedies that include hiring, reinstatement, promotion, back pay, and reasonable accommodation and for payment of attorney's fees, expert witness fees and court costs (Acemoglu 2001).

Between July of 1992 to September of 1997, the EEOC received 90,803 ADA charges. This figure excludes about 65,000 discrimination charges filed with state Fair Employment Practice (FEP) agencies with which the EEOC has work-sharing agreements. Of the claims filed directly with the EEOC, 29 percent mentioned "failure to provide accommodation," and 9.4 percent pertained to discrimination at the hiring stage. The majority of charges, 62.9 percent, pertained to wrongful termination (Acemoglu 2001).

#### 2.3.3.3 The California Fair Employment and Housing Act (FEHA)

In addition to the ADA, many states also have anti-discrimination laws dealing with disability and employment. Some state laws are quite similar to the provisions of the ADA, while others lack the accommodation requirement or do not cover mental health impairments. In California, "disabilities" has been broadly defined to be more inclusive than the federal legislation. Known as FEHA, the state's Fair Employment and Housing Act has provided applicants and employees with disabilities another avenue of legal recourse. Originally enacted in 1980, FEHA was principally aimed at physical disabilities, and then in 1992 the Act was amended to add mental disabilities. FEHA has since been amended in 2001 to reflect additional important changes (Kadue 2003).

The FEHA amendment affords a very broad definition of “disability” under which more employees could qualify than under the ADA; whereas under the ADA the impairment must substantially limit a major life activity; under FEHA, an impairment need only “limit” a major life activity. Impairments amount to disabilities under FEHA even if their limit on a major life activity is mitigated or corrected with medications or devices. The FEHA makes an employer prove whether the employee has the ability to perform the essential job functions (rather than the employee), and an individual’s inability to do a particular job is sufficient to qualify as a limit on the major life activity of “working”, compared to the ADA, in which the employee must be unable to do a broad class of jobs in order to be considered substantially limited in the major life activity of “working”. Finally, under the FEHA, there are no statutory caps on the amount of an award available through a jury verdict, compared to the ADA.

#### 2.4 Asian Americans and the Labor Market

*In the aggregate*, Asian Americans enjoy a higher employment rate, and higher household and family income levels than other ethnic minorities.<sup>17</sup> But this broad generalization masks serious challenges faced by Asian Americans, including poverty, underemployment, lack of job mobility, lower salaries than Whites of equal or less education, and the glass ceiling impeding promotion to decision-making positions (Lee 1996). Close analysis of the multi-faceted Asian American community dispels the myth that Asian Americans are the “model minority”.

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<sup>17</sup> For the most part, the high employment level among Asian Americans is because both husbands and wives tend to work due to economic need and a general refusal to accept public assistance (Fong, 2002).

### 2.4.1 Lower Returns on Educational Attainment

Proponents of the “model minority” thesis often point to aggregate income data to argue that Asian Americans are outperforming other Americans. However, using annual and hourly earnings data, Ong and Hee (1993) found that despite higher overall education levels, the average hourly wage for Asian American males was \$15.40 compared to \$15.90 for White males. Barringer, Gardner and Levin (1993) reported that after controlling for a number of factors, Whites earned more than Asian Americans in almost all occupational categories.<sup>18</sup>

### 2.4.2 Glass Ceiling

The "glass ceiling", that invisible but impenetrable barrier for qualified women and people of color to move upward into executive managerial ranks (Federal Glass Ceiling Commission 1995), is particularly vexing to Asian Americans. This is so because of the erroneous general perception that Asian Americans do not face the glass ceiling due to their high education levels and high household incomes.

Friedman and Krackhardt (1997) found lower returns to education and career potential based on managers’ assessment for Chinese and Asian Indians compared to Whites. The researchers also discovered that education translated into social connections only for Whites. Xin (1997) conducted two surveys, one with Asians managers and their supervisors, the second with White managers and their supervisors. She found that Asian Americans tend to focus almost exclusively on their job tasks, with little attention to promoting themselves and developing positive social relationships with co-workers and supervisors, creating an “impression gap” that leads to lower career mobility for Asian Americans.

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<sup>18</sup> This pattern does not hold at all socio-economic class groups. For example, Barringer, et al. (1993) found that self-employed Asian professionals had higher incomes than that of similar Whites.

### 2.4.3 Income and Poverty

Income and poverty are also potential problems masked by using aggregate data.<sup>19</sup> The 1999 median income for the Asian American households was \$51,205, compared to the national median household income at \$40,816, Whites at \$42,504, African Americans at \$27,910 and Hispanics at \$30,735. However, significant variations exist among Asian Americans. In 1990, Japanese Americans had the highest median family income of \$51,550, but Hmong Americans had a median family income of \$14,327 (Fong 2002).

In comparison to other racial/ethnic groups, Asian Americans have lower poverty levels. In 2003, the poverty rate for Asian Americans was 11.8%, 22.5% for Hispanics, and 24.7% for African Americans.<sup>20</sup> However, again these aggregate figures for Asian Americans are misleading; Ong and Hee (1994) reported that in 1990, the highest poverty rates (25%) were experienced by Southeast Asian refugees such as Vietnamese compared to Japanese and Chinese populations at 7% and 14% respectively.

### 2.4.4 Ethnic Enclaves/Economy Labor Market Theories

The influx of post-1965 Asian and Latino immigrants challenged the traditional conceptual models of labor market participation, which largely emphasize structural or competitive labor market conditions. The premise is that immigration is a social process facilitated by informal ethnic-based networks which foster the conditions and the resources necessary for socioeconomic integration through the formation of occupational niches and immigrant enclaves in the host country (Hum 1997).

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<sup>19</sup> Chapter 8 of Barringer, Gardner and Levin (1993).

<sup>20</sup> It should be noted that 11.8 percent represented in 2003 1.4 million Asian Americans living in poverty.

Portes and Bach (1985), in their groundbreaking work of Cuban immigrants in Miami during the 1970s, noted the importance of Cuban business owners as employers for new arrivals. The ethnic enclave economy literature proposes that small, immigrant-owned firms, which employ workers of the same ethnicity, constitute a distinct labor market segment that shares characteristics of both the secondary and primary labor markets. Further, ethnic employer and employee relationships are mutually beneficial. Immigrant entrepreneurs use ethnic solidarity to persuade workers to accept exploitative conditions, but they are, in turn, bonded by mutual obligation (Hum 1997).

Although the evidence on the benefits of ethnic enclaves is mixed, even proponents of the ethnic enclave/economy acknowledge that benefits of enclaves are not evenly shared within the enclave. Zhou (1992) found that although male enclave workers showed positive earnings from education investment, previous labor market experiences and English language ability, these same human capital variables did not appear to have any impact on the earnings of female enclave workers. Absent from this literature is discussion of how the disabled population fares in these ethnic enclave economies.

#### 2.4.5 Asian Americans with Disabilities in the Labor Market

Recent research on employment outcomes suggests that disability in combination with other characteristics such as race, gender or age has a much more powerful effect on outcomes than any one of these characteristics alone (Yelin 2004). Bound, Schoenbaum and Waidmann (1996) using Health and Retirement survey data, found that health has a substantially greater impact on the employment of Blacks than Whites, and accounted for much of the differences in employment participation rates for men from these two racial groups. Preliminary information suggests that if health factors such as disability are considered, Asian Americans with



disabilities, who have an employment rate of 27.4%, trail behind disabled African Americans at 31.7% and Hispanics at 38.2% (Yelin 2002). In comparison, non-disabled Asian Americans in the aggregate are outperforming all other ethnic groups in labor market participation.

Some recent efforts have been undertaken to address the employment issues facing disabled Asian Americans. Asian and Pacific Islanders with Disabilities of California, which began as an informal coalition of government and private agencies and institutions, then incorporated as a non-profit organization, has convened statewide conferences since 1999<sup>21</sup> to identify the most pressing barriers impeding employment of this subgroup of Asian Americans. One of the key findings from these conferences is the lack of data and knowledge about Asian Americans with disabilities at nearly every level of government (Pi 2001). Disabled Asian Americans and access to employment have attracted little attention among labor market scholars, and consequently, there is minimal data on this population.

## 2.5 Gaps in the Literature

Little is known about the employment barriers faced by Asian Americans with physical and developmental disabilities. Besides general demographic information gathered by the U.S. Census, very little data are available on Asian Americans with disabilities and even less available on recent Asian immigrants with disabilities. Of the 1.9 million working age people sampled in the 2005 Census Bureau mid-year survey (PUMS), only 274 were non-English speaking disabled Asian Americans.

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<sup>21</sup> Since the first conference convened by APIDC during 1999 in Los Angeles, conferences have been held during 2001 in Oakland, CA, during 2005 in Garden Grove, CA, and during 2010 in Long Beach, CA. The next conference is scheduled for San Francisco in 2013. APIDC was formed due to information and service gaps between rehabilitation service providers and the Asian American communities.

Several challenges have contributed to the lack of scholarly knowledge on labor market access of Asian Americans with disabilities. First, the use of aggregate data and resultant “model minority” misperception by mainstream society thesis has resulted in little interest in data collection and understanding of the problems and issues facing disabled Asian Americans (Pi 2001). Second, the ethnic, language and cultural diversity within the Asian American population compounds the difficulties that researchers face in understanding this population. The labor market experience of a recently immigrated non-English speaking Vietnamese immigrant with disabilities likely differs widely from those of a junior college educated, U.S. born Chinese American with disabilities. Some APIDC conference proceedings and white papers suggest significant variances in funding of critical health and human services for Asian Americans with disabilities compared to similarly situated White Americans with disabilities (Leung 1999; Pi 2001). Finally, in addition to the severe lack of quantitative data, there is virtually no qualitative information on the cultural and political economic barriers faced by Asian Americans with disabilities. Cultural issues such as norms that disabled individuals are akin to children and cannot take on adult responsibilities, and that disabled persons reflect negative karma and sham on the family, have not be adequately examined. Larger political economic barriers faced by Asian Americans such as societal views of disabled persons as incapable or less capable than able-bodied individuals, and the lack of accommodation through non-compliance with the Americans with Disabilities Act of 1990, also remained unexamined.

## 2.6 Conclusion

The review of the literature for descriptions and possible explanations of variations in employment of Asian Americans with disabilities compared to other disabled and non-disabled

populations proved very interesting and a bit disappointing. Existing research does not address the population and as a whole the research literature offers little knowledge on Asian American with disabilities. However, the absence and the resulting gap within the literature also provide clear and exciting research opportunities to study and understand this hidden population. Three areas of research offer guidance to study and conduct research on the employments issues of this population, as described in this chapter.

As described in this chapter, the first area on disability and work is rooted in the fields of economics and the emerging field of disability studies. It focused on employment trends, wage inequalities, full-time/part-time work, poverty and education. More specifically, it focused on the long-term macroeconomic trends of employment patterns of persons with disabilities by detailing that they generally fared well during the 1980s insofar as experiencing larger proportional gains in labor force participation than persons without disabilities and how this pattern changed in the 1990s. Moreover, it discussed that fragility of improvements in the employment picture in the 1980s for persons with disabilities and how their labor force participation declined more rapidly during the 1990 recession than persons without disabilities. Further, it detailed that this perplexing decline continued throughout the 1990s for individuals with disabilities while the labor market prospects for the non-disabled improved with the recovering economy.

Although long-term macroeconomic trends set the overall parameters for labor force participation for persons with and without disabilities in this research group, factors such as discrimination still have an impact, particularly if combined with gender or race. For example, non-White disabled women are only half as likely to be employed as disabled White men and over a third less likely to be employed as a White disabled female. Non-White disabled males

fare slightly better than non-White disabled women but still trail by a significant margin behind the employments rates of disabled White men and women. The lessons from this literature will motivate research models and questions in this study of Asian Americans with disabilities and employment.

The second area is U.S. government policy and how it led to the passage of the Americans with Disabilities Act (ADA). The lessons in the research area not only detail the history and the provisions of the ADA but also pose a number of important questions to bear in mind in researching Asian Americans with disabilities and employment. For example, when the ADA was passed, no one answered or even asked basic questions such as: did employers prior to the ADA accommodate workers with disabilities, and if so, what additional steps had they taken to integrate disabled employees into the workforce? Does providing an accommodation allow a disabled employee to be more productive and help decrease underemployment? What are the financial costs of accommodation—e.g., how much are employers spending on assistive equipment? What are the specific reasons why an employer is unwilling or unable to accommodate an applicant—is it due to the fact that the employer is unable to restructure the job to fit the needs of the applicant, or does it appear to be for an unsubstantiated discriminatory belief that a disabled employee would have some type of negative impact on the workplace?

Lastly, research on Asian Americans and the labor market highlighted many issues that Asian Americans with disability will probably face in the labor market. For example, many Americans are incorrectly convinced that workers of Asian descent confront no special problems and enjoy an economic status roughly comparable to that of Whites. But Asian Americans are a rapidly growing, increasingly diverse population that should not be considered in the aggregate in order to accurately understand their status in the American labor force. When analysis is

conducted on a subgroup level, a different picture emerges: Asian American poverty is higher than Whites. Research suggests that many Asians are stuck in low wage jobs, lack occupational mobility and are underrepresented in high salary job classifications. Despite higher educational attainments, Asian Americans have lower returns on investment for their education. Despite portrayal as a successful “model minority”, many Asian Americans-- particularly the foreign-born-- continue to work at the lower end of the labor market. Even proponents of the ethnic enclave/economy acknowledge that benefits of enclaves are not evenly shared within the enclave; less-educated immigrants work longer hours at lower pay than their counterparts outside the enclave. Asians still face a glass ceiling where only a fraction of one percent are senior managers in major American companies. Instead, numerous factors appear to contribute to labor market disadvantages: ethnic and racial discrimination, language-based discrimination, the role of nativity (i.e. foreign-born versus native born), and social and cultural differences from the dominant group, and as seen in the literature, going beyond human capital variables to social and cultural variables appears particularly relevant to capture the multi-faceted issues faced by the Asian Americans.

The next chapter focuses on a conceptual framework developed from grounded theorizing using my qualitative data and deductive analysis of the literature to provide explanations for the myriad and complex barriers faced by Asian Americans with disabilities as they try to access and remain in the labor force.

CHAPTER 3  
CONCEPTUAL FRAMEWORK:  
ATTITUDINAL/CULTURE BARRIERS FACED BY RECENT  
ASIAN IMMIGRANTS IN THE LABOR MARKET

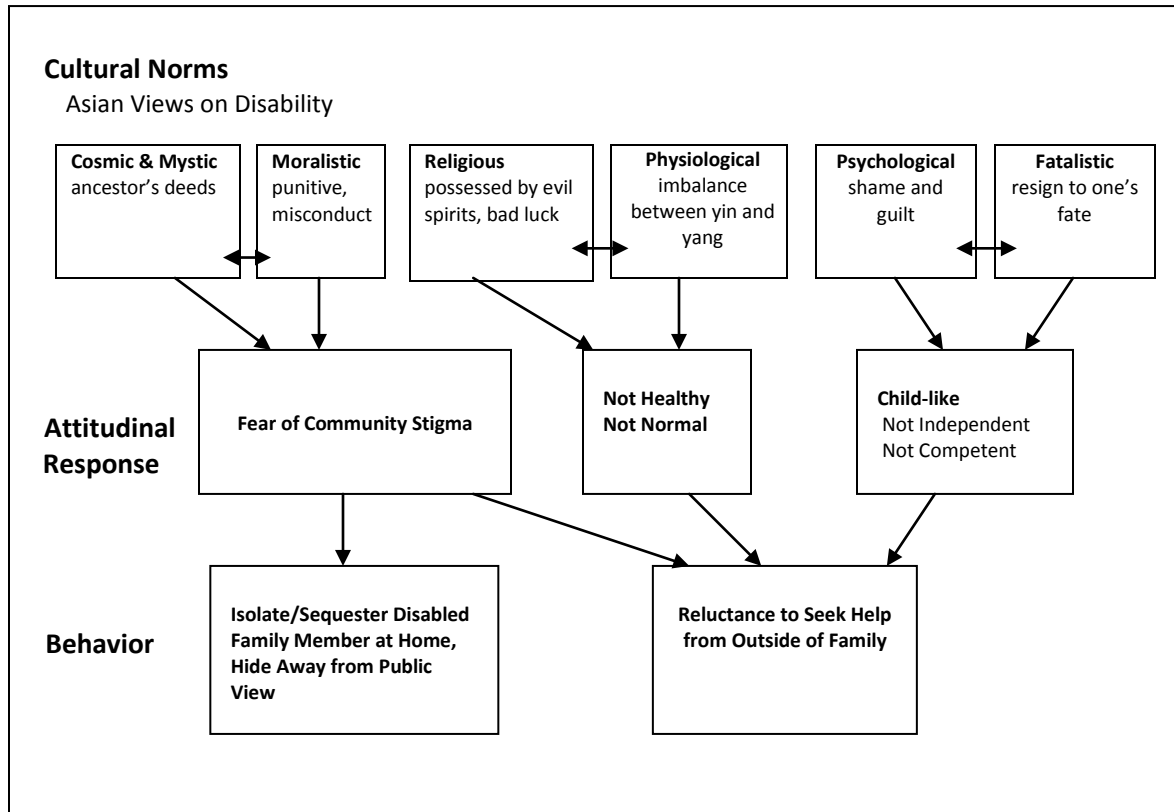
3.1 Introduction

This chapter sets forth a conceptual framework for clarifying how cultural norms, attitudinal response, and behavior combine to create and reinforce barriers to labor market participation by Asian Americans with disabilities who are immigrants. The chapter is organized by first describing the conceptual framework depicted in Figure 3.1 as it functions for Asian households who have a family member with disabilities. Next is Figure 3.2, an outline for the conceptual framework as it functions for Asian households who do not have a family member with a disability. Next is Figure 3.3 and a discussion of the conceptual framework as it functions for institutions outside of the Asian American communities. In addition to discussions of each box or category of boxes in the conceptual models, also highlighted are linkages among various elements, and how these elements mutually inform one another. Figure 3.4 applies the concepts from the previous models and presents in one conceptual model the cultural and structural barriers that Asian Americans with disabilities would probably face in accessing the labor market.

3.2 Conceptual Framework for Asians with Disabled Family Members

This section consists of four major subsections: cultural norms, attitudinal responses, behaviors and the linkages between the three previous subsections.

**Figure 3.1: Asians with a Disabled Family Member**

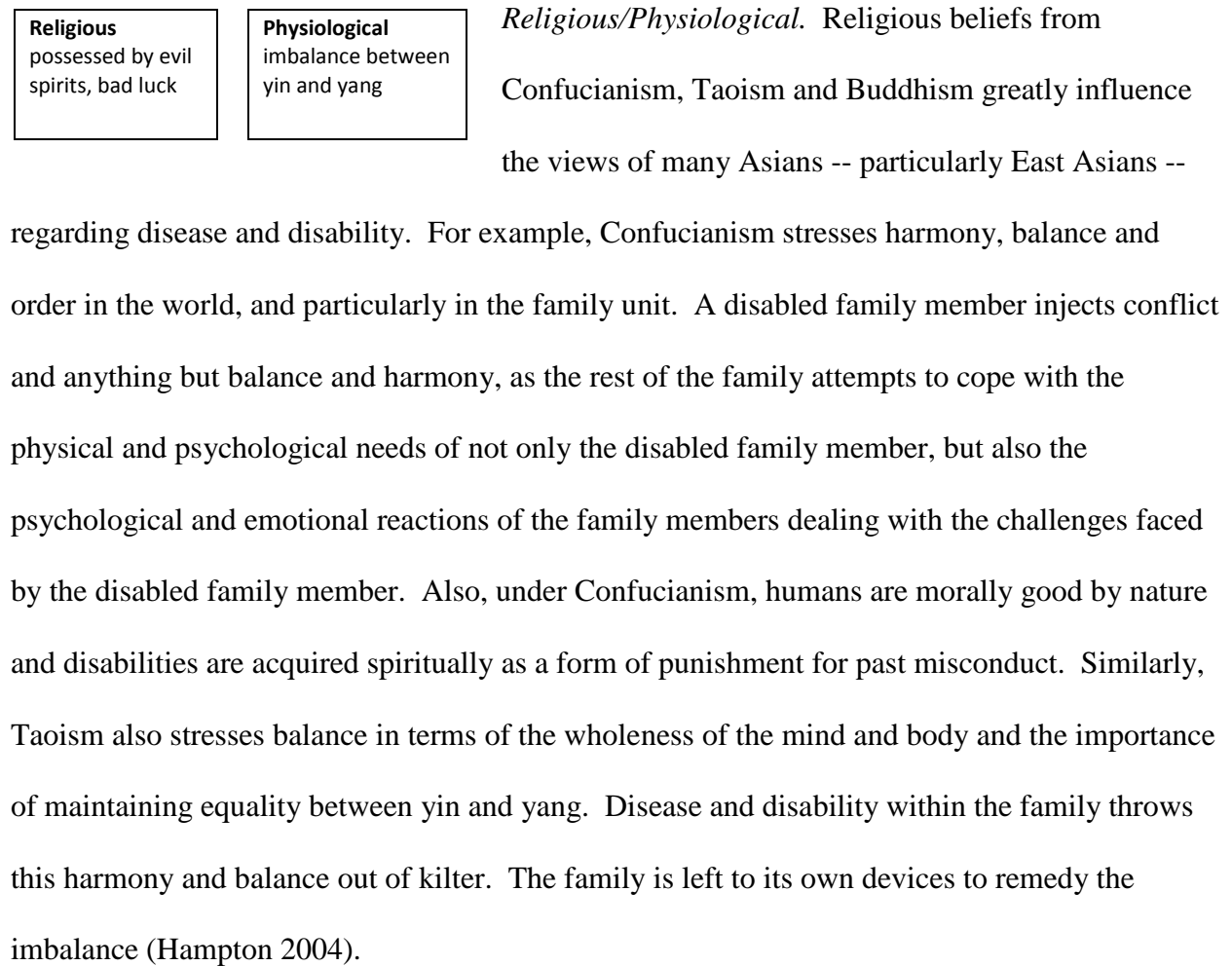


### 3.2.1 Cultural Norms

Although Asian Americans are ethnically, linguistically and culturally diverse, they generally hold similar attitudes towards people with disabilities. Watanabe (1998) noted that in Asian families there are some similar constructs involving disability that guide the social structure of the family and the families' interactions in the larger social construct of their respective communities; these constructs can be traced back to Asian religious belief systems. Many views about disability, particularly for East and Southeast Asians families, are rooted in the moral and religious beliefs of Confucianism, Buddhism and Taoism (Watanabe 1998; Pi 2001; Hampton 2004). Pi (2001) compiled information on these Asian belief systems and

provided six cultural norm categories that drive Asian views on disability: 1) Religious; 2) Physiological; 3) Mystic and Cosmic; 4) Moralistic; 5) Psychological; and 6) Fatalistic.

Figure 3.1 depicts these six categories to further explain Asian attitudes and subsequent behaviors towards disability. Although many of these cultural norms have overlapping characteristics, they can be further combined into three larger groups.





action. For example, good deeds will yield good returns and conversely, bad deeds will result in bad returns. This may mean that disabilities, often viewed as bad outcomes, can be directly traced back to bad acts perpetrated by the individual (Miles 1995).

Individual past sins and misdeeds are often associated as the cause of a disability from not only a religious, but also a cultural-societal perspective. For example, some Koreans believe that lifelong disability is a type of payback for something they did wrong in the past (Kim-Rupnow 2002).

In addition to individual deeds, Asian cultural norms also associate ancestral and parental sins and misdeeds with disease and disability. In many areas of China, for example, disability is viewed as punishment for the disabled person's parental or past life sins (Shapiro 2002). As a result of these beliefs, the Asian family with a disabled member looks to the past to identify the external force, be it a deity or past sin, which caused the disability, and concludes that the disability was a result of Karma or fate.

<b>Psychological</b> shame and guilt	<b>Fatalistic</b> resign to one's fate	<i>Psychological/Fatalistic.</i> The last set of cultural norms that influence attitudes and behaviors are psychological, which includes shame, guilt, and as prefaced above, fatalism. Indeed, numerous authors have noted that Asians with disabilities and their families suffer from psychological symptoms related to such shame, guilt, helplessness, denial, and depression (Watanabe 1998; Leung 2001; Pi 2001). Many Asian families believe that their destiny is predetermined -- that a person is "afflicted" with a disability for a past deed, as explained above, of an ancestor or otherwise as punishment or as a negative bi-product of some reason beyond the control of the person with the disability or his/her family.
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### 3.2.2 Attitudinal Response

The conceptual framework highlights the importance of family attitudes, which are influenced by the cultural norms, and which are conceptualized in this dissertation to have three characteristics: disability as not healthy and not normal, fear of community stigma, and disability as childlike.

**Not Healthy  
Not Normal**

*Not Healthy and Not Normal.* The attitude that many non-disabled Asians have towards a person with a disability is that the disabled person is not quite normal and to some extent not a fully functioning human being. For example, the physical deformities dominate the perception that a disabled individual is sick despite the possibility that the disabled person might actually have a stronger immune system and might be less susceptible to seasonal colds and viruses than non-disabled individuals. Once the stigma is assigned, Goffman (1963) argues that these assumptions give rise to various forms of discrimination, which effectively reduces the life chances of the person stigmatized.

**Fear of Community  
Stigma**

*Fear of Community Stigma.* Asian families' fear that the disabled member will bring shame or a loss of "face" in the eyes of the community is an important part of stigma of disabled people in the Asian community. The family's fear consists of two dimensions: (1) the fear of isolation or exclusion from the rest of Asian society, and (2) the fear of potentially damaging the marriage prospects for other family members.

Fear of isolation or exclusion is a large component of this attitude. The collectivist orientation held by many Asian cultures has been well documented (Nishi 1995; Agbayani-Siewert 1995; Watanabe 1998). The needs, wants, and desires of the individual must be

sacrificed to ensure that the needs, wants, and desires of the family are obtained. For example, Nishi (1995) outlined five values shaping and guiding Japanese family relationship between individual, family and community. Similarly, Agbayani-Siewert (1995) outlined four values guiding the Filipino family that are very similar to Nishi's work on the Japanese family. The overriding themes characterizing these values are: 1) that the larger entities (family and community) are more important than the needs of the one; and 2) that the shame of one will bring shame upon the larger entities.

A key fear held by but not always expressed by Asian families is the fear that a disabled family member will damage the marriage prospects of other family members. It is not uncommon for people of different cultures to harbor fears about the sexuality of certain stigmatized groups, such as persons who are mentally retarded, feeling that if they are allowed to reproduce they will have retarded offspring. However, for Asian families, the intensity of this fear is particularly pronounced because the stigma is often projected onto the entire family or clan. For example, prior to marriage, it is not an uncommon practice in Chinese and Japanese families to use investigators to examine the backgrounds of the potential families. This investigation may include ferreting out issues that deviate from the norms, such as physical and mental disabilities within the clan. Asian families go through extraordinary efforts to hide or sequester their disabled kin in hopes of protecting the marriage prospect of their non-disabled offspring.

<b>Child-like</b> Not Independent Not Competent
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*Child-like.* People with a disability generally suffer from perceptions that they are not independent and not competent. These negative perceptions result in significant barriers that prevent disabled people from

seeking/obtaining independence and full participation in society. The labels of not being

independent and not competent establish a form of paternalism whereby the disabled individual is treated as a child to be taken care of, disenfranchised from any form of independence.

### 3.2.3 Behavior

Figure 3.1 shows that the cultural beliefs about disability coupled with negative attitudinal responses, including fear, will lead to barriers.

<b>Isolate/Sequester Disabled Family Member at Home, Hide Away from Public View</b>	<i>Isolate and Hide Disabled Family Member from Public View.</i> Cultural beliefs coupled with negative attitudes may lead the family to adopt a behavior that does not necessarily benefit the disabled family member or the family—such as sequestering the family member at home, and reducing the social interaction for not only the disabled family member but of the entire family. The specific actions related to the isolation/sequester behavior occur on different levels: 1) individual—i.e., the nuclear family conduct that results in specific actions/behavior by the individual with the disability; 2) the nuclear family’s conduct in relation to the extended family; 3) conduct by the nuclear family in terms of relationships with the immediate community; and 4) societal behavior.
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The first level at the individual scale consists of actions limiting the disabled family member from developing contact with others outside of the family. These include:

- Not encouraging/discouraging disabled family member to acquire schooling or training outside of the family;
- Not encouraging/discouraging the disabled family member to participate in enrichment activities such as art, music, dance and sports;
- Not encouraging/discouraging disabled family member to make friends outside of the home;

- Not encouraging/discouraging disabled family member to date or develop romantic relationships.

The second level at the extended family scale consists of actions taken by the nuclear family to isolate the disabled individual from much of the extended family:

- Limiting presence of disabled family member to only nuclear family functions such as birthdays;
- Not bringing disabled family member to extended family functions such as weddings, funerals.

Third, on a community level, the nuclear family will tend to restrict the visibility of the disabled family member to the local community, e.g., if the individual with the disability is Chinese, the family will tend to isolate the individual from interaction in the local Chinatown.

Examples of specific actions are:

- Not bringing disabled family member to community functions;
- Not bringing disabled family member to holiday events celebrated outside of the family, such as Japanese New Year rice pounding or New Year celebration held in a restaurant.

Lastly, at the societal scale, the nuclear family will also tend to isolate the disabled family from wider society—i.e., outside of the local community where, e.g., the disabled family would also face language and cultural barriers. Examples of specific actions include:

- Not encouraging/discouraging disabled family member to find a job working outside of the home;
- Not encouraging/discouraging disabled family member to learn to live independently outside of the home.

**Reluctance to Seek Help  
from Outside of Family**

*Reluctance to Seek Help from Outside the Family.* This reluctance is driven by several major factors. Preliminarily, as described above, there are the host of factors that lead to a sequestering of the disabled family member—e.g., the fear of community stigma as described above. But the second important factor is the notion—not exclusive to Asian cultures but perhaps more deep rooted in immigrants who have reinforced the importance of family—that it is the parents’ and the family’s responsibility to take care of their offspring. Seeking or accepting help from outside of the family may be viewed as irresponsible; the result is that families with a disabled family member may not seek assistance, or when offered services, may not accept such opportunities.

Another dynamic that may influence the reluctance of an Asian American family to seek or accept help outside of the family is income: a family with substantial financial resources may be able to afford to have one parent—usually the mother—stay at home to care for the disabled family member, while a family with a limited income (both parents needing to work) may be forced to seek outside help.

Reluctance to seek help has a two-sided dimension—on the one hand, families with a disabled member are hesitant or resistant to providing information to outside sources on a variety of levels—from initially disclosing that they have a disabled family member living with them—to disclosing specific information about the disability, as well as the family’s capacity to physically (e.g., whether there is anyone in the household who can easily carry a quadriplegic to the toilet) and financially support the disabled family member, which would be essential in order for a service agency to gauge the most appropriate resources to meet the family’s needs.

Examples include:

- Failure or delay in filling out Census Bureau forms (long form);

- Failure or delay in returning phone calls to service agency, support groups who were referred to the family by friends, church members.

On the other hand, families with a disabled member are reluctant to actually receive the services. Examples include:

- Reluctance to investigate resources available outside of the family;
- Reluctance to attend free workshops for families with disabled member;
- Reluctance to attend culturally relevant, language accessible conferences aimed at Asian families with disabled member;
- Reluctance to hire staff, either live in or off site, who would assist in caregiver support, e.g., feeding, clothing, administering of medication;
- Reluctance to join support groups;
- Reluctance to seek professional help to identify the source and extent of the disability and to determine whether medical or prosthetic resources are available to help abate or manage the disability.

### 3.2.4 Linkages

Table 3.1 also highlights linkages among these various elements. Following is how these linkages mutually inform one another.

#### 3.2.4.1 The Link Between Cultural Norms and Attitudes

*Cosmic/Moralistic—Fear of Community Stigma.* This link hypothesizes that the fear of being stigmatized by the community is driven by the beliefs of past bad deeds by the individual and/or the ancestors. The extension of past sins and misdeeds to ancestors or parents, combined with the Confucius emphasis on family as the basic unit of society may greatly impact the family's views towards disability. Saving face (not being publicly embarrassed in the

community) and not causing shame to the family are important, and disability is a fate that affects more than the person with the disability; all members of the family share the “burden” of the disability, and to “save face” there may be a reluctance or resistance to going outside of the family unit to “admit” the sins and misdeeds of one’s forefathers. Moreover, the belief that the disability is a form of punishment further drives the fear of being scorned and stigmatized by the community.

*Religious/Physiological—Not Healthy, Not Normal.* This link hypothesizes that religious and physiological beliefs influence the family’s attitude that the disabled member’s bad health and abnormality are caused by a combination of evil spirits, bad luck and inner yin-yang imbalance. As a result, the stigma that non-disabled Asians harbor toward a disabled person is that the disabled individual is not healthy, not normal and therefore not productive. Consequently, the “not healthy” label is often used to discourage disabled people from participating in major life activities, including work. French (2001) noted that negative attitudes about people with disabilities are sometimes disguised as a broad-brush concern that disabled people may damage themselves or others by undertaking demanding work, rather than an individualized assessment of the type of work which the person with disabilities can safely undertake.

*Psychological/Fatalistic—Child-like.* This link hypothesizes that the perception of disabled persons as child-like is influenced by two beliefs: first, by guilt and shame, and then accepting the fate of the disability. By accepting the fate of the disability, the family seeks to reduce its anxiety by rationalizing that the disabled person is child-like and should be cared for like a child, even if the disabled person is chronologically an adult, capable of making at least some independent decisions.



Furthermore, the fatalistic attitude can further steer the person with disability and/or his/her family into inaction—since there is no belief that anything can be done to empower the person with disability. There is no or little focus on the *abilities* of the disabled family member; there is little or no focus on what work the disabled family member *could do*.

#### 3.2.4.2 The Link Between Attitudes and Behavior

*Not Healthy, Not Normal—Reluctance to Seek Outside Help.* This link indicates that the perception of disability as “not healthy and not normal” directly affects the behavior of the family, leading to a resistance to seek outside help. This behavior is motivated by the family’s attitude that the disabilities (abnormality and unhealthiness) are influenced by evil spirits or bad luck; the family becomes skeptical about the effectiveness of outside help.

*Fear of Community Stigma—Isolate the Disabled Family Member at Home.* The behavioral response -- isolating/sequestering the disabled family member -- is influenced directly by the threat of being stigmatized by the community. Community stigma of a disability is seen as threat to the both the individual with disability and to the non-disabled family member. Public display of a disability is seen as an action that will draw additional attention to the disability and reinforce the stigma against the family.

Isolation and hiding may be a preferred behavior by Asian families with a disabled family member. Such families face numerous challenges—fear of being stigmatized and regarded as outcasts due to a societal fear that the disability is contagious, wanting to save face in front of others who may view the disability as evidence that the family’s ancestors committed some egregious misdeed, the deep shame and guilt experienced by family members who feel may have done something which caused the disability or failed to do something which could have prevented its occurrence.

Furthermore, because disabilities carry the stigma of shame, families may not openly discuss their disabled family member, keeping that person at home rather than taking him/her to social or community events, for fear that they will be stigmatized by others. This fear in turn becomes internalized by the person with disabilities, to the extent that the person may end up isolating him/herself from interaction with those outside of the nuclear family.

*Fear of Community Stigma—Reluctance to Seek Outside Help.* This link posits that the fear of community stigma will influence the family's willingness to seek outside help for a disability. The reluctance to seek outside help occurs across all families despite varying economic resources. Although the families may believe (or have been told) that there are services which may be beneficial to the disabled person, they also believe that the benefits of the services provided by outsiders are outweighed by the negatives of being stigmatized by the community.

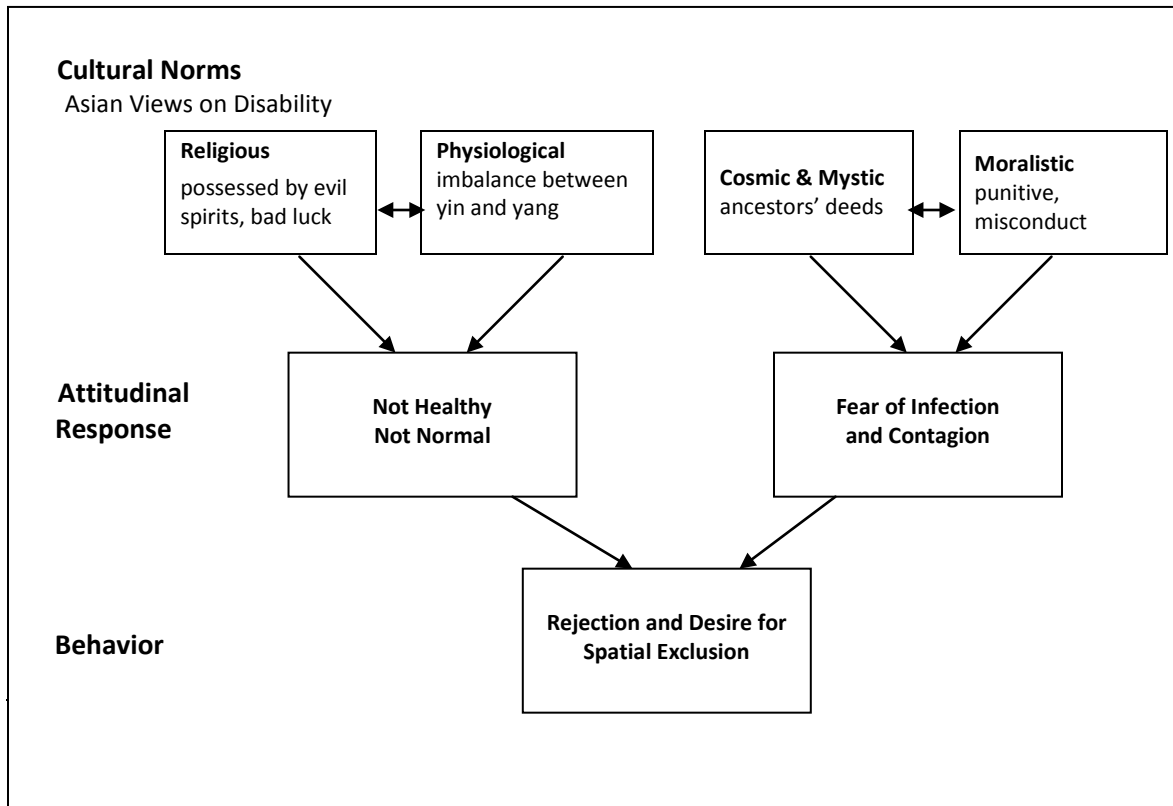
*Child-like—Reluctance to Seek Outside Help.* This link hypothesizes that the reluctance to seek outside help is influenced by the perception that the disabled person is child-like and will not be able to independently take care of him or herself. Childcare is seen as the sole responsibility of the family and it is rare for families to seek outside help for childcare for any of their children. To treat the disabled as children directly affect the willingness of families to seek outside help.

For example, Asian families tend to view their disabled family member as one would regard a young child — as a person incapable of assuming responsibility for their future, incapable for making rational decisions, and incapable of full employment (and thus not worthy of a premium education enjoyed by the non-disabled family members). As a result, Asian families tend to have a paternalistic attitude towards their disabled family members, wrought

with presumptions and assumptions about what would be best for the person with disability. Consistent with this attitude, Asian families tend to not expose the disabled family member to situations which would provide an opportunity for meaningful decision making in substantive life decisions, such as whether the disabled person should seek and enroll in job training or job placement programs. As a result, it is believed that the Asians families who take advantage of services offered by organizations such as Asian Rehabilitation Services, Inc. (a job training, job placement and career building non-profit organization serving Asians and other ethnic minority persons with physical and mental disabilities) are the rare exception.

### 3.3 Conceptual Framework for Asians without Disabled Family Members

**Figure 3.2: Asians Without Disabled Family Member (Community Behavior)**



The views of Asian American families without disabled members and the Asian American community in general are similar to the views of families with a disabled member with the exception that they are not subject to fatalism, the shame and guilt that accompanies families with a disabled member.

**Religious**  
possessed by evil  
spirits, bad luck

**Physiological**  
imbalance between  
yin and yang

*Religious/Physiological.* Religious beliefs from Confucianism, Taoism and Buddhism greatly influence the views of many Asians particularly East Asians

regarding disease and disability. For example, Confucianism stresses harmony, balance and order in the world and particularly the family unit and that human are morally good by nature. Similarly, Taoism also stresses balance in terms of the wholeness of the mind and body and the importance of maintaining equality between Yin and Yang. Disease and disability within the family throws this harmony and balance out of kilter and the family is left to their own devices remedy the imbalance (Hampton 2004). Further, many families believe that the disease or disability is the result of bad luck or misfortune.

**Cosmic & Mystic**  
ancestors' deeds

**Moralistic**  
punitive,  
misconduct

*Cosmic & Mystic/Moralistic.* Karma mainly refers to one's intention or motivation while doing an action. For example, good deeds will yield good returns and

conversely, bad deeds will result in bad returns. This may mean that disabilities, often viewed as bad outcomes, can be directly traced back to bad acts perpetrated in the past (Miles 1995). As a result of these beliefs, the Asian family without a disabled member see that past behaviors by the Asian American families with disabled family members caused the disability, given that the disability may be attributable to Karma or fate.

Individual past sins and misdeeds are often associated as the cause of a disability. For example, some Koreans believe that lifelong disability is a kind of payback for something that family or individual did wrong in the past (Kim-Rupnow 2002). In addition to individual deeds, Asian cultural norms also associate ancestral and parental sins and misdeeds with disease and disability. In many areas of China, for example, disability is viewed as punishment for the disabled person's parental or past life sins (Shapiro 2002).

The extension of past sins and misdeeds to ancestors or parents is not surprising and can also be traced back to beliefs discussed above. For example, Confucianism views the family as the basic unit of society. Certain reciprocal relationships must be observed to preserve harmony. Saving face (not being publicly embarrassed) and not causing shame to another are important. Since the family is the core unit, all actions of an individual reflect on the family and on all members of the family. As a result, disability is a fate that affects the entire family.

### 3.3.2 Attitudinal Response

<b>Fear of Infection and Contagion</b>
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*Fear of Infection and Contagion.* A key fear held by Asian culture is that the disabled person is infectious and contagious. This fear is also not unique to Asians. Barbarin (1986) noted that people experience fear of contagion from physical and mental problems even though they know that the condition cannot be transmitted through contact.<sup>22</sup> However, because of widespread belief that disabilities are due to evil spirits or bad luck, people with disabilities are also viewed as morally deviant and therefore a threat to the overall social fabric of the local communities.

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<sup>22</sup> This fear usually stems from not knowing about the etiology of a condition, its predictability and its course.

**Not Healthy  
Not Normal**

*Not Healthy and Not Normal.* An additional attitudinal response from the larger Asian community is mostly manifested in the perceptions that the disabled individual is not healthy, not normal and therefore not productive. The attitude that non-disabled Asian Americans have towards a person with a disability is that the disabled person is not quite normal and to some extent not a fully functioning human being. For example, the physical deformities will dominate the perception that the disabled person is sick despite the possibility that the disabled person might actually have a stronger immune system and might be less susceptible to seasonal colds and viruses than the wider Asian American community.

### 3.3.3 Behavior

**Rejection and Desire for  
Spatial Exclusion**

*Rejection and Desire for Spatial Exclusion.* The Asian American community rejects disabled individuals from social and economic participation, and expects disabled persons to live sheltered lives, hidden from public view. The community expects the family with the disabled member to accept full responsibility for taking care of all the needs of the individual—physical, financial, and emotional. The disabled person and his/her family are consequently often directly or indirectly excluded from Asian American community activities. This rejection and desire for spatial exclusion is consistent with Asian cultural practices, which emphasizes the family unit, and not the individual, in which socialization and the maintenance of social control rests. The family is expected to control and be held accountable for the actions of its members (Watanabe 1998). A family that “allows” its member with mental disabilities to wander the streets or be seen in the local Chinatown would be viewed as irresponsible, in the same manner as a family that “allows” its blind member to navigate a local restaurant on his/her own.

Asian Americans with disabilities are rejected by both individuals within the Asian American community as well as by the community at large. On an individual level, a non-disabled person may regard a disabled person with caution, fear or outright rejection, and behave towards the disabled person in various ways, as set forth below:

- Stare at the physically disabled;
- Smile less or exaggeratedly more at disabled people;
- Avoid eye contact with physically disabled persons;
- Avoid physical contact with disabled people;
- Avoid forming friendships with disabled people;
- Acting awkward and uncomfortable around disabled persons.

On a community level, accommodation of people with disabilities is not a high priority, as seen by the number of public buildings that are not accessible under the ADA. There are therefore both social and spatial dimensions to such exclusion. Community and commercial spaces particularly in ethnic enclaves at times do not take individual, particularly the physical needs of the disabled into account. For example, Chinatowns have few curb cuts and wheelchair accessible ramps for disabled persons. Many buildings lack elevators or wheelchair accessible elevator service (i.e., no safety bars or floor and emergency buttons at a height accessible to wheelchair patrons, and no Braille signage). The disabled person is expected to be confined within the private world of the family. Public and social meetings are not located at handicapped accessible sites.

#### 3.3.4 Linkages

Table 3.2 highlights linkages among these various elements. Following is a discussion of how these linkages mutually inform one another.

#### 3.3.4.1 The Link Between Cultural Norms and Attitudes

*Religious/Physiological—Not Healthy, Not Normal.* This link hypothesizes that religious and physiological beliefs influence the family's attitude that the disabled member's bad health and abnormality are caused by a combination of evil spirits, bad luck and inner yin-yang imbalance. As a result, the stigma that non-disabled Asian Americans harbor toward a disabled person is that the disabled individual is not healthy, not normal and therefore not productive. Consequently, the "not healthy" label is often used to discourage disabled people from participating in major life activities, including work. French (2001) noted that negative attitudes about people with disabilities are sometimes disguised as a broad-brush concern that disabled people may damage themselves or others by undertaking demanding work, rather than an individualized assessment of the type of work that the person with disabilities can safely undertake.

*Cosmic/Moralistic—Fear of Infection and Contagion.* This link posits that cosmic and moralistic beliefs such as the past bad deeds of the individual or ancestors directly influence the attitudes that the disabilities are infectious and contagious. It is presumed that humans are morally good by nature and that disabilities are acquired spiritually as a form of punishment for past misconduct. The belief that the disabled conditions are spiritually acquired contributes to the fear that the disability may be contagious.

#### 3.3.4.2 The Link Between Attitudes and Behavior

*Fear of Infection—Rejection and Spatial Exclusion.* This link posits that rejection and spatial exclusion of the disabled person from public and civic activities is influenced directly by the fear that the disability is infectious and contagious. In the face of a public health threat, the behavior of the larger Asian American community often is to take drastic action to exclude and

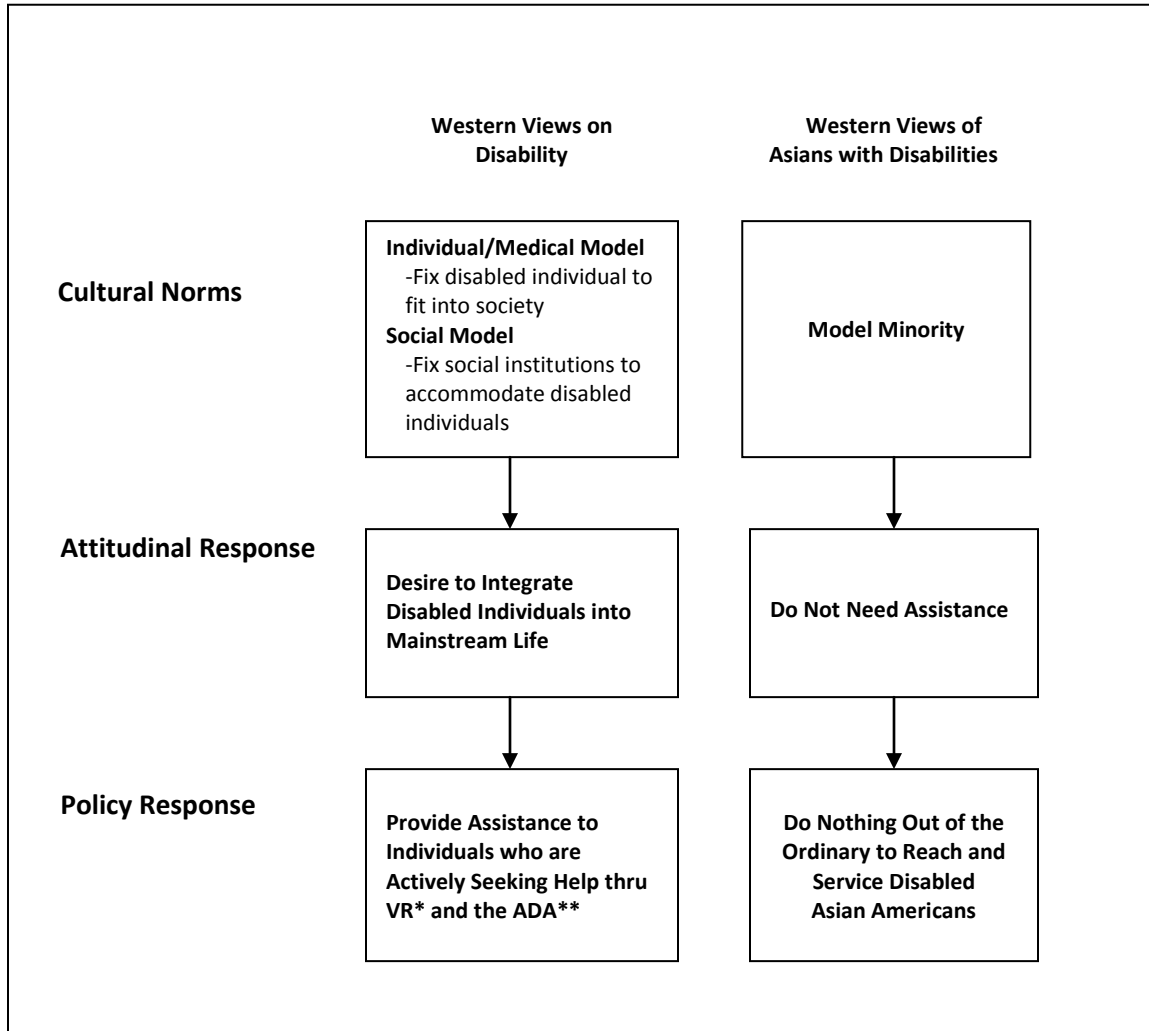


reject the disabled person from all forms of social participation. Spatial exclusion becomes an important strategy to ensure that infection is contained; consequently, disabled Asian Americans are expected not to be seen in the community.

*Not Healthy, Not Normal—Rejection and Spatial Exclusion.* Another linkage influencing the behavioral responses of rejection and exclusion is that the disabled person is not healthy and not normal. Because of the cultural beliefs that the disabled person's health is influenced by spirits and karma, many may think of disability as not a medical condition and consequently disability cannot be cured medically. As a result, this linkage presumes that the only remaining option for the community is to reject the disabled person from all forms of social participation.

### 3.4 Conceptual Framework for Responses Outside Asian American Communities

**Figure 3.3: Mainstream Cultural Attitudinal and Policy Responses towards Asians with Disabilities**



\*Vocational Programs

\*\*Americans with Disabilities Act

#### 3.4.1 Mainstream Responses toward Disability: Cultural Norms

<b>Individual/Medical Model</b> -Fix disabled individual to fit into society <b>Social Model</b> -Fix social institutions to accommodate disabled individuals
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*Individual/Medical Model of Disability.* The individual/medical model of disability is conceived as part of the disease process, abnormality and individual tragedy —something that happens to unfortunate individuals on a more or less random basis. The problems

disabled people encounter are perceived to lie within the disabled person rather than within society. The individual model of disability may, therefore, be viewed as taking a “victim blaming stance” (French 2001). As a result, the individual/medical model of disability focuses almost exclusively on attempting to modify the person’s impairment. Therefore the onus is on disabled people to adapt to a disabling environment.

*Social Model of Disability.* About twenty years ago, a paradigm shift occurred in Western cultural perception of disability. Led by activism by disabled people and modeled after the civil rights movement of the 1960s to gain equality and social justice, the social model of development was developed. Under the social model, disability is seen as resulting not from an impairment per se, but from the interaction between the impairment and the surrounding structural and attitudinal environment. In other words, the environment — combined with the impairment — creates the definition of disability. As such, the consequences of physical and mental impairment for social participation are shaped by the expectations and attitudes of the larger society, often resulting in barriers for those who do not conform to such expectations (Scotch 2000; French 2001).

#### 3.4.2 Mainstream Responses toward Disability: Attitudinal Response

**Disabled Individuals into  
Mainstream Life**

*Desire to Integrate Disabled Individuals into Mainstream Life.* Under the social model, people with disabilities are regarded as a minority group subject to unfair discrimination. The role of government is to protect their civil rights in order to enable their political, economic, and social participation. Additionally, environmental, structural and attitudinal barriers have the potential to impede the progress and inclusion of disabled people in many areas of living including employment.

Consequently, these barriers need to be minimized or removed in order to ensure the social inclusion of people with disabilities.

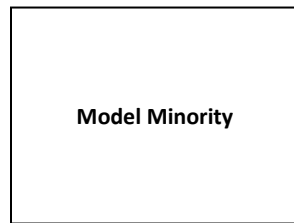
### 3.4.3 Mainstream Responses toward Disability: Policy Response

**Provide Assistance to  
Individuals who are  
Actively Seeking Help thru  
VR\* and the ADA\*\***

Since the 1920s, the United States has demonstrated a concern for the employment challenges facing Americans with disabilities. This concern has been primarily manifested in vocational rehabilitation programs that have emphasized training and job counseling and placement.

In 1990, this concern took on an important new dimension with passage of the then controversial Americans with Disabilities Act (Act, or ADA). Through this Act, Congress outlawed employment discrimination on the basis of disability, and required employers to accommodate the employment needs of the disabled, where reasonably possible given the size of the employer and the particular job requirements. Consequently, the ADA is more than a specific protection from discrimination — it is also a policy commitment to the social inclusion of people with disabilities.

### 3.4.4 Mainstream Responses toward Asian Americans with Disabilities: Cultural Norm



The model minority thesis<sup>23</sup> has probably had the most significant impact on how Asian Americans are viewed by the American mainstream. The basic assumption of the model minority thesis is that despite their minority status, Asian Americans are doing well in education and employment. Albeit research to refute and deconstruct the model minority thesis, it continues to have a lasting influence on the minds of mainstream culture and decision makers.<sup>24</sup> There are four significant assumptions embedded within the model minority thesis. First, it assumes that all Asian Americans are the same. Second, it assumes that all Asian Americans are doing well in school. Third, it attributes success to “culture”. Lastly, Asian American culture is consistently described as fostering a “hard work” ethic.

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<sup>23</sup> The "model minority" thesis was first used in print by sociologist William Peterson in an article titled "Success Story: Japanese American Style" published in the New York Times Magazine in January 1966. Peterson (1966) concluded that Japanese culture with its family values and strong work ethic enabled the Japanese Americans to overcome prejudice and to avoid becoming a "problem minority". A second article similarly describing Chinese Americans appeared in U.S. News and World Report on December 26, 1996. The author wrote, "At a time when it is being proposed that hundreds of billions be spent to uplift Negroes and other minorities, the nation's 300,000 Chinese Americans are moving ahead on their own—with no help from anyone else". The article went on to praise the good citizenship of Chinese Americans and the safety of Chinatowns (Success Story of One Minority Group in the U.S. 1966).

<sup>24</sup> Sue and Kitano (1973) and Bob Suzuki (1977), among others, attacked the success image, pointing out that more controlled and disaggregated comparisons of Asian Americans with whites demonstrated relative disadvantages of Asian Americans. More recent works, Sue (1993) on access to mental health services and Hune and Chan (1997) on access to higher education further revealed that the 'model minority' thesis masks the true status of Asian Americans and actually hurt Asian Americans in accessing services. In fact, once the data is disaggregated and examined closely, Asian Americans are disadvantaged in comparison to whites. That is, the model minority myth diverts attention from the problems of many segments of the Asian American community, particularly the Laotian, Hmong, Cambodians and Vietnamese, who have high poverty rates (Min 2003).

### 3.4.5 Mainstream Responses toward Asian Americans with Disabilities: Attitudinal Response

**Do Not Need Assistance**

Because of the model minority thesis described above, mainstream culture and decision makers mistakenly believe that all Asian Americans are good students and high achievers with good employment prospects who adjust readily to school, employment and society. Even Asian Americans with disabilities will succeed because of cultural and hard working attributes. Further, since Asian are culturally more collective and less individualist, family and kin will help the disabled who need assistance. As a result, the general attitudinal response is that the Asian Americans do not need help or services.

### 3.4.6 Mainstream Responses toward Asian Americans with Disabilities: Policy Response

**Do Nothing Out of the Ordinary to Reach and Service Disabled Asian Americans**

Since Asian Americans are perceived as not needing assistance, the specific policy behavior action is to do nothing or nothing out of the ordinary to reach or serve this population. In effect, the model minority thesis serves to hide disenfranchisement, discrimination and differential gains within the Asian American community. Asian Americans are often not considered a minority either because -- in addition to being discounted due to the model minority thesis -- institutions lack the capacity to collect data on this community. There is little reliable and systematic data on the disabled Asian American community (Pi 2001). In fact, Asian Americans were not included in the Current Population Reports-Americans with Disabilities: 1994-1995 published by the U.S. Bureau of Census (Hampton 2004). As a result Asian Americans have become an invisible minority and are often left out of key public policy discussions and considerations of resource allocation.

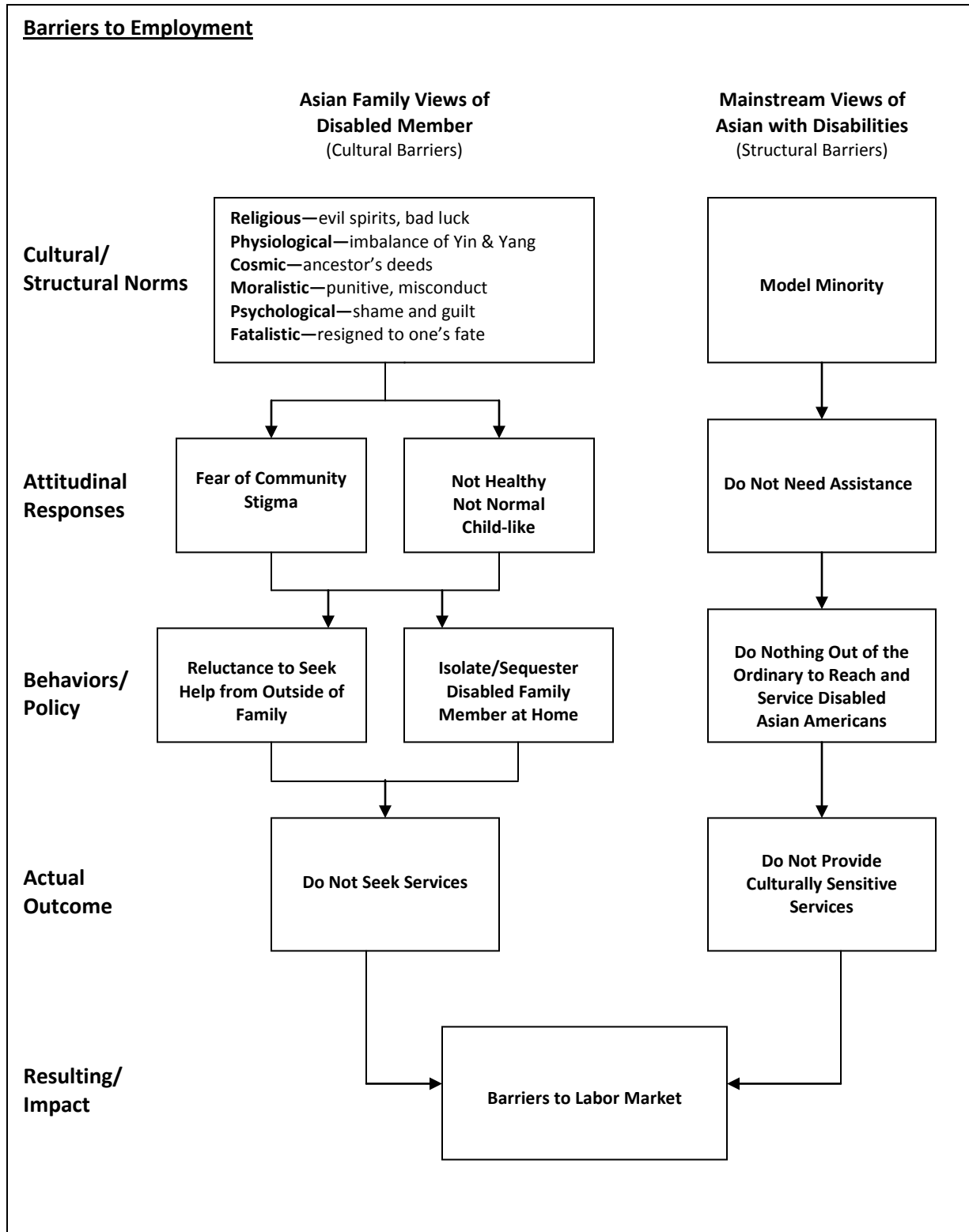
### 3.5 Actual Outcomes Leading to Barriers into the Labor Market

Figure 3.4 below utilizes the concepts developed in the above sections to illustrate the additional barriers that Asian Americans with disabilities would probably face in accessing the labor market. These barriers may be divided into cultural barriers and structural barriers. The left hand side of the diagram represents the Asian family views of their disabled family member. For the most part, it is rooted in the moral and religious beliefs of Asian cultural.

The right hand side of the diagram represents mainstream Americans views of Asian Americans with disabilities. It illustrates that the prevalent mainstream view of Asian Americans as model minorities directly influences the policy responses of mainstream organizations to not invest the time and resources necessary to reach Asian Americans with disabilities. As a result of the lack of culturally sensitive services available to this population, another barrier layer is added to further hamper their access to the labor market. Interestingly, both sides of the model converge at the bottom, resulting in additional barriers that impede the appropriate use of rehabilitation and independent living resources that could aid access to employment.

As a result of the cultural norms leading to attitudes of fear, stigma and isolation illustrated on the right side of Figure 3.4, the actual outcome of these behaviors is that the Asian family does not seek public services such as rehabilitation and job training for their disabled family members. Although it is not the intent of most families to add to the burden their disabled offspring, the conceptual model shows that by not seeking available public services they are actually erecting new barriers to employment for their family members with disabilities.

Figure 3.4: Conceptual Model of Barriers to Labor Market





### 3.6 Summary

This chapter has presented a conceptual framework mapping the multiple layers of barriers and challenges Asian Americans with disabilities face in accessing the labor market. In particular, recent immigrants with disabilities face the most daunting challenges starting with barriers and stigma carried over from cultural beliefs and attitudes from within the family to mainstream organizations serving individuals with disabilities.

Arguably, the cultural norms and beliefs within the Asian family may be the most difficult to overcome. In addition to the stigma associated with the disabled individual, the family also fears that the presence of a family member with a disability will damage the marriage prospects of other family members. As a result, families will hide and sequester the disabled member, thereby creating situations where structural and policy inventions are extremely difficult.

For Asian Americans with disability who are able to overcome family and community cultural norms and beliefs associated with disability, they then also face issues posed by mainstream organizations serving individuals with disabilities. This is due to a lack of cultural competency and program experience serving Asian Americans with disabilities. Further, as a result of the sequestering and hiding of individuals with disabilities, many mainstream service providers do not encounter significant numbers of Asian American clients with disabilities and therefore may not prioritize them as target populations within their service agencies. Similarly, policymakers also rarely encounter advocates for Asian Americans with disabilities and as a result may not see employment barriers for this population as a problem needing policy intervention.

Lastly, it is important to acknowledge the influences of the model minority thesis on mainstream disability service organizations and policymakers. The basic assumption is that

despite their minority status, Asian Americans are doing well in education and employment, consequently leading to an environment where mainstream organizations are doing nothing out of the ordinary to reach and provide services targeting Asian Americans with disabilities in their efforts to participate in the U.S. labor market.

## CHAPTER 4 RESEARCH DESIGN AND DATA METHODS

### 4.1 Introduction

This chapter contains a description of the mixed methods research design used in the subsequent three analytical chapters to address the research questions posed in this dissertation (the questions are listed in the following section). First is a summary of the quantitative empirical model specifications utilized to explain variations in wages and labor market participation in the existing literature. The models selected were those that would provide the greatest value to clarify how Asian Americans with disabilities participate in the labor market. Next contains a description of the PUMS dataset and the methods used in the selection of the variables for analyses in Chapters 5 and 6. The chapter concludes with a description of the qualitative methods used in Chapter 7 to conduct and analyze 18 interviews with working age Asians with disabilities.

### 4.2 Research Design

Because of the ethnic, language, and cultural diversity within the Asian American population and severe lack of specific data on disabled Asian Americans, the proposed methods for this study are both quantitative and qualitative. Besides basic general demographic information gathered by the U.S. Census, very limited data are available on disabled Asian Americans and their interactions with the labor market. Within the four different types of mixed method designs,<sup>25</sup> the parallel/simultaneous studies approach was used, where I analyze existing national Census data and focus groups/long interviews data of Asian Americans with disabilities.

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<sup>25</sup> The four typologies of mixed methods designs are: 1) sequential studies; 2) parallel/simultaneous studies; 3) equivalent status designs; and 4) dominant-less dominant studies. For more in-depth discussions of the mixed methods typology, see (Tashakkori 1998).

To address my first research question: “*Why do disabled Asian Americans face greater barriers in the labor market than other groups?*”, I use quantitative analysis of the 2005 PUMS 1% sample data from the U.S. Census Bureau. Although the work related information from this national sample is somewhat limited and the 2005 data are somewhat dated, the data do provide some basic information on work and work disabilities, education, occupations and income levels. More importantly, this national sample allows cross group comparisons of race, gender, urban versus rural and disabled versus non-disabled individuals.

To address my second research question: “*What are the employment barriers for Asian Americans with disabilities (wages, employment rate, etc.)?*”, I use focus groups and semi-structured in-depth interviews to understand the needs and challenges faced by Asian Americans with disabilities who want and are able to work. I use focus group data that I collected during 2003 and semi-structured in-depth interview data I collected during 2005 as part of my work with the non-profit California Asians and Pacific Islanders with Disabilities of California (APIDC).<sup>26</sup>

#### 4.3 Methods Matrix from the Literature

Although there is virtually no direct research on Asian Americans with disabilities and their work experience, after a critical review of the literature, there were five sets of relevant research model approaches: human capital, model minority thesis, political economy of disability, social interaction and socio-cultural. Table 4.1 shows the five model sets in a table matrix format. The five sets of research models were further grouped into quantitative methods

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<sup>26</sup> APIDC received a 2 year grant from the California Endowment and the Asian Pacific Islander American Health Forum (APIAHF) for capacity building and research on Asian Americans with disabilities.

and qualitative methods. The quantitative methods include the human capital, the model minority thesis and the political economic of disability. First developed by Gary Becker, the human capital models argue that human capital is created by changing persons--to give them skills and capabilities that enable them to act in new ways. Amongst the key variables determining a person's human capital are education, experience, age, race and gender (Becker 1993). The next set of quantitative models is based on the model minority thesis. The key variables that both the proponents and critics of the thesis have used are educational attainment, poverty levels and income (Petersen 1966; Kitano 1973; Suzuki 1977). The last set of models under the quantitative umbrella are the political economy of disability policy, which are mostly concerned with obtaining and retaining employment for people with disabilities, analyzing the effectiveness of policy changes such as the ADA and ultimately, the impact on federal entitlement policy and spending. Key variables include employment rates, part-time versus full-time work and wages (Berkowitz 1986; Mashaw 1996; Stapleton 2003).

**Table 4.1: Methods Matrix**

Quantitative Methods				Qualitative Methods	
	Human Capital	Model Minority (Asian American)	Political Economy of Disability (ADA)	Social Interactions	Socio-cultural
<b>Key Authors</b>	Gary Becker	William Peterson Harry Kitano Bob Suzuki	Richard Haveman Monroe Berkowitz John Bound Thomas DeLeire	James Coleman Alejandro Portes	Pierre Bourdieu Min Zhou George Farkas
<b>Reference Articles or Books</b>	Becker (1964)	Peterson (1966) Kitano (1973) Suzuki (1977)	Haveman (1984) Berkowitz (1996) Bound (2002) DeLeire (2000)	Coleman (1988) Portes (1993) Lin (1986)	Bourdieu (1977) Farkas (1996)
<b>Key Definitions</b>	Human capital means an individual's investment in personal productivity.	Asian culture with its family values and strong work ethic enabled the Asian Americans to overcome prejudice and to avoid becoming a "problem minority".	The employment of persons with disabilities is a central focus of disability policy.	Social capital is created when the relations among persons change in ways that facilitate action.	Bourdieu defines it as a competence in a society high-status culture. High status culture emphasizes art, music, dance, and literature and includes furniture, architecture, cuisine and fashion.
<b>Key Variable Types</b>	<ul style="list-style-type: none"> <li>- Wage income</li> <li>- Employment status</li> <li>- Endowments inherited from parents</li> <li>- Public expenditures on his or her development</li> <li>- Education</li> <li>- Experience</li> <li>- Age</li> <li>- Race</li> <li>- Gender</li> <li>- Urban/rural</li> </ul>	<ul style="list-style-type: none"> <li>- Wage income</li> <li>- Educational Attainment</li> <li>- Return on investment of education</li> <li>- Parents educational level</li> <li>- Race</li> <li>- Poverty</li> <li>- Access to service</li> </ul>	<ul style="list-style-type: none"> <li>- Wage income</li> <li>- Employment status</li> <li>- Full-time versus part-time work</li> <li>- (DI) Disability Insurance benefits</li> <li>- Age</li> <li>- Elasticity of labor market</li> </ul>	<ul style="list-style-type: none"> <li>- Interaction between parent and child</li> <li>- Interaction between with surrounding community</li> <li>- Contacts</li> <li>- Network diversity</li> </ul>	<ul style="list-style-type: none"> <li>-Work habits</li> <li>-Appearance and dress</li> </ul>

The qualitative methods group includes the social interaction and socio-cultural models. The social interaction models argue that “social capital” is created when the relations among persons change in ways that facilitate action. For example, one’s reaction and willingness to help changes depending on whether one has previously met the person or whether this person comes highly recommended from a familiar and trusted source. Social capital can be either inherited or acquired and increases with use. Key social interaction variables are interaction with family, interaction with the community and network diversity.

French social scientist Pierre Bourdieu is one of the key authors of the socio-cultural models. Bourdieu defines “cultural capital” as a competence in a society high-status culture. High status culture emphasizes art, music, dance, and literature and includes furniture, architecture, cuisine and fashion (Bourdieu 1979). Cultural capital conveys prestige recognition on the strength of which people get desirable jobs, marriages, and business contacts. People acquire cultural capital in the family and in formal schooling. Key variables in the socio-cultural models are work habits including absenteeism and appearance and dress.

Because the conceptual framework described in Chapter 3 does not fit precisely any of these models, these models were used as a basis for selecting appropriate variables from the 2005 PUMS data and for developing the interview guide for the qualitative data analysis. Following this is a description of the 2005 PUMS data.

#### 4.4 American Community Survey (ACS) 2005 Data Set from PUMS

As previously mentioned, there is very limited national data on Asian Americans with disabilities and employment. Fortunately, the U.S. Census and the American Community Surveys (ACS) contain variables on work disabilities, race, and English fluency. The American

Community Survey 2005 sample from PUMS was used for this research because it is one of the more recently collected samples. The ACS 2005 is a 1-in-100 national random sample of the population with approximately 1,159,000 household and 2,878,000 person records.

This dissertation analysis focused on working age population (age 18 – 65 years), and on four racial/ethnic groups: Asians, Blacks, Whites, and Hispanics of Mexican origin. The selection of Asians, Blacks, and Whites was done to try to highlight variations among large racial groups (Blacks and Whites) with Asians, while the focus on Hispanics of Mexican origin was done because Mexican Americans were the largest Hispanic group.

Frequency tables are used in this section to show the variations in disability and employment by race and ethnicity, including other socio-demographic characteristics. The following two tables were generated from the ACS 2005 survey to illustrate available information by work disability, race, gender and English proficiency within the dataset.

**Table 4.2: Work Disability by Race**

<b>Working Age (18-65)</b>	<b>Total</b>	<b>Reporting work disability</b>	<b>% of total</b>
Asians	9,236,301	332,488	3.6%
Hispanics (Mexican origins)	15,894,662	730,875	4.6%
Blacks	22,171,386	2,261,499	10.2%
Whites	139,498,297	9,780,561	7.0%

Population projections using person weight of (3:2093)

Table 4.2 shows the numbers and proportion of the sample reporting a work disability by race. The population person weight factor from PUMS was used to draw out the magnitude of the entire population. Blacks/African Americans by far report a much higher rate of people with work disabilities with 10.2 percent of the population, followed by Whites with 7 percent. For



Hispanics of Mexican origin, 4.6 percent reported having a work disability. Only 3.6 percent Asians as an overall group reported as having a work disability, which is half the rate of Whites.

**Table 4.3: Employment Status by Race, Gender and English Ability**

<b>Working Age (18-65) with Work Disability</b>	<b>% Employed</b>
All Asians	26.6
Hispanic (Mexican origin)	19.7
Blacks	14.2
Whites	17.9
Non-English speaking (NES) Asians	<b>9.2</b>
NES Asian males	<b>14.8</b>
NES Asian females	<b>7.0</b>
Non-English speaking (NES) Hispanics (Mexican origin)	13.5
NES Hispanic males (Mexican origin)	17.4
NES Hispanic females (Mexican origin)	11.0

Table 4.3 shows the employment status by race of the sample reporting a work disability. Overall, Blacks/African Americans still report the lowest employment rate at 14.2 percent. However, once English speaking ability is added along with gender, a more interesting picture emerges. Non-English speaking Hispanics of Mexican origin and Non-English speaking Asians reporting work disabilities only posted employment rates of 13.5 percent and 9.2 percent respectively. When gender is added, the employment goes down even further to 11 percent for Non-English speaking Hispanic women of Mexican origin with a work disability and 7 percent for Non-English speaking Asian women with a work disability.

#### 4.4.1 Variable Selection

Using the human capital, model minority and political economy of disability models in Table 4.1 as guides, the key variable types listed in the last row of Table 4.4 were used to help build the regression models. For each of the key variable types in the three models in Table 4.4, similar variable types within the PUMS dataset were sorted as either available or not available. The first row of Table 4.4 represents key variable types that were not available in the PUMS

dataset. The second row of Table 4.4 represents key variable types that were available in PUMS. From the available variable types row, the PUMS variables were further sorted with their specific variable names into either dependent or independent.

The primary dependent variables for this study included employment status (EMPSTAT), whether individuals worked the previous year (WORKEDYR). In PUMS, the EMPSTAT variable has three discrete values, whether they were employed, unemployed or not in the labor force. WORKEDYR indicates whether the person had worked at all for profit, pay, or as an unpaid family worker during the previous year. Other important and available dependent variables included income earned from wages (INCWAGE), and hours worked in a week (UHRSWORK), which indicated full time versus part time work. For a full list of the actual dependent and independent variables from PUMS, please see Table 4.5.

**Table 4.4: Potential Dependent and Independent Variables in PUMS**

	<b>Human Capital</b>	<b>Model Minority (Asian American)</b>	<b>Political Economy of Disability (ADA)</b>
<b>Key variable types from models in Table 4.1 that are <u>NOT</u> available in PUMS</b>	<ul style="list-style-type: none"> <li>- Endowments inherited from parents</li> <li>- Public expenditures on his or her development</li> <li>- Experience</li> </ul>	<ul style="list-style-type: none"> <li>- Return on investment of education</li> <li>- Parents' educational level</li> <li>- Access to service</li> </ul>	<ul style="list-style-type: none"> <li>- (DI) Disability Insurance benefits</li> <li>- Elasticity of labor market</li> </ul>
<b>Key variable types from Table 4.1 that are available in PUMS</b>	DEPENDENT <ul style="list-style-type: none"> <li>- Wage income</li> <li>- Employment status</li> </ul> INDEPENDENT <ul style="list-style-type: none"> <li>- Age</li> <li>- Race</li> <li>- Gender</li> <li>- Urban/rural</li> </ul>	DEPENDENT <ul style="list-style-type: none"> <li>- Wage income</li> </ul> INDEPENDENT <ul style="list-style-type: none"> <li>- Race</li> </ul>	DEPENDENT <ul style="list-style-type: none"> <li>- Wage income</li> <li>- Employment status</li> <li>- Full-time versus part-time work</li> </ul> INDEPENDENT <ul style="list-style-type: none"> <li>- Age</li> </ul>

The last rows in Table 4.4 list the independent variables for the regression models used in Chapter 6. Among the independent variables are demographic variables such as race (RACE) and gender (SEX). This dissertation is primarily concerned with people of working age, which

was manipulated from the PUMS variable (AGE). Individuals between the ages of 18-65 years were included in the final data set. A key independent variable within PUMS for this study is work disability (DISABWRK). This variable indicates whether respondents have any lasting physical or mental health condition that causes difficulty working, limits the amount or type of work they can do, or prevents them from working altogether. DISABWRK does not include temporary health conditions, such as broken bones or pregnancies. Other independent variables include an individual's English proficiency (SPEAKENG) and whether the person lives in an urban or rural community (URBAN).

**Table 4.5: List of Dependent and Independent Variables from 2005 PUMS**

<b><i>Dependent Variables</i></b>	<b><i>Description*</i></b>	<b><i>Values</i></b>	<b><i>Notes</i></b>	<b><i>Derived Variable in tables, regressions or multivariate models</i></b>
EMPSTAT	Indicates whether the respondent was part of the labor force—working, seeking work, or whether the person was currently employed.	0 = N/A 1 = Employed 2 = Unemployed 3 = Not in labor force	<i>Reference variable only, not used in tabs, regressions or multivariate models.</i>	EMPSTAT3
WORKEDYR	Whether the person had worked for profit, pay, or as an unpaid family worker during the previous year.	0 = N/A 1 = No, and did not work in past 5 years 2 = No, but worked 1-5 years ago 3 = Yes	<i>Reference variable only, not used in tabs, regressions or multivariate models</i>	WORKEDYR2
UHRSWORK	Reports the number of hours per week that the respondent usually worked, if the person worked during the previous year.		<i>Continuous variable</i>	
INCWAGE	Reports each respondent’s total pre-tax wage and salary income received as an employee for the previous year.		<i>Continuous variable</i>	
<b><i>Independent Variables</i></b>				
AGE	Age	Continuous 0-99	<i>Reference variable only, not used in tabs, regressions or multivariate models</i>	AGE (Working age 18-65)
SEX	Reports whether the respondent was male or female.	1 = male 2 = female		
DISABWRK	Indicates whether the respondent has any lasting physical or mental health conditions that causes difficulty working, limits the amount or type of work respondent can do or prevents the respondent from working altogether.	0 = N/A 1 = No disability that affects work 2 = disability limits but does not prevent work 3 = disability prevents work 4 = disability causes difficulty working		DISABWRK2

RACASIAN	Indicates whether respondent's race is Asian.	1 = no 2 = yes	Asians with Work Disability N = 3,251	
RACBLK	Indicated whether respondent's race is Black.	1 = no 2 = yes	Blacks with Work Disability N = 19,576	
RACWHT	Indicates whether respondent's race is White.	1 = no 2 = yes	Whites with Work Disability N = 106,181	
HISPAN	Hispanic origins.	0 = Not Hispanic 1 = Mexican 2 = Puerto Rican 3 = Cuban 4 = Other	<i>Reference variable only, not used in tabs, regressions or multivariate models.</i>	HISPAN2
SPEAKENG	Indicates whether the respondent speaks only English at home; also how well the respondent speaks English.	0 = N/A 1 = Does not speak English 2 = Yes, speaks English 3 = Yes, speaks only English 4 = Yes, speaks very well 5 = Yes, speaks well 6 = Yes, but not well 7 = Unknown	<i>Reference variable only, not used in tabs, regressions or multivariate models.</i>	SPEAKENG2
METRO	Indicates whether the household was located within a metropolitan area, whether the housing unit was within a metropolitan area's central city, or within the remainder of the metropolitan area.	0 = Not identifiable 1 = Not in metro area 2 = Central city 3 = Outside central city 4 = Central city status unknown	<i>Reference variable only, not used in tabs, regressions or multivariate models.</i>	METRO2

\* Descriptions of variables are from the PUMS website <http://usa.ipums.org/usa-action/variables>.

#### 4.4.2 Analysis

Chapter 5, the first analytical chapter, contains descriptive statistics of the 2005 PUMS data variables listed in Table 4.5 to assess the possible influence of disability, race, and other socio-economic variables, and residential location (in or out of metropolitan areas) on work characteristics (employment status, income, hours worked per week). These descriptive statistics (chi-squared and ANOVA tests) are used to ascertain which independent variables should be included in the multivariate models in Chapter 6 (which focuses on the importance of disability in explaining variations in employment and wage income compared to other socio-demographic and locational variables).

Chapter 6 contains a description of the recoded variables used in the multivariate regression models (dependent and independent), and an overview of Pearson correlation coefficients (to check for possible multicollinearity). The last column in Table 4.5 shows that two dependent variables and five independent variables were recoded to redefine categorical variables to dichotomous or binary variables. The correlation analysis is followed by an estimated logistic regression models to predict the probability of whether a person is working or not (EMPSTAT3) and whether they worked last year (WORKEDYR2). For example, the probability that a person is employed might be predicted from knowledge of the person's race, age, sex, education, English fluency, urban/rural location and disability.

For continuous variables such as wage income (INCWAGE) and weekly hours worked (UHRSWORK) an Ordinary Least Squares (OLS) modeling technique was used. Logistic regression is a generalized linear model used for binominal regressions and is

appropriate for binary outcomes. Ordinary least squares (OLS) is also a generalized linear model. However, the OLS method is more appropriate for continuous dependent variables.<sup>27</sup>

#### 4.5 Qualitative Data and Methods

The qualitative portion of the mixed method study design was conducted in two stages. Two focus groups were first conducted for formative research. This formative research was used to construct the conceptual model in Chapter 3, which consists of the following elements and their linkages: cultural barriers and structural barriers, attitudinal response, behavior, actual outcomes, and result/impact.

Further, the formative research from the focus groups also played an important role in guiding the development of the interview guide for the semi-structured in-depth interviews of Asian Americans with disabilities. Eighteen semi-structured in-depth interviews were conducted, which were on average about 1 hour each. These interviews resulted in detailed and rich data about the challenges faced by Asian Americans with disabilities in seeking and retaining employment.

The focus groups were conducted with Asian Americans with disabilities in Northern California to avoid contaminating the target population for the semi-structured in-depth interviews, which were conducted with Asian Americans with disabilities in Southern California.

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<sup>27</sup> Logistic Regression with Stata. UCLA: Academic Technology Services, Statistical Consulting Group. from <http://www.ats.ucla.edu/stat/stata/webbooks/logistic/chapter1/stalog1.htm> (accessed August 31, 2012).

#### 4.5.1 Focus Groups with Disabled Asian Americans

Focus groups are common in the fields of health and medicine and in cross-cultural research with ethnic minority populations. The small size of the groups allow participants to report and reflect upon their subjective feelings, thoughts and experiences about being Asian American living with a disability or about employer challenges. Further, through listening to other participants' experiences, participants should become more comfortable about sharing their perspectives in the group setting. Group conversation can help to stimulate discussion around taboo subjects “because the less inhibited members of the group break the ice for the shyer participants” (Kitzinger 1995). Focus groups are particularly useful with non-English speaking individuals – many of whom do not read or write well -- and for communities for which storytelling is the preferred method of communication. Furthermore, “the method is particularly useful for exploring people's knowledge and experiences and can be used to examine not only what people think but how they think and why they think that way” (Kitzinger 1995).

In February of 2003, as part of the outreach efforts of APIDC, I conducted two focus groups with Asians with disabilities. The focus groups were conducted at the office of the California Pan Ethnic Health Network in Oakland, California. Jean Lin, APIDC's Outreach Coordinator recruited individuals of working age (18-65 years) through both formal organizations (e.g., Berkeley Independent Living Center, ILC) and informal support groups serving Asian Americans with disabilities (e.g., East Bay informal support group for hearing impaired Asian Americans). Over 12 Asian Americans with disabilities indicated their interest to participate. As a result, there were enough participants for two separate groups of 6 or 7 each. Furthermore, due to an



APIDC staffperson's efforts, roughly half of the interested respondents were from the Asian American hearing-impaired community.

We decided to conduct the two groups on the same day back to back. Participation was voluntary and no monetary incentives were offered or provided. APIDC provided refreshments (e.g., coffee and soft drinks). Additionally, light snacks such as cookies and fruit were also available to the participants. Upon arrival the participants were provided informed consent information about the focus groups (group communication setting), the sessions will be digitally recorded and they were informed that they could leave at the group discussion at any time. For non-English speakers and the hearing impaired, translators were instructed to provide the information to the participants.

The first group was with the non-English speaking, hearing-impaired Chinese immigrants using translators from Chinese sign language to American Sign Language (ASL) and then ASL to English and vice-versa. The second group consisted of English and non-English speaking Chinese Americans with disabilities other than hearing impairments. An English-Cantonese/Mandarin translator was used for non-English speaking participants.

The purpose of the focus groups was to gain insights through focused discussions into experiences of Asian Americans with disabilities. The focus groups were conducted in a two-hour, semi-structured interview format of between 4 and 6 participants with diverse disabilities. I disseminated a pre-questionnaire that gathered basic demographic information, and attitudes about employment. Participants were asked questions about

planning, obtaining, and retaining employment. Each focus group session was digitally recorded with the permission of the participants.

#### 4.5.2 Semi-Structured In-Depth Interviews with Asian Americans with Disabilities

Semi-structured in-depth interviews provided one-to-one interaction between the researcher and the disabled individual, and addressed a primary weakness of focus groups-- group dynamics such as dominant and shy participants. The open-ended interview format resulted in copious information, providing very detailed and rich data about the challenges faced by Asian Americans with disabilities in seeking and retaining employment.

In 2005 as part of my work with APIDC, which at the time was affiliated with the California Governor's Committee on Employment of People with Disabilities, I had the opportunity to conduct 18 in-depth interviews with disabled Vietnamese individuals in Orange County and disabled Korean individuals in Los Angeles. I focused on the Vietnamese and Korean communities because they offered a good mixed of acculturated and new immigrants with relatively fewer US-born individuals. Additionally, both of these Asian American communities are growing and thriving ethnic communities. The interviews took place at the Dayle McIntosh Center<sup>28</sup> in Orange County and at the Shalom Disabilities Ministry (SDM)<sup>29</sup> in Los Angeles' Koreatown.

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<sup>28</sup> The Dayle McIntosh Center found in 1977, is an Independent Living Center (ILC) located in Garden Grove, CA. The Center is not a residential program, but instead promotes the full integration of disabled persons into the community and offers job training and rehabilitation services. The community of Little Saigon in Orange County falls under the service boundaries of the Dayle McIntosh Center.

<sup>29</sup> Reverend Moses Park founded the Shalom Disabilities Ministry in 1997 as a Christian ministry specifically for disabled Korean-Americans. Reverend Park estimates there are

My recruitment method of the interviewees consisted of a modified snowball approach. I first asked the directors and staff of SDM and the Dayle McIntosh Center to identify two disabled bi-lingual speaking people within their organization for me to interview. These interviews were semi-structured and recorded. Before each interview, I provided informed consent information to the interviewee. Each interviewee was informed that the research was to better understand the struggles and challenges that Asian Americans with disabilities faced in the labor market, the session would be digitally recorded and later transcribed, participation was strictly voluntary and I would stop the recording immediately upon their request. As a thank you for their travel efforts and participation time, they were given \$10 at the end of the interview. They received the \$10 if they decided to stop the interview before the conclusion. (The interview guide is included in the Appendix.)<sup>30</sup> Second, after conducting the interview with the four bi-lingual participants, I then selected one English/Vietnamese speaker and one English/Korean speaker to serve as my translators for subsequent interviews with non-English speakers. Next, I worked out a selection criteria based on maximizing the experiences in the interviewed group to include gender, age, immigration status and English fluency. The selection criteria included working age individuals between the ages of 18-65 years who were clients of the Dayle McIntosh Center or members of the Shalom Disability Ministry; a rough balance of male and female participants; limited or non-English speakers since I already had four interviews with bi-lingual speakers who

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approximately 400 families in their ministry. Church services are held on Thursday nights in Koreatown.

<sup>30</sup> The interview guide used was developed and informed by the focus groups that I conducted in 2003.

were now serving as my translators. Lastly, working with the directors of the organizations and my translators, the directors and staff approached people within their organizations who fit the selection criteria and were willing to be interviewed.

On average, I conducted about 2 - 3 interviews per week. As a result, the entire interview process lasted roughly eight weeks over June, July and August of 2005. Each interview was approximately 1 hour long, recorded and then transcribed.

**Table 4.6: Interviewee Profile**

<b>Ethnicity</b>	<b>Number of Interviews</b>	<b>Age Range</b>	<b>English Proficiency Range</b>	<b>Education Range</b>
Korean women	4	25 – 45	Low – high	Junior high – College
Korean men	4	21 -- 55	very low – high	Elementary – some college
Vietnamese women	3	40 – 45	very low – medium	2 <sup>nd</sup> grade – some college
Vietnamese men	7	19 – 62	low – high	high school – college

#### 4.5.3 Analysis

Interviews for respondents who spoke other than English were translated into English. All interview statements were transcribed. I systematically analyzed and coded the interviews based on the conceptual model in Chapter 3. To identify major themes within the parameters of my conceptual model, I focused on the arrows (linkage) between the boxes. In other words, the arrows linking the boxes guided the coding and quote extraction for analysis. For example, I look for statements referring or suggesting that the perception of “not healthy and not normal” leads to a resistance to seek outside help. Using grounded theorizing, I coded the transcripts in an iterative fashion, using the conceptual model as a guide, but also incorporating emerging themes – this iterative approach resulted in the conceptual framework described in Chapter 3.

#### 4.6 Summary

This chapter described the research design and data collection and analysis methods for the mixed method approach used in this dissertation (quantitative analysis of

2005 PUMS data, and qualitative analysis of semi-structured in-depth interviews). The PUMS 2005 data provided key dependent and independent variables for the quantitative analysis presented in Chapter 5 and 6 to explain variations in employment status (EMPSTAT), whether individuals worked last year (WORKEDYR), weekly hours worked (UHRSWORK) and wage income (INCWAGE) controlling for age, sex, race, work disability, English speaking ability, and whether individuals lived in metropolitan areas are aligned with the variables identified in quantitative models from literature as listed in Table 4.4. The qualitative analysis is discussed in Chapter 7, highlighting the barriers to employment in the words of Asian American

CHAPTER 5  
DESCRIPTIVE STATISTICS OF 2005 PUMS DATA:  
DISABILITY AND WORK

5.1 Introduction

This chapter contains descriptive statistics of the 2005 PUMS data to assess the possible influence of disability, race, and other socio-economic variables, and residential location (in or out of metropolitan areas) on work characteristics (employment status, absenteeism, income, hours worked per week). These descriptive statistics (chi-squared and ANOVA tests) are used to ascertain which independent variables should be included in the multivariate models in Chapter 6 (which focuses on the importance of disability in explaining variations in employment and wage income compared to other socio-demographic and locational variables).

The chapter is organized into the following sections: (1) gender, disability, and work; (2) disability compared to non-disability and work; (3) disabled Asians compared to disabled non-Asians and work; (4) disabled Whites compared to disabled non-Whites and work; (5) disabled Blacks compared to disabled non-Blacks and work; (6) disabled Hispanics compared to disabled Hispanic non-Mexicans and work; (7) English speaking ability, disability, and work; (8) residence in metropolitan areas and work; and (9) a summary of the findings of the descriptive statistical findings and conclusions.

## 5.2 Gender, Disability, and Work

**Table 5.1: Employment Status by Sex of Individuals with Disabilities**

Employment Status	Male	Female	Total
Employed	11,695 (18.4%)	11,341 (15.8%)	23,036 (17.0%)
Unemployed	3,496 (5.5%)	2,883 (4.0%)	6,379 (4.7%)
Not in Labor Force	48,419 (76.1%)	57,549 (80.2%)	105,968 (78.3%)
Total	63,610 (100.0%)	71,773 (100.0%)	135,383 (100.0%)

Pearson  $\chi^2(2) = 360.09$  Pr = 0.000

Table 5.1 shows that disabled male workers have higher labor market participation rates and higher employment rates (18.4%) compared to disabled female workers (15.8%) (significant at the  $p < .001$  level). The “Not in Labor Force” category accounted for large percentages of male and female disabled workers with over 76.1% and 80.2% percent respectively.



**Table 5.2: Worked Last Year by Sex of Individuals with Disabilities**

Worked Last Year	Male	Female	Total
No	28,668 (45.1%)	35,996 (50.2%)	64,664 (47.8%)
No, But Worked 1-5 Years	16,214 (25.5%)	17,648 (24.6%)	33,862 (25.0%)
Yes	18,728 (29.4%)	18,129 (25.3%)	36,857 (27.2%)
Total	63,610 (100.0%)	71,773 (100.0%)	135,383 (100.0%)

Pearson chi2(2) = 410.20 Pr = 0.000

Table 5.2 shows that disabled male workers are more likely to have worked the previous year at 29.4% compared to disabled female workers at 25.3% (significant at the  $p < .001$  level). About one quarter (27.2%) of individuals with disabilities reported working last year. Another quarter of respondents reported although they did not work last year, they worked within the last five years. In total, over 52% of individuals with disabilities reported that they worked in some capacity within the previous five years.

**Table 5.3: Annual Wage Income by Sex of Individuals with Disabilities**

Income from Wages	Coef.	Standard Error	t	P> t
sex	-2410.886	83.53741	-28.86	0.000
_cons	8643.271	134.4522	64.29	0.000

Number of obs = 135,383  
F( 1,135381) = 832.90, Prob > F = 0.0000  
R-squared = 0.0061

Table 5.3 shows that disabled female workers earn about \$2,410.89 less than disabled male workers. This is significant at the  $p < 0.001$  level.

**Table 5.4: Weekly Hours Worked by Sex of Individuals with Disabilities**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
sex	-2.731481	.0927815	-29.44	0.000
_cons	13.47919	.1493304	90.26	0.000

Number of obs = 135383  
 F( 1,135381) = 866.71, Prob > F = 0.0000  
 R-squared = 0.0064

Table 5.4 shows that disabled female workers work about 2.7 hours less per week than disabled male workers. This is significant at the  $p < 0.001$  level.

### 5.3 Disability Compared to Non-Disability and Work

**Table 5.5: Employment Status of Individuals With and Without Disabilities**

Employment Status	Work Disability (No)	Work Disability (Yes)	Total
Employed	1,239,853 (75.5%)	23,036 (17.0%)	1,262,889 (71.0%)
Unemployed	74,499 (4.7%)	6,379 (4.7%)	82,878 (4.7%)
Not in Labor Force	326,167 (19.9%)	105,968 (78.3%)	432,135 (24.3%)
Total	1,642,519 (100.0%)	135,383 (100.0%)	1,777,902 (100.0%)

Pearson  $\chi^2(2) = 2.4e+05$  Pr = 0.000

Table 5.5 shows disabled workers have dramatically lower labor market participation rates and higher employment rates (17.0%) compared to (75.5%) for non-disabled workers (significant at the  $p < .001$  level). The “Not in Labor Force” category accounted for a very large percentage disabled workers with over 78.3% of individuals with disabilities of working age reported they were “Not in Labor Force” in comparison to only 19.9% of individuals without disabilities who reported they were “Not in the Labor Force”.

**Table 5.6: Worked Last Year of Individuals With and Without Disabilities**

Worked Last Year	Work Disability (No)	Work Disability (Yes)	Total
No	136,141 (8.3%)	64,664 (47.8%)	200,805 (11.3%)
No, But Worked 1-5 Years	103,977 (6.3%)	33,862 (25.0%)	137,839 (7.8%)
Yes	1,402,401 (85.4%)	36,857 (27.2%)	1,439,258 (81.0%)
Total	1,642,519 (100.0%)	135,383 (100.0%)	1,777,902 (100.0%)

Pearson  $\chi^2(2) = 2.8e+05$  Pr = 0.000

Table 5.5 shows that disabled workers are dramatically less likely to have reported that they worked the previous year at 27.2% compared to non-disabled workers at 85.4% (significant at the  $p < .001$  level). The table also shows that over 91% of individuals without disabilities either worked last year or within the last five years compared to 52% of individuals with disabilities who worked last year or within the last five years.

**Table 5.7: Annual Wage Income of Individuals With and Without Disabilities**

Income from Wages	Coef.	Standard Error	t	P> t
disabwrk2	-26519.42	108.3888	-244.67	0.000
_cons	57993.1	120.1329	482.74	0.000
Number of obs = 1777902 F( 1,1777900) = 59863.13, Prob > F = 0.0000 R-squared = 0.0326				

Table 5.7 shows that workers with disabilities earned \$26,619.42 less per year than non-disabled workers (significant at the  $p < 0.001$  level).

**Table 5.8: Weekly Hours Worked of Individuals With and Without Disabilities**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
disabwrk2	-24.80397	.0510547	-485.83	0.000
_cons	58.90757	.0565865	1041.02	0.000
Number of obs = 1777902 F( 1,1777900) = Prob > F = 0.0000 R-squared = 0.1172				

Table 5.8 shows that workers with disabilities worked 24.8 hours less per week compared to non-disabled workers (significant at the  $p < 0.001$  level).

### 5.3 Disabled Asians Compared to Disabled Non-Asians and Work

**Table 5.9: Employment Status of Asians with Disabilities**

Employment Status	Asian (No)	Asian (Yes)	Total
Employed	22,142 (16.8%)	894 (27.5%)	23,036 (17.0%)
Unemployed	6,221 (4.7%)	158 (4.9%)	6,379 (4.7%)
Not in Labor Force	103,769 (78.5%)	2,199 (67.6%)	105,968 (78.3%)
Total	132,132 (100.0%)	3,251 (100.0%)	135,383 (100.0%)

Pearson chi2(2) = 263.4238 Pr = 0.000

Table 5.9 shows that disabled Asian workers have higher labor market participation rates and higher employment rates 27.5% compared to disabled non-Asian workers at 16.8%. (significant at the  $p < .001$  level). Over 67% of Asians with disabilities reported that they were “Not in Labor Force”. A similarly high percent of 78.5% of non-Asians with disabilities also reported that they were “Not in Labor Force”.

**Table 5.10: Worked Last Year of Asians with Disabilities**

Worked Last Year	Asian (No)	Asian (Yes)	Total
No	63,355 (48.0%)	1,309 (40.3%)	64,664 (47.8%)
No, But Worked 1-5 Years	33,233 (25.2%)	629 (19.4%)	33,862 (25.0%)
Yes	35,544 (26.9%)	1,313 (40.4%)	36,857 (27.2%)
Total	132,132 (100.0%)	3,251 (100.0%)	135,383 (100.0%)

Pearson  $\chi^2(2) = 293.9517$  Pr = 0.000

Table 5.10 shows that disabled Asian workers are more likely to have worked the previous year at 40.4% compared to disabled non-Asian workers at 26.9% (significant at the  $p < .001$  level). Asians with disabilities who did not work last year were less likely to have worked in the last five years at 19.4% as compared to non-Asian workers with disabilities at 25.2%.

**Table 5.11: Annual Wage Income of Asians with Disabilities**

Income from Wages	Coef.	Standard Error	t	P> t
racasian	5153.754	272.8173	18.89	0.000
_cons	-323.2543	282.4733	-1.14	0.252

Number of obs = 135383  
F( 1, 135381) = 356.86, Prob > F = 0.0000  
R-squared = 0.0026

Table 5.11 shows disabled Asian workers earn about \$5,154 more than disabled non-Asian workers (significant at the  $p < 0.001$  level).

**Table 5.12: Weekly Hours Worked of Asians with Disabilities**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
racasian	6.129321	.3029859	20.23	0.000
_cons	3.023117	.3137097	9.64	0.000

Number of obs = 135,383  
F( 1, 135381) = 409.24, Prob > F = 0.0000  
R-squared = 0.0030

Table 5.12 shows disabled Asian workers work about 6.1 hours more than disabled non-Asian workers (significant at the  $p < 0.001$  level).

#### 5.4 Disabled Whites Compared to Disabled Non-Whites and Work

**Table 5.13: Employment Status of Whites with Disabilities**

Employment Status	White (No)	White (Yes)	Total
Employed	4,568 (15.6%)	18,468 (17.4%)	23,036 (17.0%)
Unemployed	1,611 (5.5%)	4,768 (4.5%)	6,379 (4.7%)
Not in Labor Force	23,023 (78.8%)	82,945 (78.1%)	105,968 (78.3%)
Total	29,202 (100.0%)	106,181 (100.0%)	135,383 (100.0%)

Pearson  $\chi^2(2) = 93.9619$  Pr = 0.000

Table 5.13 shows disabled White workers have higher labor market participation rates and higher employment rates 17.4% compared to disabled non-White workers at 15.6% (significant at the  $p < .001$  level). The number of White disabled workers who reported “Not in the Labor Force” at 78% is almost similar to the rate of non-White disabled workers at who reported they were “Not in the Labor Force” 79%.

**Table 5.14: Worked Last Year of Whites with Disabilities**

Worked Last Year	White (No)	White (Yes)	Total
No	14,833 (50.8%)	49,831 (46.9%)	64,664 (47.8%)
No, But Worked 1-5 Years	6,742 (23.1%)	27,120 (25.5%)	33,862 (25.0%)
Yes	7,627 (26.1%)	29,230 (27.5%)	36,857 (27.2%)
Total	29,202 (100.0%)	106,181 (100.0%)	135,383 (100.0%)

Pearson  $\chi^2(2) = 143.4723$  Pr = 0.000

Table 5.14 shows that disabled White workers are slightly more likely to have worked the previous year at 27.5% compared to disabled non-White workers at 26.1% (significant at the  $p < .001$  level). For disabled workers who did not work last year, disabled White workers are more likely to have worked in the previous five years at 53% compared to disabled non-White workers at 49.2%.



**Table 5.15: Annual Wage Income of Whites with Disabilities**

Income from Wages	Coef.	Standard Error	t	P> t
racwht	249.11	101.6756	2.45	0.014
_cons	4509.772	186.1775	24.22	0.000

Number of obs = 135383  
F( 1, 135381) = 6.00, Prob > F = 0.0143  
R-squared = 0.0000

Table 5.15 shows that disabled White workers earn about \$249 more than disabled non-White workers (significant at the  $p < .05$  level).

**Table 5.16: Weekly Hours Worked of Whites with Disabilities**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
racwht	.0439075	.1129433	.39	0.697
_cons	9.22128	.2068097	44.59	0.000

Number of obs = 135,383  
F( 1, 135381) = 0.15, Prob > F = 0.6975  
R-squared = 0.000

Table 5.16 shows disabled White workers are not statistically significant than disabled non-White workers in terms of hours worked in a week from disabled non-White workers.

## 5.5 Disabled Blacks Compared to Disabled Non-Blacks and Work

**Table 5.17: Employment Status of Blacks with Disabilities**

Employment Status	Blacks (No)	Blacks (Yes)	Total
Employed	20,444 (17.7%)	2,592 (13.2%)	23,036 (17.0%)
Unemployed	5,290 (4.6%)	1,089 (5.6%)	6,379 (4.7%)
Not in Labor Force	90,073 (77.8%)	15,895 (81.2%)	105,968 (78.3%)
Total	115,807 (100.0%)	19,576 (100.0%)	135,383 (100.0%)

Pearson  $\chi^2(2) = 251.8127$  Pr = 0.000

Table 5.17 shows that disabled Black workers have lower labor market participation rates and lower employment rates at 13.2% compared to disabled non-Black workers at 17.6% (significant at the  $p < .001$  level). Over 81% of disabled black workers reported they were “Not in Labor Force” compared to 77.8% of non-Black workers with disabilities.

**Table 5.18: Worked Last Year of Blacks with Disabilities**

Worked Last Year	Blacks (No)	Blacks (Yes)	Total
No	54,255 (46.9%)	10,409 (53.2%)	64,664 (47.8%)
No, But Worked 1-5 Years	29,189 (25.2%)	4,673 (23.9%)	33,862 (25.0%)
Yes	32,363 (28.0%)	4,494 (23.0%)	36,857 (27.2%)
Total	115,807 (100.0%)	19,576 (100.0%)	135,383 (100.0%)

Pearson chi2(2) = 305.1592 Pr = 0.000

Table 5.18 shows disabled Black workers are less likely to have worked the previous year at 23.9% compared to disabled non-Black workers at 28.0% (significant at the  $p < .001$  level). Black workers who did not work last year were less likely to have worked in the last five years at 23.9% compared to non-Black workers with disabilities at 25.2%.

**Table 5.19: Annual Wage Income of Blacks with Disabilities**

Income from Wages	Coef.	Standard Error	t	P> t
racblk	-1250.916	118.8637	-10.52	0.000
_cons	6386.054	142.3286	44.87	0.000

Number of obs = 135383  
F( 1, 135381) = 110.75, Prob > F = 0.0000  
R-squared = 0.0008

Table 5.19 shows disabled Black workers earn on average about \$1,250 less than disabled non-Black workers (significant at the  $p < .001$  level).

**Table 5.20: Weekly Hours Worked of Blacks with Disabilities**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
racblk	-1.680611	.1320083	12.73	0.000
_cons	11.22325	.1580681	71.00	0.000

Number of obs = 135,383  
 F( 1, 135381) = 162.08, Prob > F = 0.6975  
 R-squared = 0.0012

Table 5.20 shows disabled Black workers worked on average about 1.6 hours less than disabled non-Black workers (significant at the  $p < 0.001$  level).

### 5.6 Disabled Mexicans Compared to Disabled Hispanic Non-Mexicans and Work

**Table 5.21: Employment Status of Mexicans with Disabilities**

Employment Status	Mexicans (No)	Mexicans (Yes)	Total
Employed	21,000 (17.0%)	1,237 (18.9%)	22,237 (17.0%)
Unemployed	5,742 (4.6%)	372 (5.7%)	6,114 (4.7%)
Not in Labor Force	96,929 (78.4%)	4,953 (75.5%)	101,882 (78.2%)
Total	123,671 (100.0%)	6,562 (100.0%)	130,233 (100.0%)

Pearson  $\chi^2(2) = 33.4237$  Pr = 0.000

Table 5.21 shows that disabled Mexican workers are employed at a higher rate 18.9% than disabled Hispanic non-Mexican workers at 17.0% (significant at the  $p < .001$  level). More Hispanic non-Mexican workers with disabilities were likely to “Not in the Labor Force” at 78.4% than Mexican workers with disabilities 75.5%. Similar to the other racial groups, the “Not in Labor Force” accounts for a large percentage of workers.

**Table 5.22: Worked Last Year of Mexicans with Disabilities**

Worked Last Year	Mexicans (No)	Mexicans (Yes)	Total
No	58,925 (46.9%)	3,071 (53.2%)	61,996 (47.8%)
No, But Worked 1-5 Years	31,360 (25.4%)	1,415 (21.6%)	32,775 (25.2%)
Yes	33,386 (27.0%)	2,076 (31.6%)	35,462 (27.3%)
Total	123,671 (100.0%)	6,562 (100.0%)	130,233 (100.0%)

Pearson  $\chi^2(2) = 85.8692$  Pr = 0.000

Table 5.22 shows disabled Mexican workers are more likely to have worked the previous year at 31.6% compared to disabled non-Hispanic workers at 27.0% (significant at the  $p < .001$  level). For disabled workers who did not work last year but worked in the last five years, disabled Mexican workers worked at about the same rate 53.2% as non-Mexican disabled workers at 52.4%.

**Table 5.23: Annual Wage Income of Mexicans with Disabilities**

Income from Wages	Coef.	Standard Error	t	P> t
hispan2	252.0211	195.6255	1.29	0.198
_cons	4694.107	209.8907	22.36	0.000

Number of obs = 130233  
F( 1, 130231) = 1.66, Prob > F = 0.1976  
R-squared = 0.0000

Table 5.23 shows disabled Mexican workers do not earn a statistically different wage than disabled Hispanic non-Mexican workers.

**Table 5.24: Weekly Hours Worked of Mexicans with Disabilities**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
hispan2	2.30924	.2162483	10.68	0.000
_cons	6.858205	.2320174	29.56	0.000

Number of obs = 130233  
F( 1, 135381) = 114.03, Prob > F = 0.0000  
R-squared = 0.0009

Table 5.24 shows that disabled Mexican workers worked about 2.3 hours more than disabled non-Mexican workers (significant at the  $p < .001$  level).

## 5.7 English Speaking Ability, Disability, and Work

**Table 5.25: Employment Status of Individuals with Disabilities by English Ability**

Employment Status	English (No)	English (Yes)	Total
Employed	207 (11.9%)	22,829 (17.1%)	23,036 (17.0%)
Unemployed	66 (3.8%)	6,313 (4.7%)	6,379 (4.7%)
Not in Labor Force	1,473 (84.4%)	104,495 (78.2%)	105,968 (78.3%)
Total	1,746 (100.0%)	133,637 (100.0%)	135,383 (100.0%)

Pearson  $\chi^2(2) = 39.3200$  Pr = 0.000

Table 5.25 shows that non-English speaking disabled workers have lower employment rate at 11.9% compared to English speaking disabled workers at 17.1% (significant at the  $p < .001$  level). Non-English speaking disabled workers reported higher “Not in Labor Force” rates at 84.4% than English-speaking disabled workers at 78.2%.

**Table 5.26: Worked Last Year of Individuals with Disabilities by English Ability**

Worked Last Year	English (No)	English (Yes)	Total
No	1,134 (65.0%)	63,530 (47.5%)	64,664 (47.8%)
No, But Worked 1-5 Years	267 (15.3%)	33,595 (25.1%)	33,862 (25.0%)
Yes	345 (19.8%)	36,512 (27.3%)	36,857 (27.2%)
Total	1,746 (100.0%)	133,637 (100.0%)	135,383 (100.0%)

Pearson chi2(2) = 212.3791 Pr = 0.000

Table 5.26 shows non-English speaking disabled workers less often reported that they worked the previous year at 19.8% compared to English speaking disabled workers at 27.3% (significant at the  $p < .001$  level). For disabled workers who did not work last year but worked in the last five years, over 25% of English speaking disabled workers reported working within the last five years compared to 15% of the non-English speaking disabled workers.

**Table 5.27: Annual Wage Income Individuals with Disabilities by English Ability**

Income from Wages	Coef.	Standard Error	t	P> t
speakeg2	2510.734	370.5928	6.77	0.000
_cons	-34.82927	737.5924	-0.05	0.962

Number of obs = 135383  
F( 1, 135381) = 45.90, Prob > F = 0.0000  
R-squared = 0.0003



Table 5.27 shows non-English speaking disabled workers earn \$2,510 less than English speaking disabled workers (significant at the  $p < .001$  level).

**Table 5.28: Weekly Hours Worked of Individuals with Disabilities by English Ability**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
speake2	2.079594	.4116839	5.05	0.000
_cons	5.167256	.8193761	6.31	0.000

Number of obs = 135383  
F( 1, 135381) = 25.52, Prob > F = 0.0000  
R-squared = 0.0002

Table 5.28 shows that non-English speaking disabled workers worked 2.0 hours less in a week than English speaking disabled workers (significant at the  $p < .001$  level).

### 5.8 Residence in Metropolitan Areas and Work

**Table 5.29: Employment Status of Individuals with Disabilities by Metro Status**

Employment Status	Metro (No)	Metro (Yes)	Total
Employed	5,169 (14.8%)	15,836 (18.1%)	21,005 (17.1%)
Unemployed	1,324 (3.8%)	4,490 (5.1%)	5,814 (4.7%)
Not in Labor Force	28,389 (81.4%)	67,423 (76.8%)	95,812 (78.1%)
Total	34,882 (100.0%)	87,749 (100.0%)	122,631 (100.0%)

Pearson  $\chi^2(2) = 309.9039$  Pr = 0.000

Table 5.29 shows that disabled workers living in metropolitan areas are more likely to be employed at 18.1% compared to non-metropolitan disabled workers at 14.8% (significant at the  $p < .001$  level). Over 81% of disabled workers not in Metro areas reported they were “Not in the Labor Force” compared to 76.8% of disabled workers in Metro areas.

**Table 5.30: Worked Last Year of Individuals with Disabilities by Metro Status**

Worked Last Year	Metro (No)	Metro (Yes)	Total
No	17,804 (51.0%)	40,561 (46.2%)	58,365 (47.6%)
No, But Worked 1-5 Years	8,654 (24.8%)	21,996 (25.1%)	30,650 (25.0%)
Yes	8,424 (24.2%)	25,192 (28.7%)	33,616 (27.4%)
Total	34,882 (100.0%)	87,749 (100.0%)	122,631 (100.0%)

Pearson  $\chi^2(2) = 311.6020$  Pr = 0.000

Table 5.30 shows disabled workers living in metropolitan areas are more likely to have worked last year at 28.7% compared to non-metropolitan disabled workers at 24.2% (significant at the  $p < .001$  level). Slightly more metropolitan disabled workers who did not work last year reported working in the last five years at 25.1% compared to 24.8% of disabled workers in non-metropolitan areas.

**Table 5.31: Annual Wage Income Individuals with Disabilities by Metro Status**

Income from Wages	Coef.	Standard Error	t	P> t
metro2	2190.236	98.96968	22.13	0.000
_cons	1300.573	175.5606	7.41	0.000

Number of obs = 122631  
F( 1, 122629) = 489.75, Prob > F = 0.0000  
R-squared = 0.0040

Table 5.31 shows that disabled workers living in metropolitan areas earn \$2,190.24 more than disabled workers who do not live in metropolitan areas (significant at the  $p < .001$  level).

**Table 5.32: Weekly Hours Worked of Individuals with Disabilities by Metro Status**

Weekly Hours Worked	Coef.	Standard Error	t	P> t
metro2	1.650892	.1083769	15.23	0.000
_cons	6.542876	.192248	34.03	0.000

Number of obs = 122631  
F( 1, 122629) = 232.04, Prob > F = 0.0000  
R-squared = 0.0019

Table 5.32 shows that disabled workers living in metro areas worked 1.65 hours more than disabled workers in non-metro areas (significant at the  $p < .001$  level).

## 5.9 Summary and Conclusion

To summarize, this chapter provided descriptive statistics and simple statistical tests of socio-demographic and locational characteristics and their relationships with work variables using the 2005 PUMS data set. This section provides an overview of the major findings.

Gender. Disabled male workers have higher labor market participation rates and higher employment rates than disabled female workers, but disabled female workers are absent from work less than disabled male workers. Disabled female workers earn less than disabled male workers.

Disability compared to non-disability. Disabled workers have lower labor market participation rates, less often reported that they worked in the previous year, and reported lower annual wages compared to non-disabled workers.

Disabled Asians. Disabled Asian workers have higher labor market participation rates and earn higher annual wages compared to disabled non-Asian workers.

Disabled Whites. Disabled White workers have higher labor market participation rates and earn slightly higher annual wages compared to disabled non-White workers.

Disabled Blacks. Disabled Black workers have lower labor market participation rates and earn lower annual wages compared to disabled non-Black workers.

Disabled Mexicans. Disabled Mexican workers have higher labor market participation rates and earn similar annual wages compared to disabled Hispanic non-Mexican workers.

English Speaking Ability. Disabled non-English speaking workers have lower labor market participation rates and earn lower annual wages compared to disabled English speaking workers.

Metropolitan Residence. Disabled workers living in metropolitan areas have higher labor market participation rates and earn lower annual wages compared to disabled workers who do not live in metropolitan areas.

The next chapter uses multivariate statistical models to test these relationships further.

## CHAPTER 6 MULTIVARIATE ANALYSIS OF PUMS DATA

### 6.1 Introduction

The previous chapter provided descriptive statistics of the PUMS variables of interest. These variables (and their recodes) will be used in this chapter to estimate regression models to ascertain the role of disability in labor force participation and wages earned. Before moving to the multivariate models, the chapter first describes the variables (dependent and independent), provides an overview of Pearson correlation coefficients, and then moves to multivariate models of each of the dependent variables to ascertain the particular explanatory power of disability in explaining differences in labor force participation and wages, and finally concludes with a summary of the major findings and conclusions about the analyses.

Table 6.1 provides the variable list and their values; recoded variables were usually redefined to transform categorical variables to dichotomous or binary variables. The variables used directly from PUMS include all the dependent variables (EMPSTAT, WORKEDYR, UHRSWORK, INCWAGE), and several independent variables (SEX, AGE – truncated to 18-65 years of age). Several variables were recoded or derived from existing PUMS variables. The descriptions of the variable values and the recoded variable values are listed in Table 6.1.

**Table 6.1: Variable Descriptions and Values**

<i><b>Dependent Variables</b></i>	<i><b>Descriptions*</b></i>	<i><b>Variable Values</b></i>
EMPSTAT	Indicates whether the respondent was part of the labor force—working or seeking work if so, whether the person was currently employed.	1 = employed 2 = unemployed 3 = not in labor force
EMPSTAT3	Derived from EMPSTAT to exclude all unemployed individuals.	0 = not in labor force 1 = employed
WORKEDYR	Indicates whether the person had worked at all for profit, pay, or as an unpaid family worker during the previous year.	1 = no and did not work in past 5 years 2 = no, but worked in 1-5 years 3 = yes
WORKEDYR2	Derived from WORKEDYR to group all persons who did not work in previous year.	0 = no and did not work in previous year 1 = yes
UHRSWORK	Reports the number of hours per week that the respondent usually worked, if the person worked during the previous year.	Continuous
INCWAGE	Reports each respondent’s total pre-tax wage and salary income received as an employee for the previous year.	Continuous
<i><b>Independent Variables</b></i>		
SEX	Reports whether the respondent is male or female.	1 = male 2 = female
DISABWRK2	Indicates lasting physical or mental health condition that causes difficulty working.	1 = no 2 = yes
RACASIAN	Indicates whether race is Asian.	1 = no 2 = yes
RACWHT	Indicates whether race is White.	1 = no 2 = yes

RACBLK	Indicated whether race is Black.	1 = no 2 = yes
HISPAN2 (Mexican)	Derived from HISPAN variable. Indicate whether Mexican or Not Hispanic.	1 = Not Hispanic 2 = Mexican
AGE (Working Age)	Working age is defined as 18-65.	Range from 18- 65
SPEAKENG2	Derived from SPEAKENG—recoded all degrees of English speaking proficiency into a single English speaking category.	1 = non-English speaking 2 = English speaking
METRO2	Derived from METRO—recoded all central city and suburban households into a single metro code.	1 = not in metro area 2 = in metro area

\* Descriptions of variables are from the PUMS website <http://usa.ipums.org/usa-action/variables>.

**Table 6.2: Correlation Coefficients of Dependent Variables with P Values**

	EMPSTAT*	WORKEDYR	UHRSWORK	INCWAGE
EMPSTAT	1.0000			
WORKEDYR	-0.7537 0.0000	1.0000		
UHRSWORK	-0.6927 0.0000	0.7692 0.0000	1.0000	
INCWAGE	-0.3783 0.0000	0.3468 0.0000	0.4856 0.0000	1.0000

\*EMPSTAT = all cases including “not in labor force” (n=1,777,902)



Table 6.2 shows the Pearson correlation coefficients and statistical significance levels of the dependent variables. The negative correlation direction with EMPSTAT and the other labor force and wage variables is due to how the values in the variable EMPSTAT are reported. For EMPSTAT, value 1 is “employed”, values 2 and 3 in EMPSTAT are “unemployed” and “not in the labor force” respectively. For example, the Pearson correlation coefficient for EMPSTAT and WORKEDYR indicates that “unemployed” or “not in the labor force” is correlated with not having worked the last year or in the previous five years. Moreover, the correlation is fairly high at -0.7537, which is above the plus or minus of correlation threshold of 0.400 used in this analysis to indicate high correlation. The correlation of EMPSTAT and the continuous variable UHRSWORK is also strong at -0.6927, meaning that being employed is highly correlated with higher weekly hours worked in the previous year. The correlation between EMPSTAT and another continuous variable INCWAGE is -0.3783, and consequently, there is a weak relationship between employed and earning more income.

As expected, the variables WORKEDYR and UHRSWORK show a strong positive correlation of 0.7692, which means working last year is correlated to the weekly hours worked in the previous year. The correlation between WORKEDYR and INCWAGE is low, with a correlation coefficient of 0.3468. The correlation of the continuous variables UHRSWORK and INCWAGE is 0.4856, which indicates that hours worked in the previous week and income are highly correlated, which is reasonable.

**Table 6.3: Correlation Coefficients of Dependent Variables with P Values (Adjusted variable EMPSTAT3)**

	EMPSTAT3	WORKEDYR	UHRSWORK	INCWAGE
EMPSTAT3	1.0000			
WORKEDYR2	0.7735 0.0000	1.0000		
UHRSWORK	0.7087 0.0000	0.7698 0.0000	1.0000	
INCWAGE	0.3730 0.0000	0.3482 0.0000	0.4854 0.0000	1.0000

\*EMPSTAT3 = recoded “not in labor force” = 0; dropped unemployed cases; ( n =1,695,024)

Table 6.3 shows Pearson correlation coefficients and statistical significance levels using a derived variable EMPSTAT3. EMPSTAT3 was derived from the variable EMPSTAT after recoding the “not in labor force” to 0 and then dropping all the “unemployed” cases, of which there were relatively few. Dropping the “unemployed” cases reduced the number of cases from n=1,777,902 in EMPSTAT to n=1,695,024 in EMPSTAT3, which is slightly less than a five percent reduction. By recoding the “not in labor force” value to 0 and dropping the “unemployed” cases, the correlation statistics are transformed into an easier to understand format. The Table 6.3 results are virtually identical to the results in Table 6.2, though the signs switch for EMPSTAT3 correlations. For example, WORKEDYR and UHRSWORK are highly correlated with EMPSTAT3 at

0.773 and 0.7087 respectively. These high correlations indicate that if individuals worked last year, those individuals also were employed this year, and that being employed is highly correlated with higher weekly hours worked in the previous year. Similarly, the INCWAGE correlation statistics in Table 6.3 are virtually identical to the results in Table 6.2 showing a weaker relationship between EMPSTAT3 and INCWAGE, and WORKEDYR and INCWAGE. The correlation between UHRSWORK and INCWAGE in Table 6.3 is consistent with the results and explanations of these variables in Table 6.2.

**Table 6.4: Correlation Coefficients of Independent Variables with P Values**

	SEX	DISABWRK2	RACASIAN	RACWHT	RACBLK	HISPAN2	AGE	SPEAKENG2	METRO2
SEX	1.0000								
DISABWRK2	0.0072 0.0000	1.0000							
RACASIAN	0.0083 0.0000	-0.0313 0.0000	1.0000						
RACWHT	-0.0233 0.0000	-0.0154 0.0000	-0.4231 0.0000	1.0000					
RACBLK	0.0314 1.0000	0.0491 0.0000	-0.0667 0.0000	-0.6414 0.000	1.0000				
HISPAN2	-0.0146 0.0000	-0.0142 0.0000	-0.0183 0.0000	-0.0638 0.0000	-0.0380 0.0000	1.0000			
AGE	0.0081 0.0000	0.1559 0.0000	-0.0390 0.0000	0.0901 0.0000	-0.0320 0.0000	-0.0556 0.0000	1.0000		
SPEAKENG2	-0.0114 0.0000	0.0013 0.0790	-0.0167 0.0000	0.0769 0.0000	0.0322 0.0000	-0.1550 0.0000	0.0249 0.0000	1.0000	
METRO2	0.0052 0.0000	-0.0490 0.0000	0.0967 0.0000	-0.1357 0.0000	0.0758 0.0000	0.0101 0.0000	-0.0478 0.0000	-0.0400 0.0000	1.0000

Table 6.4 shows the Pearson correlation coefficients and their statistical significance levels for the independent variables that will be used in the multivariate regression analyses later in this chapter.

SEX and DISABWRK2 are not highly correlated. In fact, the correlation results further show that the independent variable SEX is not highly correlated with any other independent variables. Similarly, the DISABWRK2 variable is also not highly correlated with any other independent variables.

The results for RACASIAN (Asian or not) show that RACWHT (White or not) and RACASIAN are negatively correlated at -0.4231. Interestingly, RACASIAN is not correlated in either direction with RACBLK (Black or not) or HISPAN2 (Mexican or non-Hispanic). RACWHT is negatively correlated with RACBLK at -0.6414 but is not correlated with HISPAN2, which is the derived variable for the ethnic Mexican group. HISPAN2 is not correlated with other racial variables or with other independent variables.

AGE also shows no significant correlations with the other independent variables. The variable on English speaking ability (SPEAKENG2) also yielded low correlation coefficients. Similarly, the metropolitan area variable (METRO2) also resulted in no high correlations when tested against the other independent variables.

## 6.2 Multivariate Regression Models

This section provides the results of multivariate regression models (logistic regression and ordinary least squares regression) that estimate the importance of work disability in explaining variations in labor market participation and wages. As the race variables, RACASIAN, RACWHT, RACBLK, are all highly correlated, the models are estimated using each of the race variables separately to assess the robustness of the models.

### 6.2.1 EMPSTAT3 Logistic Regression Models

This section provides the results of logistic regression models that estimate the importance of work disability in explaining variations in EMPSTAT3, whether individuals are employed or not in the labor force (a recode of the PUMS variable EMPSTAT). As EMPSTAT3 is a binary variable, logistic regression is an appropriate regression approach.

**Table 6.5: Logistic Regression of EMPSTAT3 with RACASIAN**

Empstat3	Odds Ratio	Standard Error	z	P> z
sex	.4355394	.0017491	206.97	0.000
disabwrk2	.0558215	.0004334	371.70	0.000
racasian	.6821793	.0057967	45.01	0.000
hispan2	.8916282	.0053494	19.12	0.000
age	.9869427	.0001503	86.28	0.000
speakeng2	2.18496	.0329006	51.91	0.000
metro2	1.010662	.0031956	3.35	0.001
<b>Model Goodness of Fit</b>				
Number of obs = 1695024				
Log likelihood = -833169.91				
LR chi2(7) = 258193.91				
Prob > chi2 = 0.0000				
Pseudo R2 = 0.1342				

As Table 6.5 shows, the model goodness of fit measures indicate that this model is 13.42% better than an empty model, and that the log likelihood statistic is significant at the  $p < 0.001$  level.

The two most important variables in terms of the odds ratios are reporting a work disability and speaking English. Individuals who report a work disability are 6% as likely as individuals who do not report a work disability to be employed (compared to not being in the labor force). In other words, individuals who report a work disability are much more likely to not be in the labor force than individuals who do not report a work disability. Individuals who speak English are 2.2 times more likely to be employed than individuals who do not speak English (compared to not being in the labor force). In other words, individuals who do not speak English are more likely to not be in the labor force than employed compared to individuals who speak English.

Other variables showed significant results though smaller odds ratios with respect to EMPSTAT3. Controlling for other independent variables, females are 44% as likely as males to be employed (compared to not being in the labor force). In other words, men are more likely to be employed than women, and women are more likely to not be in the labor force compared to men. Asians are 68% as likely as non-Asians to be employed (compared to not being in the labor force), controlling for other independent variables. In other words, non-Asians are more likely to be employed compared to Asians. Asians are more likely to not be in the labor force compared to non-Asians, controlling for all other independent variables.

Mexicans are 89% as likely as non-Hispanics to be employed (compared to not being in the labor force). In other words, controlling for other independent variables, non-Hispanics are more likely to be employed than Mexicans, and Mexicans are more likely than non-Hispanics to not be in the labor force. Older individuals are slightly less likely to be employed than younger individuals (compared to not being in the labor force). In other words, the older one is, the slightly less likely one is to be employed, and more likely one is to not be in the labor force.

Individuals who live in a metropolitan area are 1% more likely than individuals who do not live in a metropolitan area to be employed (compared to not being in the labor force). In other words, individuals who do not live in a metropolitan area are slightly more likely to not be in the labor force than individuals who live in a metropolitan area, controlling for all other independent variables.

**Table 6.6: Logistic Regression of EMPSTAT3 with RACWHT**

Empstat3	Odds Ratio	Standard Error	z	P> z
sex	.4369003	.0017553	-206.11	0.000
disabwrk2	.0568468	.0004413	-369.35	0.000
racwht	1.32045	.0064132	57.23	0.000
hispan2	.9146684	.0053948	-15.12	0.000
age	.9864797	.0001508	-89.05	0.000
speakeng2	2.22946	.033494	53.37	0.000
metro2	1.021172	.0032423	6.60	0.000
<b>Model Goodness of Fit</b>				
Number of obs = 1695024				
Log likelihood = -832532.59				
LR chi2(7) = 259468.56				
Prob > chi2 = 0.0000				
Pseudo R2 = 0.1348				

As Table 6.6 shows, the model goodness of fit measures indicate that this model is 13.48% better than an empty model, and that the log likelihood statistic is significant at the  $p < 0.001$  level.



Similar to the logistic regression results from the EMPSTAT3 model that included the RACASIAN variable just described, the two most important variables in terms of the odds ratios are reporting a work disability and speaking English. Individuals who report a work disability are 6% as likely as individuals who do not report a work disability to be employed (compared to not being in the labor force). Individuals who speak English are over 2.2 times more likely to be employed than individuals who do not speak English (compared to not being in the labor force).

Other variables also showed significant results although with smaller odds ratios with respect to EMPSTAT3. Controlling for other independent variables, females are 44% as likely as males to be employed (compared to not being in the labor force). In other words, males are more likely to be employed than females (compared to not being in the labor force). Whites are 32% more likely to be employed compared to non-Whites (compared to not being in the labor force), controlling for other independent variables. This means that Whites are more likely to be in the labor force than non-Whites, controlling for all other independent variables. Mexicans are 91% as likely as non-Hispanics to be employed (compared to not being in the labor force). This means when controlling for other independent variables, non-Hispanics are slightly more likely to be employed than Mexicans, and Mexicans are slightly more likely than non-Hispanics to not be in the labor force. Older individuals are slightly less likely to be employed than younger individuals (compared to not being in the labor force). In other words, the older an individual becomes, the slightly less likely he/she is to be employed, and more likely he/she is to not be in the labor force. Individuals who live in a metropolitan area are 2% more likely than individuals who do not live in a metropolitan area to be employed (compared to not being in the labor force). Put another way, individuals who do not live in a metropolitan area are slightly more likely to

not be in the labor force than individuals who live in a metropolitan area, controlling for all other independent variables.

**Table 6.7: Logistic Regression of EMPSTAT3 with RACBLK**

Empstat3	Odds Ratio	Standard Error	z	P> z
sex	.4363341	.0017521	-206.54	0.000
disabwrk2	.0568078	.0004411	-369.35	0.000
racblk	.8735279	.0057894	-20.40	0.000
hispan2	.8945308	.0053524	-18.63	0.000
age	.9870952	.0001502	-85.36	0.000
speakeng2	2.22946	.033494	53.37	0.000
metro2	1.002267	.0031626	0.72	0.473

**Model Goodness of Fit**  
Number of obs = 1695024  
Log likelihood = -833932.09  
LR chi2(7) = 256669.54  
Prob > chi2 = 0.0000  
Pseudo R2 = 0.1334

As Table 6.7 shows, the model goodness of fit measures indicate that this model is 13.34% better than an empty model, and that the log likelihood statistic is significant at the  $p < 0.001$  level.

Similar to the results from the two previous EMPSTAT3 logistic regression models, the two most important variables in terms of the odds ratios are reporting a work disability and speaking English. Individuals who report a work disability are 6% as likely as individuals who do not report a work disability to be employed (compared to not being in the labor force).

Individuals who speak English are over 2.2 times more likely to be employed than individuals who do not speak English (compared to not being in the labor force).

With the exception of METRO2, all other variables showed significant results though smaller odds ratios with respect to EMPSTAT3. Controlling for other independent variables, females are 44% as likely as males to be employed (compared to not being in the labor force). Blacks are 87% as likely to be employed compared to non-Blacks (compared to not being in the labor force), controlling for other independent variables. In other words, Blacks are slightly less likely to be in the labor force than non-Blacks, controlling for all other independent variables. Mexicans are 89% as likely as non-Hispanics to be employed (compared to not being in the labor force). This means when controlling for other independent variables, non-Hispanics are slightly more likely to be employed than Mexicans, and Mexicans are slightly more likely than non-Hispanics to not be in the labor force. Older individuals are slightly less likely to be employed than younger individuals (compared to not being in the labor force). In other words, the older one is, the slightly less likely one is to be employed, and more likely one is to not be in the labor force.

### 6.2.2 WORKEDYR2 Logistic Regression Models

This section provides the results of logistic regression models that estimate the importance of work disability in explaining variations in WORKEDYR2, whether individuals worked or not in the previous year (a recode of the PUMS variable WORKEDYR). As WORKEDYR2 is a binary variable, logistic regression is an appropriate regression approach.

**Table 6.8: Logistic Regression of WORKEDYR2 with RACASIAN**

Workedyr2	Odds Ratio	Standard Error	z	P> z
sex	.3755599	.0017832	-206.26	0.000
disabwrk2	.0560787	.000401	-402.90	0.000
racasian	.6752874	.0065977	-40.18	0.000
hispan2	.8330941	.0058439	-26.03	0.000
age	.9735113	.0001745	-149.78	0.000
speakeng2	2.835528	.0453756	65.13	0.000
metro2	1.014207	.0036617	3.91	0.000

**Model Goodness of Fit**  
Number of obs = 1695024  
Log likelihood = -669050.19  
LR chi2(7) = 287152.11  
Prob > chi2 = 0.0000  
Pseudo R2 = 0.1767

As Table 6.8 shows, the model goodness of fit measures indicate that this model is 17.67% better than an empty model, and that the log likelihood statistic is significant at the  $p < 0.001$  level.

Similar to the dependent variable EMPSTAT3, the two most important variables in terms of the odds ratios are reporting a work disability and speaking English. Individuals who report a work disability are 6% as likely as individuals who do not report a work disability to have worked last year. In other words, individuals who report a work disability are much more likely to not have worked last year than individuals who do not report a work disability. Individuals who speak English are 2.8 times more likely to have worked last year than individuals who do

not speak English. In other words, individuals who do not speak English are more likely to not have worked the year before compared to individuals who speak English.

Other variables showed significant results though smaller odds ratios with respect to WORKEDYR2. Controlling for other independent variables, females are 38% as likely as males to have worked the year before. In other words, men are much more likely to have worked the year before than women, and women are more likely to not have worked the year before compared to men. Asians are 67% as likely as non-Asians to have worked the year before, controlling for other independent variables. In other words, non-Asians are more likely to have worked the year before compared to Asians, and Asians are more likely to not have worked the previous year compared to non-Asians, controlling for all other independent variables.

Mexicans are 83% as likely as non-Hispanics to have worked the year before. In other words, controlling for other independent variables, non-Hispanics are more likely to have worked the previous year than Mexicans, and Mexicans are more likely than non-Hispanics to not have worked the previous year. Older individuals are slightly less likely to have worked the year before than younger individuals. In other words, the older one is, the slightly less likely one is to have worked the year before. Individuals who live in a metropolitan area are 1% more likely than individuals who do not live in a metropolitan area to have worked the year before. In other words, individuals who do not live in a metropolitan area are slightly more likely to not have worked in the previous year than individuals who live in a metropolitan area, controlling for all other independent variables.

**Table 6.9: Logistic Regression of WORKEDYR2 with RACWHT**

Workedyr2	Odds Ratio	Standard Error	z	P> z
sex	.3767614	.0017896	-205.50	0.000
disabwrk2	.0571623	.0004086	-400.35	0.000
racwht	1.332287	.0074066	51.61	0.000
hispan2	.8572199	.0058887	-22.43	0.000
age	.9730312	.000175	-151.97	0.000
speakeng2	2.701683	.0432538	62.08	0.000
metro2	1.025336	.0037167	6.90	0.000

**Model Goodness of Fit**  
Number of obs = 1695024  
Log likelihood = -668511.87  
LR chi2(7) = 288228.74  
Prob > chi2 = 0.0000  
Pseudo R2 = 0.1773

As Table 6.9 shows, the model goodness of fit measures indicate that this model is 17.73% better than an empty model, and that the log likelihood statistic is significant at the  $p < 0.001$  level.

The regression results for WORKEDYR2 with RACWHT show that the two most important variables in terms of the odds ratios are reporting a work disability and speaking English. Individuals who report a work disability are 6% as likely as individuals who do not report a work disability to have worked the year before. Individuals who speak English are 2.7 times more likely to have worked the previous year than individuals who do not speak English.

The remaining independent variables also showed significant results although with smaller odds ratios. Controlling for other independent variables, females are 38% as likely as

males to have worked the year before. Whites are 33% more likely to have worked the year before compared to non-Whites, controlling for other independent variables. This means that non-Whites are less likely to have worked in the previous year than Whites, controlling for all other independent variables. Mexicans are 86% as likely as non-Hispanics to have worked the year before. This means when controlling for other independent variables, non-Hispanics are more likely to have worked the year before than Mexicans, and Mexicans are more likely than non-Hispanics to not have worked the previous year. Older individuals are slightly less likely to have worked the year before than younger individuals. In other words, the older an individual becomes, the less likely they are to have worked the previous year, and slightly more likely to have not worked the previous year. Individuals who live in a metropolitan area are 2% more likely than individuals who do not live in a metropolitan area to have worked the year before. Put another way, individuals who do not live in a metropolitan area are slightly less likely to have worked in the previous year than individuals who live in a metropolitan area, controlling for all other independent variables.

**Table 6.10: Logistic Regression of WORKEDYR2 with RACBLK**

Workedyr2	Odds Ratio	Standard Error	z	P> z
sex	.3762044	.0017862	-205.91	0.000
disabwrk2	.0571042	.0004084	-400.28	0.000
racblk	.8766114	.006607	-17.47	0.000
hispan2	.8369581	.0058502	-25.46	0.000
age	.9736803	.0001743	-148.98	0.000
speakeng2	2.901106	.0462865	66.76	0.000
metro2	1.005758	.003624	1.59	0.111

**Model Goodness of Fit**  
Number of obs = 1695024  
Log likelihood = -669660.37  
LR chi2(7) = 285931.74  
Prob > chi2 = 0.0000  
Pseudo R2 = 0.1759

As Table 6.10 shows, the model goodness of fit measures indicate that this model is 17.59% better than an empty model, and that the log likelihood statistic is significant at the  $p < 0.001$  level.

Consistent with the previous regression model results, the two most important variables in terms of the odds ratios for WORKEDYR and RACBLK are reporting a work disability and speaking English. Individuals who report a work disability are 6% as likely as individuals who do not report a work disability to have worked the year before. Individuals who speak English are over 2.9 times more likely to have worked the previous year than individuals who do not speak English.



With the exception of METRO2, all other variables showed statistically significant results although with smaller odds ratios. Controlling for other independent variables, females are 38% as likely as males to have worked the year before. Blacks are 88% as likely to have worked in the previous year compared to non-Blacks, controlling for other independent variables. In other words, Blacks are less likely to have worked in the previous year than non-Blacks, controlling for all other independent variables. Mexicans are 84% as likely as non-Hispanics to have worked the year before. This means when controlling for other independent variables, non-Hispanics are more likely to have worked the previous year than Mexicans, and Mexicans are more likely than non-Hispanics to not have worked in the previous year. Older individuals are slightly less likely to have worked the year before than younger individuals. In other words, the older one is, the slightly less likely one is to have worked the previous year.

### 6.2.3 UHRSWORK OLS (ordinary least squares) Regression Models

This section provides OLS (ordinary least squares) regression results in investigating how well work disability explains variations in UHRSWORK, the number of hours usually worked if the individual reported working in the previous year. UHRSWORK is a continuous variable. As UHRSWORK is a continuous variable, OLS regression is an appropriate regression approach.

**Table 6.11: OLS Regression of UHRSWORK with RACASIAN**

Uhrswork	Coef.	Standard Error	t	P> t
sex	-9.681565	.0261323	-370.48	0.000
disabwrk2	-25.24089	.0499026	-505.80	0.000
racasian	-1.938139	.0618603	-31.33	0.000
hispan2	-.7875296	.0401456	-19.62	0.000
age	-.0381425	.0010221	-37.32	0.000
speakeng2	6.262223	.1159357	54.01	0.000
metro2	.0005639	.0213432	0.03	0.979
Cons	66.30986	.2655612	249.70	0.000

**Model Goodness of Fit**

Number of obs = 1692226  
 F( 7,1692218) =59296.49  
 Prob > F = 0.0000  
 R-squared = 0.1970  
 Adj R-squared = 0.1970  
 Root MSE = 16.979

Table 6.11 shows that this model explains about 19.70% or roughly 20% of the variation in UHRSWORK, and the F statistic is significant at the  $p < 0.001$  level. With the exception of METRO2, all other variables were significant at  $p < 0.001$ .

If the beta coefficients are used as an indicator of the importance of the independent variables in explaining the variation in the number of hours usually worked in a week if individuals worked in the previous year, the most important independent variable is whether the person has a work disability. Individuals reporting a work disability worked about 25 fewer

hours per week than someone without a work disability controlling for other independent variables.

The gender of the individual and whether he/she speaks English also are significant in explaining the variation in the number of hours worked in a week. Females worked about 9.6 fewer hours than males controlling for all other independent variables. English-speaking individuals worked about 6.2 hours more per week in the previous year than individuals who are non-English speakers. Non-Asians usually worked 1.9 or roughly 2 hours more per week than Asians. Mexicans worked 0.8 fewer hours per week than non-Hispanics. Older individuals worked slightly fewer hours per week than younger individuals.

**Table 6.12: OLS Regression of UHRSWORK with RACWHT**

Uhrswork	Coef.	Standard Error	t	P> t
sex	-9.66045	.02613	-369.71	0.000
disabwrk2	-25.1206	.0499109	-503.31	0.000
racwht	1.546483	.0339037	45.61	0.000
hispan2	-.6656225	.0401723	-16.57	0.000
age	-.0407402	.0010244	-39.77	0.000
speakeng2	5.985559	.1161158	51.55	0.000
metro2	.0654171	.0214255	3.05	0.002
Cons	61.74484	.2619215	235.74	0.000

**Model Goodness of Fit**

Number of obs = 1692226  
 F( 7,1692218) =59491.89  
 Prob > F = 0.0000  
 R-squared = 0.1975  
 Adj R-squared = 0.1975  
 Root MSE = 16.974

Table 6.12 shows that this model explains about 19.75%, which is similar to the regression results from Table 6.11 for UHRSWORK and RACASIAN. The F statistic is significant at the  $p < 0.001$  level. All independent variables were statistically significant; with the exception of METRO2 significant at the  $p < 0.01$  level, all other independent variables were significant at  $p < 0.001$  level.

Similar to the results from the Table 6.11 OLS model that included RACASIAN, if the beta coefficients are used as an indicator of the importance of the independent variables in explaining the variation in the number of hours usually worked in a week if individuals worked

in the previous year, the most important independent variable is whether the person has a work disability. Individuals reporting a work disability usually worked about 25 fewer hours per week in the previous year than someone without a work disability controlling for other independent variables. The gender of the individual and whether he/she speaks English also are significant in explaining the variation in the usual number of hours worked in a week. Females usually worked 9.6 fewer hours than males controlling for all other independent variables. English speaking individuals usually worked about 6 hours more per week in the previous year than individuals who are non-English speakers. Whites usually worked 1.5 more hours per week than non-Whites. Mexicans worked 0.67 fewer hours per week than non-Hispanics and older individuals usually worked slightly fewer hours per week than younger individuals.

**Table 6.13: OLS Regression of UHRSWORK with RACBLK**

Uhrswork	Coef.	Standard Error	t	P> t
sex	-9.671434	.0261487	-369.86	0.000
disabwrk2	-25.14555	.0499918	-502.99	0.000
racblk	-.929783	.0458925	-20.26	0.000
hispan2	-.7849483	.0401634	-19.54	0.000
age	-.0376778	.0010221	-36.86	0.000
speakeng2	6.390805	.1159917	55.10	0.000
metro2	-.0286848	.0213166	-1.35	0.178
Cons	64.9463	.2595093	250.27	0.000

**Model Goodness of Fit**  
 Number of obs = 1692226  
 F( 7,1692218) =59194.94  
 Prob > F = 0.0000  
 R-squared = 0.1967  
 Adj R-squared = 0.1967  
 Root MSE = 16.982

Table 6.13 shows that this model explains about 19.67% of the variations, which is similar to the explanatory power of the OLS regression models shown in Tables 6.11 and 6.12. The F statistic is significant at the  $p < 0.001$  level. With the exception of METRO2, all other independent variables were significant at  $p < 0.001$  level.

Similar to the results in the previous two OLS regression models, if the beta coefficients are used as an indicator of the importance of the independent variables in explaining the variation in the number of hours usually worked in a week if individuals worked in the previous year, the most important independent variable is whether the person has a work disability.

Individuals reporting a work disability usually worked about 25 fewer hours per week in the previous year than someone without a work disability controlling for other independent variables. Like the other OLS regression models, the sex of the individual and whether he/she speaks English are significant in explaining the variation in the number of hours usually worked in a week in the previous year. Females usually worked 9.6 fewer hours than males per week in the previous year controlling for all other independent variables. English-speaking individuals usually worked almost 6.4 more hours per week in the previous year than individuals who are non-English speakers. Blacks usually worked almost a full hour less per week (0.92 hours) than non-Blacks in the previous year. Mexicans worked 0.78 fewer hours per week than non-Hispanics and older individuals usually worked slightly less per week than younger individuals.

#### 6.2.4 INCWAGE OLS (ordinary least squares) Regression Models

This section provides OLS (ordinary least squares) regression results in investigating how well work disability explains variations in INCWAGE, the total pre-tax wage and salary income received as an employee for the previous year. INCWAGE is a continuous variable. As INCWAGE is a continuous variable, OLS regression is an appropriate regression approach.

**Table 6.14: OLS Regression of INCWAGE with RACASIAN**

Incwage	Coef.	Standard Error	t	P> t
sex	-17513.13	57.18247	-306.27	0.000
disabwrk2	-29477.86	109.2416	-269.84	0.000
racasian	1972.968	135.3374	14.58	0.000
hispan2	-3611.734	87.85719	-41.11	0.000
age	374.1402	2.236673	167.28	0.000
speakeng2	18706.78	253.8214	73.70	0.000
metro2	6101.047	46.69737	130.65	0.000
Cons	27173.75	581.3306	46.74	0.000

**Model Goodness of Fit**  
 Number of obs = 1695024  
 F( 7,1695016) =30136.72  
 Prob > F = 0.0000  
 R-squared = 0.1107  
 Adj R-squared = 0.1107  
 Root MSE = 37186

The OLS regression results in Table 6.14 shows that this model explains about 11.07% of the variation in INCWAGE. The F statistic is significant at the 0.001 level, and all the independent variables are statistically significant at the  $p < 0.001$  level.



If the beta coefficients are used as an indicator of the importance of the independent variables in explaining the variation in the total pre-tax wage and salary income received as an employee in the previous year, three independent variables are the most important. The most important explanatory variable is having a work disability. Individuals reporting a work disability earned \$29,478 less in total pre-tax wage and salary income as an employee in a year compared to individuals not reporting a work disability, controlling for all the other independent variables. The ability to speak English is also important. English-speaking individuals earned \$18,706 more in total pre-tax wage and salary income as employees than non-English speakers, controlling for all the other independent variables. There is also an important sex gap in annual wage and salary income, controlling for all the other independent variables. Controlling for all the other independent variables, females earned \$17,513 less in total pre-tax wage and salary income as employees than males annually.

Other variables were less important though still significant in explaining variations in INCWAGE. Living in a metropolitan area is associated with \$6,101 higher earnings in total pre-tax wage and salary income as employees than non-metropolitan area residents. Annually, Mexican earned \$3,612 less in total pre-tax wage and salary income as employees than non-Hispanics. Asians in contrast earned \$1,973 more in total pre-tax wage and salary income as employees than non-Asians annually. Older individuals earned roughly \$374 more in total pre-tax wage and salary income as employees than someone one year younger.

**Table 6.15: OLS Regression of INCWAGE with RACWHT**

Incwage	Coef.	Standard Error	t	P> t
sex	-17395.72	57.08209	-304.75	0.000
disabwrk2	-29165.72	109.0772	-267.39	0.000
racwht	6192.664	74.06391	83.61	0.000
hispan2	-3272.537	87.76897	-37.29	0.000
age	358.2524	2.237905	160.08	0.000
speakeng2	17304.43	253.791	68.18	0.000
metro2	6675.05	46.79962	142.63	0.000
Cons	19670.16	572.4179	34.36	0.000

**Model Goodness of Fit**

Number of obs = 1695024  
 F( 7,1695016) =31225.47  
 Prob > F = 0.0000  
 R-squared = 0.1142  
 Adj R-squared = 0.1142  
 Root MSE = 37111

The OLS regression results of INCWAGE and RACWHT in Table 6.15 shows that this model explains about 11.42% of the variation in INCWAGE. The F statistic is significant at the  $p < 0.001$  level, and all the independent variables are statistically significant at the  $p < 0.001$  level.

If the beta coefficients are used as an indicator of the importance of the independent variables in explaining the variation in the total pre-tax wage and salary income received as an employee in the previous year, three independent variables are the most important (these are the same three variables with the largest beta coefficients in Table 6.15). The most important explanatory variable is having a work disability. Individuals reporting a work disability on

average earned \$29,166 less in total pre-tax wage and salary income as an employee in a year compared to individuals not reporting a work disability, controlling for all the other independent variables. The second most important variable is SEX. Females earned \$17,396 less in total pre-tax wage and salary income as an employee than males annually. The ability to speak English is also very important. English speakers earned \$17,304 more in total pre-tax wage and salary income as an employee than non-English speakers, controlling for all other independent variables. Living in a metropolitan area is associated with earning \$6,675 more in total pre-tax wage and salary income as an employee than non-metropolitan area residents. Whites earned \$6,193 more in total pre-tax wage and salary income as an employee than non-Whites. Mexicans earned \$3,273 less in total pre-tax wage and salary income as an employee than non-Hispanics. Older individuals earned roughly \$358 more in total pre-tax wage and salary income as an employee than someone who is one year younger.

**Table 6.16: OLS Regression of INCWAGE with RACBLK**

Incwage	Coef.	Standard Error	t	P> t
sex	-17380.96	57.1298	-304.24	0.000
disabwrk2	-29047.1	109.2672	-265.84	0.000
racblk	-7023.494	100.2655	-70.05	0.000
hispan2	-3846.414	87.76	-43.83	0.000
age	368.2797	2.233313	164.90	0.000
speakeng2	19176.63	253.5504	75.63	0.000
metro2	6416.192	46.56694	137.78	0.000
Cons	35265.06	567.2152	62.17	0.000

**Model Goodness of Fit**

Number of obs = 1695024  
 F( 7,1695016) =30890.71  
 Prob > F = 0.0000  
 R-squared = 0.1131  
 Adj R-squared = 0.1131  
 Root MSE = 37134

Similar to Tables 6.14 and 6.15, Table 6.16 shows that this model explains about 11.31% of the variation in INCWAGE. The F statistic is significant at the  $p < 0.001$  level, and all the independent variables are statistically significant at the  $p < 0.001$  level.

If the beta coefficients are used as an indicator of the importance of the independent variables in explaining the variation in the total pre-tax wage and salary income received as an employee in the previous year, mirroring Tables 6.14 and 6.15, the same three variables emerged as important variables in Table 6.16. Once again, the most important explanatory variable in explaining variation in INCWAGE is having a work disability. Individuals reporting a work

disability earned \$29,047 less in total pre-tax wage and salary income as an employee in a year compared to individuals not reporting a work disability, controlling for all the other independent variables. The second most important variable is the ability to speak English. English speakers earned \$19,177 more in total pre-tax wage and salary income as employees than non-English speakers. The third most important variable is SEX. Females earned \$17,380 less in total pre-tax wage and salary income as employees than males annually.

Other variables were less important though still significant in explaining variations in INCWAGE. Blacks earned \$7,023 less in total pre-tax wage and salary income as employees compared to non-Blacks. Metropolitan area residents earned \$6,416 more in total pre-tax wage and salary income as employees annually than non-metropolitan area residents. Mexican earned \$3,846 less in total pre-tax wage and salary income as employees than non-Hispanics. Older individuals earned roughly \$368 more in total pre-tax wage and salary income as employees than someone who one year younger.

### 6.3 Summary

This chapter used multivariate regression analysis to examine the factors influencing the employment status (EMPSTAT3), work history (WORKEDYR2), average weekly hours (UHRSWORK) and annual wages (INCWAGE) of Asian American workers with disabilities.

Concerning employment status, the two most important variables in terms of the odds ratios were reporting a work disability and speaking English. Individuals who reported a work disability were 6% as likely as individuals who did not report a work disability to be employed (compared to not being in the labor force). English-speaking individuals were 2.1 times more likely to be employed than individuals who did not speak English (compared to not being in the labor force). This pattern also held for the models using the other race variables (RACWHT and

RACBLK). The regression results also showed sex, race, and ethnicity effects. Women were 43% as likely to be employed as men. In comparison to non-Asians, Asians were 68% as likely to be employed compared to not being in the labor force. Blacks were 87% as likely as non-Blacks to be employed compared to not being in the labor force, and Whites were 1.3 times more likely than non-Whites to be employed compared to not being in the labor force. Mexicans were 90% as likely as non-Hispanics to be employed compared to not being in the labor force.

Logistic regression analysis of whether an individual worked in the previous year (WORKEDYR2) confirmed the importance of work disability and English-speaking ability at roughly the same magnitude as the results from EMPSTAT3. The OLS regression results from UHRSWORK (hours work per week in the previous year) also showed that having a work disability reduces labor market participation by an individual with a work disability by as much as 25 hours per week. The OLS regression results on annual earnings from salary and wages (INCWAGE) also showed that having a work disability reduces annual income from salary and wage by as much as \$29,478 compared to an individual without a work disability. The annual earnings model results contrasted with the other model results in terms of the Asian and non-Asian comparisons, where Asians were less likely to be employed than non-Asians (EMPSTAT3), Asians were less likely to have worked in the previous year than non-Asians (WORKEDYR2), and Asians worked fewer hours than non-Asians (UHRSWORK). For annual earnings from salary and wages, Asians earned \$1,973 more than non-Asians.

Although these regression models had explanatory powers ranging from 11% to 20%, they did consistently highlight the significance of having a work disability in terms of employment and earnings. Further, these regression results also point out that the ability to speak English is arguably one of the key factors in labor market success. To a lesser degree,

race, ethnicity, and gender also indicate discernible effects in employment status and annual earnings from salary and wages. This suggests that, for example, a non-English speaking Asian woman with a work disability will most likely have the hardest time finding success in our current labor market.

## CHAPTER 7 ANALYSIS OF QUALITATIVE INTERVIEWS: ASIAN AMERICANS WITH DISABILITIES

### 7.1 Introduction

This chapter contains an analysis of semi-structured interviews conducted with 18 disabled Asian Americans. First is a context, a discussion of the reasons given by respondents for immigrating to the US, and experiences in the immigration process. Next is the analysis using the conceptual themes described in Chapter 3. Though the interview guide included all of these themes, some of the themes were more important (and therefore the sections in this chapter are longer and more extensive) than others, for example, the theme of disability being equivalent to lack of normality or health. Following a description of the interview qualitative analysis by theme, this chapter concludes with a summary of the major findings.

### 7.2 Reasons for Immigrating to US, and Immigration Experiences

Many interviewees stated they believed life in the United States for people with disabilities is much better due to improved technologies and government policies. Additionally, many also stated that they believed that American attitudes toward people with disabilities is significantly better than in Asia. As a Vietnamese male stated:

*I think life in America is easier and more comfortable for disable people than in Vietnam.*

(Non-English speaking 55 year old Vietnamese male with physical impairments)

This Vietnamese male did not have a preconceived notion that life would be better in the United States. In fact, he said he was worried about how a person with disability would be treated, particularly for someone who did not speak English. He stated that he acquired his disability in Vietnam from a stroke. Despite his skepticism, he has had positive experiences in



America. He has not been teased or “joked or played around with”. He said that the rehabilitation and educational opportunities in the United States are much better than in Vietnam.

Similarly, in addition to the commonly accepted pull immigration factors such as better economic and education opportunities, a Korean male was also motivated by the improved technology and government policies for people with disabilities in the United States:

*I just came here [United States] because it is a good place to live as a disabled person, government support disability people and also it is better for our children’s education.*

(Limited-English speaking Korean male between 50-55 years of age with physical impairments)

He indicated that he is married and has children so his outlook had to be broader than if he were an individual. He said that previous to his immigration, he lived in Korea with his mother; his parents were separated. His father immigrated to the United States several years before he did.

Many interviewees stated that the availability of technology and other disability access policies in the United States present a generally improved environment for people with disabilities. In comparison, this Vietnamese female stated that, with the lack of disability resources and technology in Vietnam, life for people with disabilities was very difficult:

*America...is an easier environment for disable people. Also there are many new devices that can help disabled people to [with] their disabilities.*

(Limited-English speaking 40 year old Vietnamese female with physical impairments)

This Vietnamese female did not have any preconceived notions of life in the United States. She said that she immigrated with her father and found it more hospitable than Vietnam.

She said that her disability was a result of polio, which caused her to lose the use of her right hand and created walking difficulties.

Another Vietnamese female said that as a result of the lack of services and technology in Vietnam for people with disabilities, she felt isolated without any independence as a person with disabilities. She said that she felt there was a chance to live a fuller life in the United States:

*I imagined that America was a nice country, where disabled people could have a chance for their life.*

(Bi-lingual 43 year old Vietnamese female with physical impairments)

This statement was made in the context of my asking her to compare her life in Vietnam and the United States. She said that she was basically sequestered at home and had virtually no outside contact with other than family members in Vietnam. Additionally, she said that her father, a former South Vietnam soldier, was taken away to prison and as result her family was not well treated. She went on to say that just the thought of being away from Vietnam was very welcoming. Additionally, she said that the freedom and civil rights protection in the United States also caught her imagination. She went on to compare the disability services and technology that were available in the US but not in Vietnam. As a consequence, she said that her life in the United States was significantly better than in Vietnam, where she would be confined to her bed:

*In Vietnam, I just stayed on the bed [the] whole day. [In America] there was a doctor who [help me] rent a wheel chair for [office visits]...and I could use it at home [too].*

(Bi-lingual 43 year old Vietnamese female with physical impairments)

With simple access to a wheel chair as suggested by her American doctor, she said that she was no longer bed ridden and secluded in her home. For this Vietnamese female, two factors

seemed to contribute to her improved existence in the United States. First, her father was a soldier in the South Vietnamese army and after the fall of the country, the entire family was relocated and treated very badly. Second, as a girl, she felt that her opportunities to venture outside the home in Vietnam was even more limited than for disabled boys.

Some of the interviewees did not immigrate directly to the United States, but migrated to other places first before finally moving to the United States. Many of these experiences were negative because of a lack of services. During his stay in Malaysia, as a result of his disability, this Vietnamese male reported that he spent the majority of his time with family members:

*My life [in Malaysia] was terrible. I could not talk clearly and I could not walk fast, so I did not have any friends. My daily activities were to stay with my brother, aunt and uncle.*

(Limited-English speaking 38 year old Vietnamese male with physical and speech impairments)

This statement was made in the context of my asking about his immigration experience. He said he lived in a camp in Malaysia for 11 months prior to immigrating to the United States. He described the camp in Malaysia as an open environment where everyone shared mess hall and bathroom facilities. He said he felt isolated and exposed at the same time. As a result, he said he stayed close to his brother, uncle, and aunt. He also said that verbal comments from others in the camp made him uncomfortable:

*[In Malaysia]...Sometimes, someone makes fun in front of me because of my talking and walking. I am usually embarrassed and uncomfortable when I am in public or a restaurant.*

(Limited-English speaking 38 year old Vietnamese male with physical and speech impairments)

Another Vietnamese male in his teens talked about being a young boy in a refugee camp in Malaysia, where he said that people ridiculed his disability and he felt stigmatized. As a result of the negative attitudes that he faced, he said he had a hard time making friends and faulted himself:

*I could not walk and take a shower. People around camp [Malaysia] looked at me under a strange eye. Sometimes, they said that I was funny and they laughed at me. That why I didn't have many friends around me...I am very disappointed and sad with myself. Also, I feel uncomfortable in front of people.*

(Bi-lingual 18 year old Vietnamese male with cerebral palsy)

He said that due to the lack of privacy in a refugee camp, he felt even more exposed to ridicule and teasing. He said that this experience continued to affect his level of comfort in front of people to this day.

### 7.3 Employment and Work Experiences

As described in Chapter 3, the Asian American community generally rejects and excludes disabled individuals from social and economic participation, and expects disabled persons to live sheltered lives, hidden from public view. The community expects the family with the disabled member to accept full responsibility for taking care of all the needs of the individual—physical, financial, and emotional. This rejection and desire for spatial exclusion is consistent with Asian cultural practices, which emphasizes the family unit, and not the individual, in which socialization and the maintenance of social control rests.

Not surprisingly, disability appeared to significantly hinder the ability to search for and obtain employment. A Korean male stated that he felt his disability as a barrier to employment opportunities. He stated that companies did not want to hire people with disabilities and if he disclosed that he had a disability he would not get the job. As a result, he stated his philosophy as why even bother to fill out an application if the outcome is no:

*I went to many places to get jobs. Two companies demanded application that included about medical history. It demanded [required] to fill it out all of my disease history....I refused.....I gave up finding a job... Nobody wants to give a job to disabled person.*

(Limited-English speaking 58 year old Korean male with developmental disabilities and epilepsy)

The Korean male stated that he worked in a shelter workshop with other individuals with disabilities. He said that he has tried to apply for work outside of the sheltered workshop but never gone beyond the application stage. Discussing the health questions on employment applications seemed to trigger negative past experiences. For example, he also mentioned that while working at the shelter workshop he had to leave for a while because he was sick and could not work. As a result, he said that he felt that employers would not have confidence in him because he did not have confidence in himself.

A Vietnamese male pointed out that Vietnamese businesses would not hire individuals with disabilities because they have a preconceived notion that individuals with disabilities are not appropriate employees:

*Most of Vietnamese businesses, they don't hire people with disabilities because they think that disable persons cannot produce the job well for them. That is why [the] percentage of Vietnamese businesses hires employee with disability [is] very small.*

(Limited-English speaking 38 year old Vietnamese male with physical and speech impairments)

This statement was made when I asked him about Little Saigon, a Vietnamese business district in Orange County. He said that he has experienced past discrimination in Little Saigon in the form of teasing, “playing around with me”. He stated that these teasing episodes created sadness for him and diminished his self-confidence. Although he said that he has never applied for work in Little Saigon, he also indicated that he had a very negative outlook on job prospects for individuals with disabilities in Little Saigon. Further, he said that he had never seen another individual with disabilities working in Little Saigon.

Another Vietnamese male indicated that he had past work experiences that were not appropriate for him. Although he said that he is motivated to work, he indicated that he was also aware that there are jobs, particularly jobs requiring physical exertions and standing for long periods of time, that were not appropriate for him:

*I sometimes faced a difficult time because the job required me to carry some things that were heavy. With my disability, it was hard for me to do that. I...tried my best to complete my job as well as I could. [On another job], I worked for a few months then I quit because this job required employees who must stand up entire...day.*

(Limited-English speaking 45 year old Vietnamese male with physical impairments)

Although this individual stated that his two last job experiences were difficult because of the standing and lifting requirements, he said that he never complained or asked for accommodations. He said that he believed that, “you must do your job right and you must be responsible with the job”. As a result, instead of asking whether there were possible accommodation options, he said that he quit these jobs.

#### 7.4 Lack of Services for Asian Americans with Disabilities

As stated in Chapter 3, since Asian Americans are largely perceived as not needing assistance (reinforced by high achievement data and the “model minority” myth), federal and state policies have generally not addressed how to reach or serve Asian Americans with disabilities. In effect, the model minority thesis serves to hide disenfranchisement, discrimination and differential gains within the Asian American community. Asian Americans are often not considered a minority either because — in addition to being discounted due to the model minority thesis -- institutions lack the capacity to collect data on this community.

In general, the interviewees indicated that rehabilitation and vocational services are very limited for Asian Americans with disabilities, particularly for recent immigrants who are not English proficient. Though ethnic communities and ethnic enclaves generally are places for new immigrants to shop, bank, socialize and connect with language friendly social service providers, due to stigma and hiding of individuals with disabilities in Asian American communities, there are few if any culturally and linguistically appropriate services for this population.

The lack of culturally appropriate social services targeted for Koreans with disabilities is a barrier to employment.

*There are no associations or social worker that they [help] find out jobs for disabled people.*

(Limited-English speaking Korean male between 50-55 years of age with physical impairments)

This statement was made in the context of my asking him whether it would be easier for him to live in Koreatown instead of outside of Koreatown because of culture and language familiarity. This man stated that he felt there were very few support services for him as a disabled individual in Koreatown. Given that rents were cheaper in other parts of Los Angeles, he said that he and his wife decided to live and operate a business outside of Koreatown.

Another Korean male highlighted similar challenges with lack of services. This Korean male pointed out that there were no specific Asian American and specifically Korean social service agencies serving people with disabilities:

*In Korean community, there are no programs and system that mediate jobs to disability people.*

(Limited-English speaking 58 year old Korean male with developmental disabilities and epilepsy)

This Korean female indicated that she tried to improve her skills for job opportunities but said that she faced the barrier that the services for people with disabilities were not culturally and linguistically suitable:

*I went to blind school for one year...it was so hard. They never used Korean...just English or Spanish. Therefore, I did not go anymore.*

(Non-English speaking 46 year old Korean female with physical impairments)



She stated that she enrolled in a program on life skills for the blind, but she indicated that the lack of culturally competent and linguistically appropriate service frustrated her to the point of quitting.

### 7.5 Mobility barriers

This Vietnamese male discussed limits on the distance of job search area. Even with a license and access to a car, other factors limited his job search:

*I can drive [but limited], my leg is very weak, if I drive 40 minutes, it's okay. But over 40 minutes, my leg gets numb. So I cannot brake the car. I cannot control the car. That is the reason I cannot go [long distance for a job].*

(Limited-English speaking 49 year old Vietnamese male with physical impairments)

This Vietnamese male said that he studied personal computers and was knowledgeable about hardware connections and software packages. Although he said that he had a driver's license and had access to a car, he said that he is limited physically on how far he can drive. As a result, he said that he was geographically limited to job opportunities within a certain distance and time frame that he could manage with his stamina. For example, he said that he lived in Orange County and because of these limits he could not explore job opportunities in Los Angeles County. Furthermore, he said that traffic congestion also limited the distance that he was able to travel because he had roughly a forty minute window before his legs got tired.

A Korean female stated that public transportation in the Southern California was difficult to navigate. She said that she associated access to a private car with independence, opportunities and comfort:

*I did not have car so it was uncomfortable to go out.*

(Non-English speaking 46 year old Korean female with physical impairments)

This statement was made in the context of my asking her about her challenges and difficulties she faces in the United States. Beside the challenges of the English language, she mentioned transportation as the second most important barrier that she confronted in the United States in living independently. She said that mobility had been an issue for her throughout her life, for example, in Korea, she said that her mother carried her to school on her back and her father carried her on his bicycle.

Similarly, this Vietnamese female said that she was dependent on access transit (van or bus serve for people with disabilities). But she said that the unpredictability of the services affected her employment opportunities:

*I had...to quit [work] because the bus company serving people with disabilities didn't operate anymore. Therefore, I don't have transportation for going to work.*

(Non-English speaking 45 year old Vietnamese female with developmental disabilities)

This Vietnamese female pointed out several times earlier during the interview that she was not able to drive and that para-transit was time consuming and not reliable, and therefore a barrier to her job search. She said that the lack of reliable transportation was directly responsible for her leaving her job. However, just before this statement, she mentioned that she did not like her job. Given her dislike of her job, coupled with the transportation difficulties, she said her response was to quit her job.

Negative experiences with public transit were also an issue for another Vietnamese female. She said that she had negative experiences with public transit in the past and mobility continued to be a barrier:

*I planned to apply [for] some jobs, but I had some problems with transportation because at that time, I could not drive yet.*

(Limited-English speaking 40 year old Vietnamese female with physical impairments)

This Vietnamese female made this statement in the context of my asking her about the challenges of job search. She said that she lived in a suburban setting where mobility independence was associated with private vehicles. She said that since she did not drive, her ability to find work was limited. Additionally, she said that she had prior negative experience with public and para-transit and felt they were not convenient or reliable.

## 7.6 Entrepreneurship

A Korean male stated that he realized the limitation of work opportunities for people with disabilities in Korea, and as an alternative, he started a business in Korea as a means of economic independence:

*At that time in Korea, there were not many people with disabilities who work. They worked just in rehabilitation center or just stay home with a little supporting money from government. I was different. I thought I will not be defeated by anybody...I started...a business in 1986 and I did [it] for 10 years [in Korea].*

(Limited-English speaking Korean male between 50-55 years of age with physical impairments)

### 7.7 Relationship with Parent[s]

This Vietnamese teen reported that he was torn between knowing the sacrifices his mother made to take care of him, but at the same time blaming his mother because she gave birth to him with a disability:

*My mother loves me very much. She affords me everything. I also love her. Bad is she born me like this....that why I am really upset [with] her.*

(Bi-lingual 18 year old Vietnamese male with cerebral palsy)

Coupled with his disability, he said that he was at times frustrated with his dependence on his family, particularly his mother for daily needs.

### 7.8 Cultural Norms

As described in Chapter 3, views within Asian American communities about disability, particularly for East and Southeast Asians families, are rooted in the moral and religious beliefs of Confucianism, Buddhism and Taoism (Watanabe 1998; Pi 2001; Hampton 2004). This section uses Pi's (2001) six cultural norm categories to highlight these interviewees' views on disability: 1) Religious; 2) Physiological; 3) Mystic and Cosmic; 4) Moralistic; 5) Psychological; and 6) Fatalistic.

A Korean male's perceptions of his disability reflect the Asian concept of fate. He believed that his disability was curable, but also believed that he was personally responsible for his disability. However, he blamed his past failures to find a cure as an indication that he was not working hard enough. Ultimately, after repeated failures to cure his disability, he blamed the spirits for his condition:

*I am so distressful because of [my] sickness. I always think I should treat my sickness.  
In the past time I resented God a lot about my sickness.*

(Limited-English speaking 58 year old Korean male with developmental disabilities and epilepsy)

This individual made the above statement in the context of talking about his disability and how it has changed his life over the years. This individual craved companionship and had friends growing up. However, as he grew older, his disability created distances from his friends because he had difficulties keeping up with them at work and play. As a result, he was feeling more isolated. Compounded by failed attempts to cure his disability, he became frustrated, leading him to blame the heavenly spirits for his condition.

Another important cultural norm present in the interviews was whether the individual acquired the disability through birth or acquired it through an accident. The community's perception of disability shaped the following quote from this Vietnamese male with disabilities:

*[My neighbors know] my disability [is from] an accident...it is not a problem.*

(Non-English speaking 55- year old Vietnamese male with physical impairments)

This statement was made when discussing whether he has faced discrimination as a result of his disability. Because his disability was acquired later in life due to a stroke, he felt that his neighbors were more accepting of his condition. He stated that disabilities from birth carried a higher degree of stigma.

Disabilities, particularly visible disabilities, were associated with negative reactions by the community according to the interviewees. This Korean male speculated that visibility was associated with whether community members knew about his disability:

*They do not see [that] I have a disability because mine is not seen clearly.*

(Non-English speaking 44 year old Korean male with developmental disabilities)

This statement was made when asked about how the community viewed this man's disability. Because he was able to hide his disability, he said he felt less stigmatized by the community. Hiding was used as a defense mechanism to avoid community stigma.

Conversely, visible disabilities appeared to cause others to differently treat the individual with a disability, according to the interviewees, as this Vietnamese male commented. The point by this Vietnamese male was that people did not see past his disability because his disability defined how people regarded him; he said that people saw him as having limits:

*You know, when I go out...some people [shout out]...the cripple, the cripple...not my name but shout out "Oh, the cripple come."*

(Bi-lingual 49 year old Vietnamese male with physical impairments)

### 7.9 Fear of Community Stigma

As described in Chapter 3, the family's fear that the disabled member will bring shame or a loss of "face" in the eyes of the community was an important part of stigma of disabled people in the Asian American community according to the interviewees. The interviewees indicated that the family's fear consisted of two dimensions: (1) the fear of isolation or exclusion from the rest of Asian society, and (2) the fear of potentially damaging the marriage prospects for other family members.

A Vietnamese male in his teens described an incident at school in Vietnam that caused this individual to experience stigmatization and isolation. Although this individual tried to ignore the comments, he said that the incident still saddens him to this day:

*People in school sometimes stared at me and didn't want to make friends with me. There was once...on the way home, there was a guy, who joked and laughed at the way I walked. I felt a little sad and ignored it out of my mind.*

(Bi-lingual 18 year old Vietnamese male with cerebral palsy)

Another Korean male said that he sought companionship and wanted to marry. He stated that both he and his family felt that the prospect of achieving his goal was better in the United States:

*I wanted to get marry.*

(Non-English speaking 44 year old Korean male with developmental disabilities)

He stated that although his disability was not visible and was not considered severe, he still felt that his opportunities of marriage in Korea were very limited. Additionally, he has siblings living in the United States, who he stated would provide support and facilitate an easier immigration transition. He said that he met his wife through a Korean disability group in Los Angeles.

#### 7.10 Not Normal/Not Healthy

As described in Chapter 3, the attitude that many non-disabled Asians have towards a person with a disability is that the disabled person is not quite normal and to some extent not a fully functioning human being. For example, physical deformities dominate the perception that he/she is sick despite the possibility that the disabled person might actually have a stronger immune system and might be less susceptible to seasonal colds and viruses than non-disabled individuals.

Instead of playing together with other children, for example, one Vietnamese male reported that he was teased and made to feel that he was not normal. The stares and laughter that he encountered today as an adult in public places were constant reminders that he was different and not normal:

*When I was a kid, people used to play around me. Every time, I go to a Vietnamese store or restaurant alone, people laugh at my disability.*

(Limited-English speaking 38 year old Vietnamese male with physical and speech impairments)

This individual reported that he is married and has a young son. He said that he has tried very hard to live as “normally” as possible but because he is reminded by others that he is “not normal”. As a consequence, he said that he was diminished as a person and a father. Similarly, a family member of another Vietnamese male reminded him that because of his disability, he would not be able to live a normal life, such as being employed, maintaining a relationship and living independently:

*[My sister in law] said that I could not have a job and a wife, and I could not take care of myself because I am disabled.*

(Limited-English speaking 45 year old Vietnamese male with physical impairments)

This statement was made in the context of my asking this man about his early immigration struggles. He said that he had to live with his brother when he first immigrated to the US. He said that he is now married and living on his own with his wife, although he was still seeking employment. It may be that he shared his story to dispel the label that his sister-in-law placed on him.



This next Vietnamese male's statement challenged the perception that people were unhealthy due to the fact they had a disability, when in fact he had been less susceptible to seasonal flu and cold as compared to other family members who lived with him (parents, siblings and in-laws):

*[People think that] Oh, this person...is thin and has a disability...so I think they may think my health is not good...but I'm very strong....actually I'm very strong, you know. In my family I'm the strongest because...I have not been sick in three to four years and I never [need] any medicine.*

(Bi-lingual 29 year old Vietnamese male with physical impairments)

This statement was told in the context of my asking him about his job search experience. This man said that he was frustrated by some of the health questions posed to him during job interviews. His statements contested how those questions were framed about how his health compared to others in his family.

This older Vietnamese male described how his will weakened as he has struggled living with his disability:

*When I got older, I was very sad [about my disability]...I sometimes thought that it was better to die rather than I lived with a disability like this.*

(Limited-English speaking 45 year old Vietnamese male with physical impairments)

This man described his very difficult time growing up in North Vietnam as a person with a disability. He described how other children around him were particularly cruel in their comments and behaviors towards him. However, now as a married man living in the United

States, he described his outlook as evolving to accepting the disability as part of who he is, and has strived not to allow it be a problem.

This Korean female reported that she felt singled out at a Korean owned spa by the spa owners, and was not able to take care of herself at the spa because of her disability. She reported that her situation became further complicated when another patron offered to help her and the spa management still refused to allow her to use the facilities. She also compared herself to others that she had seen at the spa such as the older folks with disabilities, and argued to no avail that the older people were allowed to use the spa. Ultimately, she reported that she had to leave, and how this saddened her:

*I went to a [Korean] spa...they said I needed a guardian [before I could use the spa] some customer said they feel uncomfortable because it looked dangerous for me. [One] customer tried to help me. She wanted to be a guardian for me, they [spa] did not allow. I said there are many people who have severe conditions than me, why I cannot use this. Please don't do [this] to me...I was sad.*

(Non-English speaking 46 year old Korean female with physical impairments)

This story was told in context of my asking about her experiences with discrimination. She reported that on her third visit to the spa, the management told her that she needed a guardian to use the spa. She said that the spa owners were apparently concerned that she might hurt herself and the spa would be legally liable. As a result, she reported that the management placed the burden on this woman to find a guardian instead of making accommodations for her and for other people with disabilities.

Adolescent development and peer relationships may also be affected by the seeming lack of normality or health associated with disability. This 18 year old Vietnamese male indicated that he was very self-conscious of his disability:

*I am not comfortable when talking to people. Even I want to say hi to my classmates, I am very embarrassed. That why I don't have many friends.*

(Bi-lingual 18 year old Vietnamese male with cerebral palsy)

As a young recent high school graduate, this Vietnamese teen indicated that he craved acceptance and friendship from his peers. He said that past experiences with teasing and his discomfort with his disability were not helpful in establishing new friendships. He reported that when he was a child in Asia, people teased him and reminded him that he was different and not normal like them. Even after immigrating to the United States, he said that he experienced discrimination and teasing, particularly in public places:

*When I as a kid [in Vietnam], people used to play me around because [of] my disability was strange thing to them. When I came to the United States, I sometimes was joked by kids or other people when I was in public [place] or in restaurant...I feel very sad and hate my disability.*

(Bi-lingual 18 year old Vietnamese male with cerebral palsy)

This Vietnamese teen's experiences were largely within the environment of schools in Vietnam where there were virtually no special education classes or accommodations for his disability. Due to his youth and past experiences of being teased, he seemed to be extremely sensitive and quickly reacted to all slights whether real or perceived.

A Korean male reported that the teasing episodes during his school years were so intense and unbearable that attending school became a negative and he just gave up:

*[People] teased me because of my disability...so I did not go to school. I just graduated elementary school.*

(Limited-English speaking Korean male between 50-55 years of age with physical impairments)

This statement was made as I asked him about his educational background, training and life in general in Korea. He reported that he was enrolled into a regular school with no physical access or accommodation for people with disabilities. He also said that he was teased by classmates, and indicated that it was a very negative environment that he needed to escape from. He instead said that since his father was entrepreneurial, he learned from his father.

A Korean female reported that she was reminded in public that her disability was not normal and that therefore she should not be out in public and should stay hidden in her home:

*When I walk down a street....some people say, “tut, tut”, or “they are so poor”, or “why they come out from house”.*

(Non-English speaking 43 year old Korean female with brain trauma, sight and other physical impairments)

She reported that she was married to a man with disabilities (who uses crutches) and has grown children. She said that her disability was a result of an accident, and that going out in public was part of her everyday life prior to her accident. She said that now that she also had a disability, when she and her husband go out in Koreatown, they were reminded by others' comments that people with disabilities should stay hidden at home.

This Vietnamese male reported a similar social pressure to remain hidden from the community. He indicated that when he was ridiculed or heard whispers behind his back, he was

reminded that he is not normal, because as he indicated, he did not see non-disabled people being singled out for verbal abuse and ridicule:

*I do not like people laughing at me, making fun at me and talking bad things about me.*

*Those make me uncomfortable and ashamed in front of people...I want everyone to treat people with disabilities like normal people.*

(Limited-English speaking 38 year old Vietnamese male with physical and speech impairments)

Even though she had a disability, this Korean female, perhaps as a coping strategy, compared herself with others who have even more severe disabilities, and saw herself as more normal as a result:

*My physical weakness was severe. One of my mother's friends had a daughter who has the same disease [as me]. She still lives on [the] bed. [My condition] became better that I can say [I'm] almost normal.*

(Non-English speaking 38 year old Korean female with physical and developmental impairments)

A Vietnamese female seemed to imply that people without disabilities were normal and individuals were "less normal" as the disability became more severe. This woman compared her experiences in Vietnam and the US. She said that she was ignored and shunned in Vietnam and not treated like a person, compared to the US, where she said that people acknowledged and engaged her in a normal way, similar to how they would treat a non-disabled person:

*In Vietnam, people don't like to play with me and don't want to talk to me. However, in the U.S. people treat me like normal.*

(Non-English speaking 45 year old Vietnamese female with developmental disabilities)

This comment was made in the context of my asking her about past discrimination she had experienced as a result of her disability. It appeared that she felt isolated and discriminated in Vietnam as a child. In the US, she reported that she was enrolled in an English as a Second Language (ESL) class where several of her classmates also had disabilities, and as a result, she felt that they treated her well.

A Vietnamese female discussed her experience in little Saigon (a business district in Orange County), where she said that people see her as someone who is not normal:

*[People in the Vietnamese community] They look at me because I am a disabled person. I think they are curious.*

(Limited-English speaking 40 year old Vietnamese female with physical impairments)

This statement was in the context of my asking her about going out in public in the community and perceptions by the Vietnamese community. This woman reported that the biases and prejudices against people with disabilities had carried over from Vietnam to the Vietnamese community in the US.

This Vietnamese female recalled a childhood memory where other girls were able to do “normal” girl things while all she could do was watch from her house:

*When I grew up, I felt different with other girls...same as my age. Sitting in a corner of my house, I looked at the girls who wore white long dresses crossing my house. I felt sad about myself, and I wished that I could wear a dress like them for one time only.*

(Bi-lingual 43 year old Vietnamese female with physical impairments)

This statement was made in the context of my asking her about growing up in Vietnam where there are accepted and expected rituals of passage, such as girls going out in public in dresses. This woman reported that she felt excluded from these rites and rituals, resulting in her status as an outsider or “not normal”.

### 7.11 Disability as Childlike

As I argued in Chapter 3, Asian Americans living with a disability generally suffer from perceptions that they are not independent and not competent. These negative perceptions may result in significant barriers that prevent disabled Asian Americans from seeking/obtaining independence and full participation in society. The labels of not being independent and not competent create and reinforce even into adulthood a form of paternalism whereby the disabled Asian American is treated as a child to be taken care of, disenfranchised from any form of independence.

On the one hand, being childlike may engage greater parental attention, but on the other hand, moving into adulthood may not change parental treatment of disabled children. This Korean male spoke about the fact that in comparison to his siblings, he received more attention from his parents. However, he also reported that although he is now an adult, his parents still treat him like a child:

*My parents...they focused on me more and try to give me more than other siblings.*

(Limited-English speaking 58 year old Korean male with developmental disabilities and epilepsy)

This statement was made in the context of my asking about this man’s relationship with his parents. Although he expressed appreciation and gratitude about the support he received

from his parents, he also reported that he believed that his parents felt guilty about his disability and continued to treat and protect him to this day.

### 7.12 Isolation/Sequestering as Coping

As stated in Chapter 3, the combination of conceptualizing disability as not normal/not healthy, and childlike, in addition to the fear of community stigma, may cause Asian American families to adopt a behavior that does not necessarily benefit the disabled family member or the family—such as sequestering the family member at home, and reducing the social interaction for not only the disabled family member but of the entire family. As laid out in Chapter 3, the specific actions related to the isolation/sequester behavior occur on different levels: 1) individual—i.e., the nuclear family’s conduct that results in specific actions/behavior by the individual with the disability; 2) the nuclear family’s conduct in relation to the extended family; 3) conduct by the immediate community; and 4) societal behavior.

This Korean female pointed out that in the Korean culture, shame and stigma were major factors that motivated families to hide and keep their disabled members at home:

*Traditionally Korean people are still...there are many people to think....want to hide their disability and still parents...parents who has children who have disability they are ashamed about that and sometimes, still in Korea, disability is kind of...stigma.*

(Bi-lingual 27 year old Korean female with physical impairments)

This Vietnamese male reported that his disability was acquired through an illness and as a result, he had past life experiences without a disability. He indicated that he viewed disability as not normal and as a result, his relationship with his non-disabled friends would never be the same:



*[Relationship with my friends] is a little weaker because I am not a normal person like before...now, I am disabled that could be a burden for my friends.*

(Limited-English speaking 62 year old Vietnamese male with physical and hearing impairments)

This statement was made in the context of my asking him about his relationships with his friends and family. He indicated that he unilaterally decided on his own to isolate himself from his friends because he did not want to be a burden to them. Isolation, whether self-imposed or imposed by others, as suggested by these interviewees, was a way for Asian American communities to deal with disabilities.

Isolation, however, had negative consequences. Being isolated at home appeared to trigger bad memories and negative emotions for this Korean female. She reported that when she was left alone home, her emotions were overwhelming:

*When a blind [person] stay at home, they think [about] past time. I feel so sad, so I try not to think past time...when I'm alone, I feel that I would be crazy because I cannot see.*

(Non-English speaking 43 year old Korean female with brain trauma, sight and other physical impairments)

She expressed frustration that rehabilitation services for the visually impaired were offered in English and Spanish but not Korean. Although this statement was made during the interview where I asked her about acquiring training and education, her statement was more than just about rehabilitation services. She appeared frustrated with her disability and her lack of self-confidence in dealing with the challenges.

Similarly, this Vietnamese man talked about feeling distant and detached from friends he had prior to being disabled. He reported that he was self isolating himself because of his acquired disability:

*[Because of my disability], I sometimes get angry at myself that makes me easily to be mad at people around me. I feel people [are] leaving me behind. With my friends, I think that I'm a problem for them. I [try] stay away [from] them.*

(Limited-English speaking 62 year old Vietnamese male with physical and hearing impairments)

This statement was made in the context of my asking him about his disability. He mentioned multiple times during the interview about his friends leaving him behind.

This Vietnamese female reported that she was isolated at home and had very little contact with non-family members. She said that the relatives with whom she plays were generally children:

*I just stay at home and play with my relatives.*

(Non-English speaking 45 year old Vietnamese female with developmental disabilities)

Although she said that she was married, this Vietnamese female indicated that she and her husband were living with her mother and sister. This woman stated that her relationship with her family was normal, but she smiled and did not answer the question when asked specifically about her relationship with her mother, which suggested to me that there was possible tension in the household. She stated that her relationship with her husband was good and that he always supported her.

### 7.13 Summary and Conclusions

This chapter used analysis of 18 semi-structure in-depth interviews conducted with Asian Americans with disabilities in Southern California. Themes and patterns from the interviews were first reviewed using the list of categories outlined in the conceptual framework in Chapter 3. In addition to the themes from the conceptual framework, the text was reviewed again to find emergent themes or issues in the data that were not part of the conceptual framework.

The analysis of the interview transcripts using the categories from the conceptual framework in Chapter 3 revealed that many of the themes were supported by the narrative data. In particular, numerous quotes in the interview narratives covered all three of the attitudinal responses to a family with disabilities, as mapped out in Figure 3.1: fear of community stigma; not healthy/not normal; and child-like. Not surprisingly given the negative attitudes they face, many of the interviewees described being isolated and sequestered in the home by their families, or that they themselves used isolation as a coping mechanism. Other themes such as lack of job opportunities due to stigma from within their own ethnic community and the lack of culturally competent supportive services for employment also were evident throughout the interviews.

The review of interview transcripts for emergent themes also produced some surprises. For example, the conceptual framework as currently constructed is designed to reflect how the family, community and the mainstream view individuals with disabilities. When asked about relationship with their parents, several individuals shared it was difficult but declined to elaborate further. However, one individual stated that he was grateful but also blamed his mother for his disability.

Other more positive themes also emerged. For the most part, when asked to compare life in the United States with life in their country of origin, virtually everyone agreed that life in the

United States offered more hope for people with disabilities. However, many cited that the inability to speak English as a challenge. On another hopeful note, one respondent stated that since he was unable to find work he decided to start his own business as a way to support himself and his family.

## CHAPTER 8 CONCLUSION AND RECOMMENDATIONS

### 8.1 Summary of Findings

This dissertation has identified the barriers and challenges that Asian Americans with disabilities face in accessing the United States labor market in comparison to other groups. Asian Americans with disabilities experience multiple jeopardies in the form of barriers arising from within the family, within the Asian American community, and the larger mainstream American community in their quest for employment and employment services. This dissertation used three sets of existing literature on disability and work, federal and California state disability policy, and Asian Americans in the labor markets as detailed in Chapter 2 to provide background information and to frame the research.

Through the conceptual framework in Chapter 3, this dissertation organized and presented some of the major hurdles to the labor market facing Asian Americans with disabilities, particularly the challenges facing recent Asian immigrant with disabilities who are non-English speakers. Arguably, the cultural norms and beliefs within the Asian family may be the most difficult to overcome. In addition to the stigma associated with the individual with disabilities, the family also fears that the presence of a family member with a disability will damage the marriage prospects of other family members. As a result, families will hide and sequester the disabled member thereby creating situations where research studies and structural and policy inventions are extremely difficult.

For Asian Americans with disability who are able to overcome family cultural norms, and community cultural norms and beliefs associated with disability, they then also face issues involving mainstream organizations serving individuals with disabilities because of a lack of

cultural competency and program experience serving Asian Americans with disabilities. Further, as a result of the sequestering and hiding of individuals with disabilities, many mainstream service providers do not encounter significant numbers of Asian American clients with disabilities and therefore may not prioritize them as target populations within their service agencies. Similarly, policymakers also rarely encounter advocates for Asian Americans with disabilities and as a result may not see employment barriers for this population as a problem needing policy intervention.

The conceptual model in Chapter 3 provides a framework in an area where little prior research has been done. It is based on grounded theorizing, using interpretations of focus groups and in-depth interviews with Asian Americans with disabilities (analyzed in Chapter 7) —an approach which is consistent with methods used to research populations that are difficult to identify and reach. This conceptual model and the proposition emerging iteratively served as the anchoring guide during the coding process of the in-depth interviews with Vietnamese and Koreans Americans with disabilities in qualitative analysis in Chapter 7.

The quantitative analysis of PUMS 2005 data in Chapters 5 and 6 were guided by the three sets of relevant research model approaches: human capital, model minority thesis, political economy of disability, social interaction and socio-cultural factors (variables listed in Table 4.1). Using these variables, similar variables from the PUMS data set were selected to include in the quantitative analysis. For example, the human capital and model minority models guided selection of variables such as employment rate, race, gender, wage income, English speaking ability and metro/non-metro. The political economy of disability literature guided the selection of variables for work disability, full-time versus part-time work and work history.

Below are major findings in the dissertation.

### 8.1.1 Quantitative Findings from Descriptive Statistics from PUMS Data

The PUMS 2005 data provided key dependent and independent variables for the quantitative analysis presented in Chapter 5 and 6 to explain variations in employment status (EMPSTAT3), whether individuals worked last year (WORKEDYR2), weekly hours worked (UHRSWORK) and wage income (INCWAGE) controlling for age, sex, race, work disability, English speaking ability (SPEAKENG), and whether individuals lived in metropolitan areas (METRO).

Chapter 5 provided descriptive statistics and simple statistical tests of socio-demographic and locational characteristics and their relationships with work variables using the 2005 PUMS data. This section provides an overview of the major findings.

Gender. Males with disabilities have higher labor market participation rates and higher employment rates than female workers with disabilities. Female workers with disabilities earn less than disabled male workers.

Disability compared to non-disability. Workers with disabilities have lower labor market participation rates, less often reported that they worked in the previous year, and reported lower annual wages compared to non-disabled workers.

Asian Americans with disabilities. Asian Americans workers with disabilities have higher labor market participation rates and earn higher annual wages compared to disabled non-Asian workers.

Whites with disabilities. White workers with disabilities have higher labor market participation rates and earn slightly higher annual wages compared to disabled non-White workers.

Blacks with disabilities. Black workers with disabilities have lower labor market participation rates and earn lower annual wages compared to disabled non-Black workers.

Mexicans Americans with disabilities. Mexican American workers with disabilities have higher labor market participation rates and earn similar annual wages compared to disabled Hispanic non-Mexican workers.

English-speaking ability. Non-English speaking workers with disabilities have lower labor market participation rates and earn lower annual wages compared to disabled English speaking workers.

Metropolitan residence. Workers with disabilities living in metropolitan areas have higher labor market participation rates and earn higher annual wages compared to disabled workers who do not live in metropolitan areas.

#### 8.1.2 Quantitative Findings from Multivariate Analysis of PUMS Data

Chapter 6 used multivariate regression analysis to examine the factors influencing the employment status (EMPSTAT3), work history (WORKEDYR2), average weekly hours (UHRSWORK) and annual wages (INCWAGE) of Asian American workers with disabilities.

Employment status (EMPSTAT3) – logistic regression model results. The two most important explanatory variables in terms of variations in employment status odds ratios were reporting a work disability and speaking English.

- Workers with disabilities were much less likely to be employed compared to non-disabled workers.
- English speaking individuals were much more likely to be employed than individuals who do not speak English (compared to not being in the labor force).
- Women were less likely to be employed than men.



- Asians Americans were less likely to be employed than non Asians.
- Whites were more likely to be employed than non-Whites.
- Blacks were less likely as to be employed than non-Blacks.
- Mexicans Americans were less likely to be employed than non-Hispanics (compared to not being in the labor force).

Worked in previous year (WORKEDYR2) – logistic regression results. Logistic regression model explaining the variation in whether an individual worked in the previous year (WORKEDYR2) confirmed the importance of work disability and English speaking ability at roughly the same magnitude as the results from the logistic regression model of EMPSTAT3.

- Workers with disabilities were much less likely than non-disabled workers to have worked last year.
- English speaking individuals much more likely to have worked last year than individuals who do not speak English.
- Women were less likely to have worked last year than men.
- Asians Americans were less likely to have worked last year than non-Asians.
- Whites were more likely to have worked last year than non-Whites.
- Blacks were less likely to have worked last year than non-Blacks.
- Mexicans Americans were less likely than to have worked last year than non-Hispanics.

Hours worked per week in previous year (UHRSWORK) – ordinary least squares regression results. The OLS regression models explaining the variation in UHRSWORK (hours work per week in the previous year) also showed that having a work disability reduces labor market participation by an individual with a work disability by as much as 25 hours per week.

- Workers with disability worked fewer hours per week than non-disabled workers.
- English speaking individuals worked more hours per week than individuals who do not speak English.
- Women worked fewer hours per week than men.
- Asians Americans worked fewer hours per week than non-Asians.
- Whites worked more hours per week than non-Whites.
- Blacks worked fewer hours per week than non-Blacks.
- Mexicans Americans worked fewer hours per week than non-Hispanics.

Annual earnings from salary and wages (INCWAGE) – ordinary least squares regression results. The OLS regression model results analyzing variations in annual earnings from salary and wages (INCWAGE) also showed that having a work disability reduces annual income from salary and wage by as much as \$29,478 compared to an individual without a work disability.

- Workers with disability earned less per year than non-disabled workers.
- English speaking individuals earned much more per year than individuals who do not speak English.
- Women earned less per year than men.
- Asians Americans earned more per year than non-Asians.
- Whites earned more per year than non-Whites.
- Blacks earned less per year than non-Blacks.
- Mexicans Americans earned less per year than non-Hispanics.

### 8.1.3 Qualitative Findings from Long Interview Data

Chapter 7 provided analysis of 18 semi-structure in-depth interviews conducted with Asian Americans with disabilities in Southern California. Themes and patterns from the

interviews were first reviewed using the list of categories outlined in the conceptual framework in Chapter 3 (the conceptual model was developed using grounded theorizing from an initial review of the qualitative data and from themes drawn from the existing literature outlined in Chapter 2). In addition to the themes from the conceptual framework (deductive coding), the text was reviewed again to find emergent themes or issues in the data that were not part of the conceptual framework (inductive coding).

The analysis of the interview transcripts using the categories from the conceptual framework in Chapter 3 revealed that many of the themes were supported by the narrative data. In particular, numerous quotes in the interview narratives covered all three of the attitudinal responses to a family with disabilities, as mapped out in Figure 3.1: fear of community stigma; not healthy/not normal; and child-like. Not surprisingly given the negative attitudes they face, many of the interviewees described being isolated and sequestered in the home by their families, or that they themselves used isolation as a coping mechanism. Other themes such as lack of job opportunities due to stigma from within their own ethnic community and the lack of culturally competent supportive services for employment also were evident throughout the interviews.

The review of interview transcripts for emergent themes also produced some surprises. For example, the conceptual framework as currently constructed is designed to reflect how the family, community and the mainstream view individuals with disabilities. When asked about relationship with their parents, several individuals shared it was difficult but declined to elaborate further. However, one individual stated that he was grateful but also blamed his mother for his disability.

Other more positive themes also emerged. For the most part, when asked to compare life in the United States with life in their country of origin, virtually everyone agreed that life in the

United States offered more hope for people with disabilities. However, many cited that the inability to speak English as a challenge. On another hopeful note, one respondent stated that since he was unable to find work he decided to start his own business as a way to support himself and his family.

## 8.2 Implications of Findings for Future Research

The goals of this dissertation are to identify the cultural and structural barriers that Asian Americans with disabilities face in accessing the labor market, and to explore explanations as to why Asian American with disabilities are underperforming compared to other groups. The dissertation conceptual framework and empirical analysis point to the persistent barriers faced by the Asian American worker with disabilities. At the same time, there are several research fronts that will help us more fully understand the challenges faced by the Asian American workers with disabilities and design intervention strategies to overcome these barriers.

- Further develop and extend the conceptual framework and to draw out the work search and economic independence behaviors and responses of Asian American workers with disabilities: The model as constructed in Chapter 3 maps out the barriers and challenges imposed from the Asian American family, the Asian American community and institutions outside the Asian American communities. Although, it was not within the scope of this dissertation to fully examine the actual responses and coping strategies of the individual with disabilities facing these barriers, the interview data particularly the section on entrepreneurship provided hopeful hints that coping strategies exist and deserve further research.

- Expand the research into the views and perceptions of employers, including Asian-owned businesses in ethnic enclaves. The employer’s views, perceptions and motivations are important components of labor market studies. The obvious implication is that it would probably be easier to apply and work for employers who are more open to hiring Asian Americans with disabilities. The conceptual model of cultural barriers such as “stigma” and structural views such as the “model minority” would be very useful in laying the foundation for future study of employers inside and outside of the Asian American communities.
- Explore the relationship between the discriminatory barriers faced by Asian Americans with disabilities and disability policy tools in the United States: The discussion of the American with Disabilities Act (ADA) in Chapter 2 traced the historical development of rehabilitation policies in the United States and how it led to the ADA as currently the most powerful policy tools to integrate individuals with disabilities into American society. To what extent do the provisions in the ADA help Asian Americans with disabilities overcome the structural barriers they are facing, and how might remedies in the ADA influence their employment prospects? For example, are Asian Americans more or less willing to use the ADA complaint/enforcement mechanisms and why?

### 8.3 Implications of Findings for Practice and Policy

The dissertation conceptual framework and empirical analysis point to several areas of focus for policy makers and service providers who are concerned about reducing and eliminating barriers to labor markets for Asian Americans with disabilities. Below are recommendations based on the dissertation findings:

- Organize one permanent organization/coalition as a lead national advocacy organization:  
The barriers highlighted by the interviewees point to the need for clear and coordinated advocacy in policy and practice settings on their behalf. Having one organization take the lead would prevent effort duplication, confusion, and conflicting viewpoints when structure and consistency are necessary. The organization would also serve as a national clearinghouse for Asian Americans with disabilities health and rehabilitation information and resources. It could also serve as a liaison between federal agencies such as HHS, NIDRR and Asian American organizations serving individuals with disabilities.
- Collect and analyze data: The lack of data on this population points to an urgent need for additional disaggregated data collection and analysis. Once the data is gathered, analyses should be published and disseminated, so the data and analysis are incorporated into culturally competent public health and rehabilitation practices. Finally, the effectiveness of those practices need to be rigorously evaluated to develop best practice models for translation and scaling up.
- Strengthen the capacity of local Asian American community-based organizations: The lack of ethnic organizational capacity as indicated by the interviewees for services and support suggest a need for training and capacity building. Asian American organizations should work with mainstream organizations serving individuals with disabilities to enable cross training for organizations.
- Sponsor national Asian American disability conferences: Similar to the model developed by APIDC, every few years a national health conference should be convened or special sessions at mainstream conferences (such as the American Public Health Association annual conference) to serve as an update on the progress of Asian Americans with

disabilities. Researchers, policymakers, individuals with disabilities and their families and the Asian American community should convene to discuss the successes, failures, resources and to collaborate on future research and policy projects.

- Leadership training for individuals with disabilities and their families: As some of the interviewees suggested, entrepreneurship is a possible avenue to overcome barriers to the labor market. However, entrepreneurship not only requires resources but also leadership capacity and skills. Leadership training and information for Asians and Pacific Islanders with disabilities and their families could be helpful not only to cope individually with labor market barriers, but also for longer term, community and societal level change, such as serving in local government, state and federal boards, committees and offices that impact their lives.
- Collaborate with the media: Because of the isolation and sequestering often experienced by Asian Americans with disabilities, there is little awareness in the Asian American or larger community about the challenges they face, and the successes that they have achieved in labor market participation. The media should be encouraged to report on Asian Americans with disabilities and Asian Americans with disabilities should be encouraged to speak to the media or develop their own media outlets.
- Develop an investment strategy for funders: The lack of organizational capacity, awareness, and focus on Asian Americans with disabilities as indicated by the interviewees might change with available funding resources. Foundations should be informed about the state and need of Asian Americans with disabilities. An agenda should be formulated to create an overall investment strategy for foundations to follow in supporting Asian Americans organization serving people with disabilities and research

entities studying Asian Americans with disabilities. Government agencies should also be educated about this investment strategy.



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