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WE HEREBY RECOMMEND THAT THE DISSERTATION BY:

David V. Flores

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ENTITLED:

Drug Use in Aging Mexican American Men: The Role of Culture and Capital

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BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Ph.D. IN SOCIAL WORK.

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Running Head: Culture, Social Capital, and Heroin Use

Drug Use in Aging Mexican-American Men:

The Role of Culture and Social Capital

BY

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ABSTRACT

In the first decade of the twenty-first century, rates for substance abuse treatment among older adults increased significantly. In the next decade the number of individuals 50 and older in need of drug abuse treatment will double to almost 6 million. Injection drug use (IDU) among older adults continues to be a significant health issue in the U.S., and a disproportionate amount of IDU use is among minority communities. IDU is associated with numerous health and social consequences such as incarceration, homelessness, depression, HIV, Hepatitis C, and suicide ideation. Of particular concern is the predicted increase in alcohol and drug use among older Hispanics, expected to result from an upsurge in the Hispanic population. These factors, compounded by the growth of Hispanics in the U.S., are of significant public health concern. Factors such as Social Capital and Cultural Values have been found to influence drug use and treatment, such as efforts to prevent transition to IDU, the onset of IDU, efforts to achieve cessation, and specifically for heroin use. Understanding the roles of Social Capital and Cultural Values among long-term drug injecting Mexican-Americans may elucidate mechanisms of cessation.

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CHAPTER I: INTRODUCTION

Drug Use in Aging Mexican-American Men:

The Role of Culture and Social Capital

With the explosive growth of the Hispanic population (Humes, Jones, & Ramirez, 2011) and the graying of the baby-boomer generation—the cohort with the highest known prevalence of substance use (Han, Gfroerer, Colliver, & Penne, 2009), the focus on aging, drug-using Hispanics is timely. This becomes even more critical when we consider that our society is facing a nexus of both aging and diversity (Torres-Gil & Treas, 2008) coupled with growing numbers of Hispanics in poverty (Short, 2011). In the first decade of the twenty-first century, rates for substance abuse treatment among older adults increased significantly (Substance Abuse and Mental Health Services Administration, 2011b). In the next decade, the number of individuals 50 and older in need of drug abuse treatment will double to almost 6 million (Han, et al., 2009). Injection drug use (IDU) among older adults continues to be a significant health issue in the U.S., and a disproportionate amount of injection drug use (IDU) occurs in minority communities (Zaller, Bazazi, Velazquez, & Rich, 2009). Moreover, an influx of inexpensive heroin from Latin America and stricter regulations on prescription opiates has contributed to an increase in heroin use (Ciccarone, Unick, & Kraus, 2009; Riordan & Rappleye, 2012; U.S. Department of Justice National Drug Intelligence Center, 2011).

Numerous health and social consequences such as incarceration, homelessness, depression, HIV/AIDS, Hepatitis C (HCV), and suicide ideation have been associated with IDU (Devlin & Henry, 2008; L. R. Torres, Kaplan, & Valdez, 2011; Valdez,

Neaigus, & Cepeda, 2007). Of particular concern is the predicted increase in alcohol and drug use among older Hispanics, expected to result from an upsurge in the Hispanic population. These factors, compounded by the growth of Hispanics in the U.S., are of significant public health concern.

Hispanic IDUs are significantly more likely to be infected with Hepatitis C virus compared to other ethnic groups (Valdez, et al., 2007; Zaller, et al., 2009) and Hispanics contracting HIV through IDU are more likely to be U.S. born than foreign-born (Vega, Canino, Cao, & Alegria, 2009; Zaller, et al., 2009). Social Capital and Cultural Values have been found to influence many aspects of drug use, including patterns of use, efforts to prevent transition to IDU, the onset of IDU, and efforts to achieve cessation (Cloud & Granfield, 2008; Granfield & Cloud, 2001; Laudet & White, 2008). However, research on the influence of social capital and cultural values on heroin use continues to be limited (Cloud & Granfield, 2008). Understanding the influence of social capital and cultural values on drug use will inform future interventions. This study utilized both quantitative and qualitative data to examine relationships between social capital, cultural values, initiation, and cessation of heroin use in a sample of aging Mexican-American injection heroin-using men.

COMMUNITY AND CULTURE

Social capital and cultural values function as mediators for health and health-risk behaviors and have been found to significantly impact substance abuse, specifically in minority communities (Cloud & Granfield, 2008). This is of significant importance for communities of lower socioeconomic status, most of which tend to be ethnic and urban by nature. These ethnic urban communities tend to be impoverished and lack resources,

but are rich in cohesive cultural identity. Communities such as these, especially Hispanic communities, have difficulty responding successfully to conventional substance use treatment compared to Whites (Alegria et al., 2006; DeLaCancela & Martinez, 1983; Glick & Moore, 1990). Homogeneous minority communities that may be lacking in "capital" (material, financial, human, community) but maintain a strong cultural identity require interventions to encompass both socioeconomic abilities/inabilities and cultural strengths/barriers in treatment. The importance of assessing contextualized mediators for substance abuse, such as the socioeconomic status (SES) of a community and their specific cultural beliefs, have become key in understanding substance use in these understudied minority populations and for developing culturally appropriate interventions.

Access to Treatment and Socioeconomic Status

The ability to afford and access *quality* healthcare, including substance abuse treatment, is a significant factor in cessation (Cloud & Granfield, 2008; Granfield & Cloud, 2001; Stockdale, Tang, Belin, & Wells, 2007). According to the U.S. Census, in 2010 roughly a third (28.7%) of Hispanics lived at or below poverty level (Short, 2011) and lacked health insurance (30.7%) compared to Whites (14.3% and 15.4% respectively) (DeNavas-Walt, Proctor, & Smith, 2011). Hispanics' high school dropout rates are among the highest (6%) compared to Whites (2.8%) (Stillwell, Sable, & Plotts, 2011). Education is a key indicator for poverty and health status, and thus, becomes indispensible in obtaining capital. This is especially apparent in an economy that is becoming increasingly technological, sophisticated, and specialized. Increased education is highly correlated with increased income and with having health insurance, and

therefore becomes a significant health related mediator due to rising costs of medical care.

Poverty is another key factor in accessing substance use treatment (Adler & Stewart, 2010). The U.S. Census reports that in 2009, a third of Hispanic households (31%) reported zero or negative net worth compared to 15% of White households, and the median wealth of White households was 18 times that of Hispanics (DeNavas-Walt, et al., 2011). These figures are significant given that in 2005, comparable figures were 23% for Hispanic households compared to 11% for Whites. Further, in 2009, roughly a quarter of all Hispanic households (24%) had no assets other than a vehicle, compared to 6% of White households (DeNavas-Walt, et al., 2011). Trends in SES do not appear to be abating and accessibility for substance abuse resources will increase concurrently with Hispanic population growth.

MEDIATORS FOR SUBSTANCE ABUSE

Social capital and cultural values function as mediators for substance use. Diseases, health conditions, and conditioned behavioral responses to stimuli result from combinations of "complex chains of risk factors" (mediators/moderators) that are specific to the individual (Kiernan, Phillips, Fair, & King, 2000; Kraemer, Kiernan, Essex, & Kupfer, 2008). An individual's mediators/moderators for risk factors determine susceptibility to exposure. Mediators and moderators present themselves differently according to population and must be examined contextually in order to determine how these determinants influence health and health risk behaviors (Kraemer et al., 2001). Problems remain in assessing mediators and moderators of substance abuse in minority populations, especially in hidden populations such as Mexican-American heroin users.

Voids in the literature are a direct result of a lack of funded research, mistrust of researchers by community residents, culturally inadequate measures, lack of research participation by community members, and researchers' inability to convey culturally appropriate information. Identifying these mediators and moderators can help prevent intergenerational substance abuse patterns and disorders.

Gaps in Current Research

Studies have reported poorer health outcomes for Hispanics across a wide range of diseases and have found a significant need for health services, but research on treatment outcomes for substance use remains limited (Alegria, et al., 2006; Smedley, Stith, & Nelson, 2003). The following are some examples of current research on Hispanics. Some research has focused on culturally appropriate treatment of Hispanics, sub-cultural distinctions among Hispanics (e.g., by country of origin, or the "tecato" subculture), and gender usage differences (S. Reif, C. M. Horgan, & G. A. Ritter, 2008; Valdez, Neaigus, & Kaplan, 2008). One study found that Hispanic methamphetamine users received less treatment and services for substance and psychiatric disorders compared to Whites (Niv & Hser, 2006). Co-occurring substance abuse and psychiatric disorders are estimated to be as high as 50% in the general population and lifetime prevalence rates of psychiatric disorders for Hispanics are similar to Whites (Alegría et al., 2010; Hasin, Goodwin, Stinson, & Grant, 2005). Researchers have also discovered that some Mexican-American populations have specific biological markers linked to the development of schizophrenia (Escamilla et al., 2009). Despite these studies, literature on the influence of social capital and cultural values on substance use remains limited.

Health Consequences of Substance Abuse

Substance abuse among older adults is on the rise. Among Americans aged 50 to 59, the rate of past-month illicit drug use increased from 2.7 percent in 2002 to 4.6 percent in 2008 (Andrews, 2008; Substance Abuse and Mental Health Services Administration, 2009). The health consequences of long-term substance abuse are significant and include both physical and socioeconomic consequences (Substance Abuse and Mental Health Services Administration, 2009; L. R. Torres, et al., 2011). Substance abuse/dependence is defined as a clinically significant impairment or distress due to maladaptive patterns of substance use in at least three of following areas; increased tolerance, increased time spent on substance use activities, withdrawals, increased amounts of the substance, unsuccessful efforts to control use, continued usage despite adverse consequences, and a decrease in social, occupational, or recreational activities (American Psychiatric Association, 2000).

Hispanics are disproportionately represented among those with poor chronic health conditions, and substance use exacerbates these conditions (Organista, 2007). Co-morbidity for other substances, especially alcohol, has been found to be significant among Hispanics (L. R. Torres, et al., 2011). Hispanic men have high rates of excessive drinking, alcohol related problems, and alcohol-related mortality compared to Whites (Fisher & Harrison, 2005). Consequences of chronic substance use include serious health conditions and possible fatal overdoses–particularly for injection heroin users.

Injection Drug Use

Injection drug use (IDU) continues to be a significant public health issue in the U.S. and a majority of IDU takes place in minority communities (Zaller, et al., 2009).

Among opiate users, heroin is most prevalent in Hispanic communities and aging Hispanic men are among the largest number of injection heroin users (Valdez, et al., 2008). Some medical consequences of chronic IDU include scarred or collapsed veins, bacterial infections of the heart valves, abscesses, liver or kidney disease, lung complications, and arthritis. Susceptibility to blood-borne viruses such as hepatitis B (HBV) and C (HCV) and HIV increases significantly for injectors. These medical conditions are often accompanied by serious psychological disorders and a decline in social functioning (. National Institute on Drug Abuse, 2010)

TREATMENT

By 2020 it is projected that the number of individuals age 50 and older using illicit drugs will increase significantly and those needing substance use treatment will escalate to almost 6 million (Gfroerer, 2003; Han, et al., 2009). Between 2002 and 2010, illicit drug use rose from 3.4% to 7.2% for individuals aged 50 to 54 (Substance Abuse and Mental Health Services Administration, 2011b). This increased need for treatment for substance use is highly associated with the aging baby boomer generation (Colliver, Compton, Gfroerer, & Condon, 2006; Gfroerer, 2003; Han, et al., 2009). These figures are profound given that individuals born between the 1940's and 1960's have the highest prevalence of IDU ever (Armstrong, 2007). Potential consequences for this baby boomer cohort, including Mexican-American IDUs aged 49 and older, remain significant.

Unfortunately, Hispanics are seeking and receiving less treatment than their White or Black counterparts (Alegria, et al., 2006). Without treatment, the effects of substance use and its associated comorbidities on health and social welfare can result in significantly decreased quality of life. Among Hispanics, current research suggests that

resistance to conventional substance use treatment is multifactorial and largely the result of language, acculturation barriers, and economic constraints (Alegria, et al., 2006; DeLaCancela & Martinez, 1983). Hispanics have lower mortality rates than Whites and Blacks. However, prolonged heroin and alcohol use increases mortality rates. Hispanic males have historically sought out healthcare and substance abuse treatment at reduced rates, placing them at greater risk for serious health problems. Reluctance to receive care from sources outside their community may be directly related to cultural constraints on "being dependent on others," specifically among older Hispanics.

THEORETICAL FRAMEWORK: RECOVERY CAPITAL THEORY

Recovery Social Capital theory served as the theoretical framework for both studies comprising this dissertation (Cloud & Granfield, 2008; Granfield & Cloud, 2001). Recovery capital maintains that addiction and recovery from addiction are based on "capital." The basic theoretical supposition of recovery capital is:

> "Those who misuse substances but who have access to the various kinds of resources that constitute recovery capital have greater capacity to terminate substance misuse than those who do not have access to such resources (Cloud & Granfield, 2008)."

Two key constructs of this model were significant in the findings of this study, *Negative Recovery Capital* and *Cultural Capital*. Negative recovery capital is described as an interval level variable where zero is one point along a continuing encompassing both negative and positive points. At the positive end of this continuum, capital is represented as greater access to conventional resources such as positive family interactions, financial stability, quality education, and positive community networks.

Dysfunctional family relations, fractured neighborhoods, increased rates of poverty, lower rates of education, and affiliation with illicit groups are representative of the negative end of this continuum. *Negative recovery capital* suggests that behaviors, attributes, personal circumstances, and values that are negative in nature, can impede an individual's ability to successfully terminate substance misuse (Cloud & Granfield, 2008).

Cultural capital is the ability to advocate for one's basic interests and maximize opportunities within the cultural norms of one's society (Cloud & Granfield, 2008). Cultural capital encompasses the beliefs, values, perceptions, dispositions, and appreciations that are culturally shared by family, group, or community (Pierre Bourdieu, 1986a; Cloud & Granfield, 2008).

THEORETICAL DEVELOPMENT OF RECOVERY CAPITAL

The theoretical development of recovery capital stemmed from studies in status attainment, education, employment, and crime. Researchers set out to develop theoretical constructs associated with the recovery process and to these ends utilized a grounded theory qualitative approach. Inclusion criteria required that participants overcame substance abuse by means of "mutual-help communities" and did not access formal treatment. Mutual-help communities refer to resources individuals have access to through family, friends, and community. Additionally, participants had to have met the criteria for substance dependence/abuse set forth in the *Diagnostic and Statistical Manual for Mental Disorders*, 4th edition (*DSM-IV*). Recovery capital is defined as the differential capacities and prospects individuals have at their disposal for overcoming serious substance abuse and consequential related problems (Cloud & Granfield, 2008). Four major forms of

capital were found to contribute significantly to recovery capital theory; Social capital, Physical Capital, Human Capital, and Cultural Capital.

Social capital is described as the sum of actual or potential resources individuals or groups have at their disposal through durable networks (P. Bourdieu & Wacquant, 1992). Social capital's main tenet is that group membership allows for greater opportunities to improve one's life by means of access to resources, reciprocal obligations, and increased benefits. Recovery capital suggests that both emotional support (human capital) and access to opportunities aiding in cessation (physical capital) are key in the recovery process.

Physical capital is defined as tangible assets relating to economic, financial, or material capital (James Samuel Coleman, 1990). Recovery capital theory contends that those who are financially stable have increased chances for successful recovery. Financial resources provide for access to medical insurance and professional health assistance. Physical capital allows for individuals to "remove themselves" from toxic environments associated with drug use. For instance, individuals with financial means can afford to "take a hiatus" from work in order to attend an inpatient treatment facility.

Human capital is defined as the extensive array of human attributes that provide individuals with the means to function effectively in conventional society, the maximization of benefits associated with membership in a particular society, and the ability to achieve personal goals. Human capital factors can be acquired or inherited and are necessary for the *best possible negotiation of daily life*. Examples of these include education, knowledge, skill sets, health, and mental health. Genetic inheritance (Reinarman, 2005), mental health (Kessler et al., 1996b), and employment (Cloud &

Granfield, 2008) play defining roles in substance use. More significantly, recovery capital theory suggests that conditions such as unemployment can encourage participation in illicit activities associated with the drug culture. Unemployment associated with drug use becomes an impediment to developing the pro-social values and patterns needed to function in conventional society.

Cultural capital is defined as the embodiment of cultural norms that provide capacities to access basic needs and abilities to maximize opportunities by performing within the context of societally defined norms. Cultural capital encompasses socialized values, traditions, perceptions, beliefs, and attitudes specific to a cultural group. Culture plays a significant role in professional help-seeking for substance use. Among certain ethnic groups conditions such as substance use are typically managed within the family (Fisher & Harrison, 2005; Mechanic, 2008; Stockdale, et al., 2007). Recovery capital theory suggests that users who maintain conventional norms and have a vested stake in society are provided with increased chances for cessation compared to individuals who reject conventional societal norms. In the original recovery capital study (Cloud & Granfield, 2008; Granfield & Cloud, 1999; Granfield & Cloud, 2001), researchers found that self-remitters (cessation of substance use without formal treatment) converted to positive beliefs and conventional values in order to overcome their addictions (Granfield & Cloud, 1999; Granfield & Cloud, 2001). The construction of new systems and beliefs congruent with sobriety is crucial but difficult to realize in communities lacking capital.

Substance use recovery can be delayed in subcultures that develop "street codes" that endorse street reputation, respect, and violence (Anderson, 1996; Cloud & Granfield, 2008). Drug use is nurtured in these subcultures and closely resembles the closed

marginalized enclaves of Mexican-American heroin users in this study. Cultural capital suggests that disadvantaged individuals from oppressed groups develop adaptive coping behaviors and patterns for dealing with depressed environments. These adaptive behaviors needed to cope with their depressed environment inhibit their ability to engage in successful strategies that allow for successful participation in the conventional society and to cease substance use.

Recovery capital theory further proposes that long-term association with drug using subcultures leads to the development of negative adaptive behaviors and "discordant values." *Discordant values* allow for drug use to be seen as normal and desired in the subculture. Substance abuse becomes concomitant to "street" attitudes and further diminishes the possibility of returning to conventional society. These ensconced, well-cultivated attitudes and values can disparage aspirations of cessation (Cloud & Granfield, 2008). These *puissant formulae* of *negative recovery capital* can significantly influenced substance use.

According to recovery capital theory, several factors significantly contribute to negative capital; age, gender, mental health, health and incarceration. Age is highly associated with later-life substance use *severity* and *recovery* (Hawkins, 2006). The younger the age of onset, the increased likelihood of severe substance use over the life course (Hawkins, 2006). In the same study, Hawkins's found that older individuals experienced decreased probability for severe substance use in later life by focusing on positive life experiences in order to prioritize their recovery (2006).

Gender's influence on substance use is comprised of both physical and social differences. Consistent heavy substance use has significantly more detrimental effects on

women compared to men due to their physiological differences (Wechsberg, Craddock, & Hubbard, 1998). Sociocultural taboos and stigma regarding substance use are different for women and men, even in non-conventional drug using societies (Nelson-Zlupko, Kauffman, & Dore, 1995).

Mental health is another important factor regarding substance abuse and recovery. The *National Comorbidity Study* found that 51% of individuals had lifetime mental disorders coupled with lifetime substance dependence, and 41%-66% of individuals with lifetime substance dependence had a lifetime prevalence of mental disorders (Kessler et al., 1996a). Mental disorders, such as major depressive disorder, can significantly impact attempts at recovery. Health status and chronic health conditions were found to be factors in recovery, a finding that is congruent with other studies (Cloud & Granfield, 2008). For individuals with significantly diminished health, mind-altering substances serve as distractions from both depleted health and the realities of life.

Incarceration impacts recovery due to the development of *adaptive prison cultural values*. Incarcerated individuals become "hardened," develop anti-establishment attitudes, and negative cultural values (Terry, 2003). Recovery capital's precepts suggest that cultural values are crucial to recovery efforts and those values learned in prison are counter-intuitive to reentry into conventional society. Conversely, prison-cultural values and behaviors are perfectly adaptable for reentry into the drug world (Cloud & Granfield, 2008).

All of these factors pertaining to recovery capital theory function significantly in the lives of the cohort of Mexican American IDUs studied in this dissertation.

SIGNIFICANCE

The Hispanic population is currently the fastest growing population in the U.S., and will represent roughly a third of the entire US population by 2050 (Humes, et al., 2011). Hispanics accounted for 40% of the increase in the nation's total population between 1990 and 2000 and currently are the largest minority group in the U.S., accounting for 15.4% of the population (Pew Hispanic Center, 2008). Hispanic population growth underscores the need for understanding factors associated with substance abuse, yet research in Hispanic substance abuse continues to be limited (Reif, Horgan, & Ritter, 2008; Alegria et al., 2006). Literature is further limited on the interactive effects of social capital and cultural values on substance.

Findings from this dissertation will contribute to the current limited literature and provide a better understanding of the dynamic interactions between individuals, environmental factors, and drug abuse. A better understanding will inform strengths-based and cultural assets frameworks for improving interventions. Decreasing substance use in these communities can stem the long-term consequences of substance use and increase quality of life for members of this growing population and their communities.

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CHAPTER II: STUDY I

"EL Lado Oscuro": "The Dark Side" of Social Capital

In Mexican-American Heroin Using Men

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ABSTRACT

This paper describes social capital in a cohort of 227 long-term injection heroin using Mexican-American men. Social capital scores for current and former users were similar, suggesting equal absolute values of capital, but associated with illicit activities in current users and with cessation efforts in former users. Stable drug-using relationships provided high negative capital while conventional relationships provided positive capital. Thus, social capital functions dichotomously in positive and negative contextualized roles. This study provides an alternative understanding of the dynamic interactions between individuals, environment, and drug abuse, and can inform prevention and treatment interventions for an important demographic group.

KEYWORDS: Illicit drugs, social capital, heroin, Mexican-American, health, substance use

INTRODUCTION

Hispanics have high prevalence of substance abuse and dependence (9.7%) compared to Whites (8.9%) and Blacks (8.2%) and their *current* illicit drug use rose from 6.2% in 2008 to 8.1% in 2010 (Substance Abuse and Mental Health Services Administration, 2011a). Between 2000 and 2010 Hispanics grew 43% and are projected to be almost a third of the U.S. population by 2050 (Humes, et al., 2011; United States Census Bureau, 2007). These trends suggest greater substance-related consequences for this population. More significantly, U.S. heroin consumption has risen due to increased regulations on prescription opiates and inexpensive heroin from Mexico (Riordan & Rappleye, 2012; U.S. Department of Justice National Drug Intelligence Center, 2011). Among Hispanic opiate users, heroin is the preferred illicitly obtained opiate, and injection heroin use is most common in older Mexican-American men (Valdez, et al., 2008). Non-injection heroin use is increasing in younger opiate users (Lankenau et al., 2012).

A disproportionate amount of injection drug use (IDU) occurs in minority communities. Mexican-Americans are among the largest number of injection heroin users (Estrada, 1998, 2005; Martinez, Bluthenthal, Flynn, Anderson, & Kral, 2011). Consequences of long-term IDU include over-dose, incarceration, homelessness, depression, HIV, Hepatitis C, and suicide ideation (Devlin & Henry, 2008; Musto, 1999; L. R. Torres, et al., 2011; Valdez, et al., 2007). Nonetheless, Hispanics are seeking and receiving less treatment than Whites or Blacks (Office of Applied Studies, 2008). Of Hispanics who do seek and are admitted for treatment, heroin was the primary substance in 26% of admissions compared to 12% for Whites (Sharon Reif, et al., 2008). Opiates

are second only to alcohol for Hispanic drug use treatment admissions (32% vs. 36%) (Alegria, et al., 2006). An important but little explored factor in Hispanic drug use is the role of social capital and how it may influence initiation, use, cessation and relapse (Cloud & Granfield, 2008; Granfield & Cloud, 2001).

SOCIAL CAPITAL

Social Capital is defined as the sum of actual or potential resources individuals have at their disposal via social networks, including material capital, human capital, civic participation, and community cohesion (Pierre Bourdieu, 1986b; James S. Coleman, 1988; Putnam, 1995). It is the exchanging of resources that strengthen communities and allows individuals to benefit from group association. Social capital has been widely used to study societal conditions, distribution of resources, and related phenomena in individuals and groups (Portes, 2000). Strong family networks, quality education, financial stability, and stable communities have all been identified as social capital.

Social capital exists along a continuum from strong positive to strong negative social capital (Cloud & Granfield, 2008; Portes, 1998, 2000; Streeten, 2002).
That is, social capital also has a "darker side", consisting of the inverse of traditionally perceived forms of capital, such as those that may exist in the context of illicit group lifestyles (Liu, 2004). Research has typically focused on socially accepted types of capital or "positive capital" (Bourgois, 1995; Browning, 2009; Browning, Feinberg, & Dietz, 2004; Burchfield, 2009; Kirst, 2009) while "negative" paradigms of capital have garnered less attention in the literature (Pih, De La Rosa, Rugh, & Mao, 2008; Streeten, 2002). Negative social capital is made of the assets, resources, and networks established by nonconventional groups or systems such as gangs and organized criminal networks.

Finances and resources obtained from illicit activities such as the selling of drugs or criminal activities and the social support provided by other group members are types of negative social capital (Liu, 2004).

Negative capital is not only assets derived from illicit activities, but also the absence of capital. Lack of capital or poor access to capital impacts health and health-risk behaviors (Adler & Stewart, 2010; Boyce et al., 2010; Schultz, O'Brien, & Tadesse, 2008). In drug use, absence of capital or limited resources (negative capital) has been found to influence onset, initiation, duration, and cessation (Cheung & Cheung, 2003; Cloud & Granfield, 2008), while access to resources (positive capital) provides increased chances of successful treatment (Cloud & Granfield, 2008) and improves post-treatment outcomes (Cheung & Cheung, 2003). Social capital is thus a critical element in dealing with substance use.

Social Capital and Mexican-American Users

Heroin is typically used in groups, and Mexican-American heroin users form closed enclaves and tight social networks (Valdez, et al., 2008). These enclaves of heroin users may engage in illicit activities, but they can possess high levels of negative capital (Liu, 2004). Familial and community tolerance of illicit behaviors can be part of drug users' negative capital. Social networks, including family and friends, can function as both risk and protective factors for drug use. One study on "networks of exchange" found that culture was created through dense clusters of exchange among large multiple household networks of Mexicans living along the U.S.-Mexico border (Vélez-lbáñez, 1988). These same processes in marginalized Hispanic neighborhoods, such as

"barrios," [1] may help to attenuate the effects of living in lower socio-economic conditions, but are unable to resolve deeply embedded disparities in these communities (Vélez-lbáñez, 1988). Both conventional (i.e., law-abiding) and criminal residents in these *barrios* achieve a culture of "negotiated co-existence" and "collective efficacy" via social exchange through extensive neighborhood networks (Browning, 2009; Rose & Clear, 1998; Sampson & Raudenbush, 1997). Thus, individuals involved in illicit activities are protected by their interconnectedness in these closed neighborhood enclaves (Browning, 2009; Rose & Clear, 1998; Sampson & Raudenbush, 1997).

Participants in the current study reside in similar ethnically distinct, closed but interconnected enclaves situated within *barrios*. *Barrios* provide both positive and negative capital through collectivism (social connectedness) and through the Hispanic cultural value of *familismo* (familial connectedness). For Hispanics, family is highly valued and the focus is on a collective orientation as opposed to the individual (Smith, Sudore, & Perez-Stable, 2009). *Familismo* is a cultural concept that refers to a strong sense of identification, loyalty to family, protection of family honor, respect, and cooperation (Gonzalez-Castro et al., 2006; Perez & Cruess, 2011). Emphasis on the family collective is central among Hispanics and provides strong positive capital. Attributes central to *familismo* can also provide negative unintended outcomes, such as enabling and increased tolerance of high-risk behaviors by family members (Cloud & Granfield, 2008; Valdez, et al., 2008). Collectivism and *familismo* may result in residents being less likely to report illicit activities, or do something about it, because of the culture of "negotiated co-existence" and "collective efficacy" created through social exchange

[1] *Barrios* are inner city Hispanic neighborhoods typically of lower socioeconomic status, with high levels of poverty and social strife.

and interactive networks. Family members may be less likely to expel an active drug-using family member from the home, which can be protective for health. However, these same family members may not take a strong stance on treatment, which can be a risk for continued use.

Gaps in Knowledge

Significant gaps remain in the literature about the relationship between social capital and substance use (Browning, 2009; Kirst, 2009). This gap is even more pronounced regarding Hispanic drug use (Reynosa-Vallejo, 2011). Recently, numerous studies have reported poorer health outcomes for Hispanics and indicated an increased need for health services (Alegria, et al., 2006; Amaro, Arevalo, Gonzalez, Szapocznik, & Iguchi, 2006; Canul, 2010; Organista, 2007; Smedley, et al., 2003). However, research on substance abuse treatment outcomes for Hispanics continues to be insufficient (Alegria, et al., 2006; Amaro, et al., 2006; Smedley, et al., 2003). A few studies have found an association between social capital and substance abuse and the ability to cease use in minority populations (Cheung & Cheung, 2003; Cloud & Granfield, 2008). Social capital has been examined in gangs and substance users before, but to our knowledge this is first study to investigate social capital in a cohort of Mexican-American IDUs. Identifying the relationship between social capital and substance use in this important population can inform the development of culturally and contextually-grounded interventions.

Current Study

Identifying the phase of drug use (e.g., sustained sobriety, methadone maintenance, or active use) is important in determining how to intervene with each specific group. The current study examined the association between social capital and

user status in a sample of long-term, Mexican American injection heroin users. This study also aimed to examine the properties (e.g., reliabilities) of a modified social capital scale used for the first time with this population. The study aimed to test the hypothesis that former users not in treatment would exhibit higher levels of social capital than current users or former users in methadone treatment, due to their ability to cease heroin use and re-establish personal and working relationships. Those in Methadone Treatment were hypothesized to have higher levels of social capital than current users due to their desire to stop heroin use and willingness to enter a methadone treatment program to achieve cessation. Lastly, current users were hypothesized to have the lowest levels of capital due to their current drug use and the individual, familial, and neighborhood consequences of long-term drug use.

METHODS

DESIGN

The study used a cross-sectional, mixed-methods, field-intensive outreach methodology augmented with Respondent-Driven Sampling. Recruitment focused in two Houston neighborhoods that are predominantly Mexican-American areas with high rates of crime, poverty, and psychosocial challenges. Trained *Outreach Specialists* familiar with these communities identified community gatekeepers and gained their trust through continued presence in the community and ongoing dialogue about the study. These gatekeepers then helped identify individuals meeting the ***inclusion criteria***: Mexican American men 45 years of age or older, with a history of injection drug use for at least three years, and who were either current injectors (***Current***), former injectors not in treatment (***Former***), or former injectors currently enrolled in Methadone Maintenance

Treatment Programs (***MMTP***). Participants were interviewed with a semi-structured instrument that included a modified social capital scale. Although the main questionnaire collected data on various drug related issues, the focus of this paper is the social capital data. Participants were compensated $40 per interview and an additional $10 finders' fee for referrals of up to two other individuals who met inclusion criteria. Each referral chain was stopped after three links (i.e., the original individual, the two referred by him, and the four referred by those two) to ensure representation from a broad range of networks rather than focusing on all individuals from the same network.

DATA COLLECTION

Measures

CHIVA[2] *Questionnaire*. The CHIVA Questionnaire, a comprehensive 72-page survey instrument, was created to collect demographic variables and information about living circumstances, family trajectory and family conflicts, and history of illegal/criminal activities and incarceration. The survey instrument focused extensively on substance abuse history, including drug career trajectory; history of injection drug use; drug markets (e.g., access, availability, methods of purchase, etc.); drug treatment history; and comprehensive medical and sexual histories. The questionnaire was computerized for laptop administration. Data was collected in the field, typically in respondents' homes. A subsample of participants (20 from each group; 60 total) was also selected for the qualitative portion of the study and interviewed with an ethnographic interview guide at a later date.

[2] CHIVA is slang for heroin in Mexican-American Spanish.

Social Capital Scale

The original scale (Onyx & Bullen, 2000) consisted of 68 Likert-type items, with responses ranging from 1 to 4. The actual wording of each response varies by item, but follows the convention of moving from less capital (e.g., 1=No, Not Much) to more capital (e.g., 4=Yes, Very Much) (original scale available in Onyx & Bullen, 2000; modified items in Appendix A.). Eight social capital factors are measured: Participation in the Local Community; Social Agency or Proactivity in a Social Context (personal and collective efficacy and capacity to plan and initiate an action; Feelings of Trust and Safety; Neighborhood Connections; Family and Friends Connections; Tolerance of Diversity; Value of Life; and Work Connections.

To our knowledge, this social capital scale has never been used to assess social capital among Hispanics. The current research team sought to improve the content validity of the scale by making modifications that would make the scale more culturally relevant to this population. Two types of modifications were needed to make the scale more relevant to our sample since the original scale was developed with a sample of individuals ages 18-65 in rural and urban New South Wales, Australia (Chronbach's alpha = 0.84). First, some questions were re-worded into American English (e.g., "people's *rubbish*" was replaced with "people's garbage") (see appendix A). Second, we excluded the *Work Connections* subscale items from the analysis (used to assess paid employment only) since two-thirds of our sample was either unemployed or disabled. Scoring of the social capital questionnaire is achieved through summation of the scale responses. Lower scores indicate less capital and higher scores indicating higher capital.

DATA ANALYSIS PLAN

For this paper, the main dependent variable was social capital, and user status (i.e., *Former*, *Current*, and *MMPT*) was the independent variable. Primary dependent and independent variables were examined for missing data, outliers, and normality. Analyses were then conducted to examine the relationship between social capital scores and user status. A between-groups analysis of variance (ANOVA) was conducted to assess mean differences across all three groups. Post-hoc multiple comparison were conducted when an overall main effect was found, to determine significant differences between user statuses. All statistical analyses were conducted with IBM PASW 19.0 (formerly SPSS).

RESULTS

A total of 227 participants completed the surveys, including *current* users (n=77), *former* users not in treatment (n= 75), and former users enrolled in *MMTP* (75). Almost half of the participants were separated or divorced (n=112, 49.3%), and the remaining were single (n=56, 24.7%), married (n=50, 22.0%), or widowers (n=9, 3.9%). One-third of participants report being employed (n=76, 33.5%) with the remaining unemployed (n=74, 32.6%) or disabled (n=54, 23.8%). On average, participants first used heroin at age 19 ($\bar{x}$ =18.93, SD=5.98) and were injecting weekly by age 21 ($\bar{x}$ =20.65, SD=6.39). The average duration of injection heroin use was 31 years ($\bar{x}$=31.15, SD=11.54) (see table 1 for a detailed summary of participant characteristics).

The overall reliability score for the *modified* Social Capital scale used in this study (α=.87) was consistent with the original scale (α=.84; Onyx and Bullen, 2000). Although modifications were made to questions in the scale and *Work Connections* items were excluded, reliability remained robust. Individual subscale Chronbach's alphas

varied from a low of 0.49 for *Proactivity in a Social Context* to a high of 0.84 for *Participation in the Local Community* (*Neighborhood Connections*=.71; *Tolerance of Diversity*=.78; *Value of Life*=.54; *Family Connections*=.51; and *Trust and Safety*=.51).

The modified social capital questionnaire *full scale* consisted of 31 items and a range of 31-124. The mean social capital score for the full sample (N=227) was 66.5 (SD=12.00). Subscale mean scores for the full sample ranged from 4.19 (SD= 1.56) for *Value of life* to 17.19 (SD=1.56) for *Social Agency/Proactivity*. In the ***Current*** group, subscale scores ranged from 4.27 (SD=1.47) for the *Value of Life* subscale to 18.10 (2.86) for *Social Agency/Proactivity*. Subscale scores for the ***Former*** group ranged from 4.76 (SD=1.53) for the *Value of Life* subscale to 17.88 (SD=2.42) for *Social Agency/Proactivity.* Lastly, subscale scores for the ***MMTP*** group ranged from 3.53 (SD=1.44) for *Value of Life* to 15.55 (SD=2.26) for *Social Agency/Proactivity* (see table 2).

There was an overall main effect for group status on social capital, F (2, 224) = 15.33, p = < .001, η^2 = 12. The *current* group (n= 77) had the highest level of social capital ($\bar{x}$=70.12, SD=12.36) followed by the *former* group ($\bar{x}$ = 68.64, SD=10.26) and then the *MMTP* group ($\bar{x}$ =60.65, SD=11.14). Post-hoc comparisons (Scheffe) found significant differences between the *current* and *MMTP* groups and between the *former* and *MMTP* groups (p < .001), with large (d=.82 between *current* and *MMTP*), and moderate (d=.75 between *former* and *MMTP*) effect sizes (Cohen, 1988). Differences in social capital scores between the *current* and *former* groups were non-significant (see table 2). Post-hoc comparisons for individual subscales yielded significant differences for Social Agency/Proactivity (*current-MMTP* and *former-MMTP*), Feelings of Trust/Safety

(*current-MMTP* and *former-MMTP*), Neighborhood Connection (*current-MMTP*), Tolerance of Diversity (*current-MMTP*), and Value of Life (*current-MMTP* and *former-MMTP*) (see table 2).

DISCUSSION

Data from this study suggests that marginalized populations such as injection drug using populations do have significant amounts of social capital. Conventional literature may suggest that groups involved in illicit behaviors may be devoid of capital, but, as shown in this study, drug-using groups can have high levels of capital. These findings add to the limited literature on social capital in non-conventional groups such as gangs, organized criminal organizations, and drug-using networks. Social capital can exist in either positive or negative forms, depending on its context.

When social capital differences were explored by user status, current users had the highest levels of social capital. This finding was unexpected and is in contrast to the initial hypothesis of this study, which was that current users would have the least capital. Upon further review of the literature, the concept of negative capital was identified and was applied to understand these findings. The contextualization of social capital is behavior-neutral and specific to participants' perceptions of their behaviors. The scale used in this study assessed levels of capital in various categories, but not the direction of that capital (that is, the positive or negative ends to which the capital is applied). Thus, it is possible that our failure to detect significant differences in levels of social capital between *former* and *current* users—which would be an expected finding—resulted from the scale's inability to differentiate in a more nuanced manner between negative and positive social capital.

Research has demonstrated that individuals that cease substance abuse live healthier and more productive lives (Cloud & Granfield, 2008; Laudet & White, 2008; Lyons & Lurigio, 2010; Sterling, Slusher, & Weinstein, 2008). The current study hypothesized that former users would have higher levels of social capital than current users. However, findings suggest that current users had levels of social capital similar to those of former users, and participants in methadone treatment had significantly lower levels of social capital. Thus, individuals who maintain stable drug-using relationships and connections in the drug-using community that contribute to sustained drug use have high, although "negative", levels of social capital when compared to former users in methadone treatment, who may be in a transition phase. Methadone clients might be literally "between groups" (the drug-using and the drug-free) but do not belong to either, resulting in less social capital (Zaller, et al., 2009). Many factors are listed in the literature as possible reasons for retaining high negative capital in drug users: continued drug use, maintaining drug use connections, criminal activities aimed at supporting drug use, and enabling behaviors family members (Liu, 2004; Pih, et al., 2008; Reynosa-Vallejo, 2011; Rice & Rugh, 2007; Rose & Clear, 1998; Sampson & Raudenbush, 1997; Wen, Browning, & Cagney, 2003). Conversely, former users have re-established positive social capital relationships consisting of positive familial relations, employment, sobriety, and new sober networks (Brisson, Roll, & East, 2009; Cloud & Granfield, 2008; Laudet & White, 2008; Lyons & Lurigio, 2010; Sterling, et al., 2008). These factors may account for the non-significant relationship in social capital levels between current and former users; in essence, their social capital may be equal in absolute value, but one is negatively and one is positively associated. That is, former users may be using their

capital to maintain their cessation efforts, while current users may be using their capital to maintain continued drug use.

As noted earlier, the modified social capital scale produced a robust Chronbach's alpha (α = .87), which was slightly higher than the original measure (α = .84). *Social Agency/Proactivity* and *Neighborhood Connections* scores were high and similar to findings in the extant literature given the context of these closed, tight-knit enclaves (Cheung & Cheung, 2003; Cloud & Granfield, 2008; Granfield & Cloud, 2001). On the other hand, scores on the *Feelings of Trust and Safety, Participation in the Community, and Tolerance of Diversity* subscales were low, and may reflect attitudes described in the drug use literature regarding authority, community, trust, and suspiciousness of others (Browning, 2009; Cloud & Granfield, 2008; Liu, 2004; Pih, et al., 2008; Streeten, 2002). These subscale scores may also reflect, to a lesser degree, attitudes towards neighborhood conditions (Cloud & Granfield, 2008; Laudet & White, 2008; Lyons & Lurigio, 2010; Sterling, et al., 2008). The *Family and Friend Connections* and *Value of Life* subscales were the lowest, perhaps reflecting an awareness of the health consequences of IDU behaviors and the impact of long-term drug use on interpersonal relations.

The study used a novel approach to investigate similarities and distinctions of contextualized capital in this heterogeneous population. Moreover, examining social capital in hidden and under-studied drug-using Hispanic populations provides an alternative perspective for understanding determinants of drug abuse initiation and cessation. Understanding the dynamic interaction between social capital and substance abuse in Mexican American communities can help inform culturally specific treatment and prevention strategies.

One limitation of the study was that the instrument used to measure social capital was designed for non-drug using, Australian populations. Many questions used to measure distinct areas of social capital were not applicable or non-existent in the lives of the participants involved in this study. In particular, many statements measuring community engagement are one-dimensional, do not consider multiple ways of community involvement, and are extremely limited in variety. For example, the item "*how often do you help pick up trash around your neighborhood?"* does not take into account the neighborhood characteristics associated with socioeconomically challenged communities where participants from this study might live, or if it is even safe to walk around freely in the community, let alone pick up trash.

Additionally, the instrument lacks a variety of contextualized questions to assess social capital, particularly negative forms of social capital, in a more nuanced manner. Scale items assume that current users, former users in methadone treatment, and former users not in treatment, all behave in their environment in the same way. However, as evidenced through the literature (Cheung & Cheung, 2003; Onyx & Bullen, 2000; Pih, et al., 2008) and through the results of this study, social capital cannot accurately be measured without concurrent analysis of the specific environment and sub-group behaviors (i.e., by phase of treatment). However, using this instrument, we were able to detect important group differences across the three groups. Further refinements to the scale are needed to obtain an instrument that can more accurately measure social capital in the specific context of drug-using populations. This would provide increased accuracy in assessing social capital in multiple populations. The identification of determinants of drug use can better inform methods for treatment and prevention. A final limitation is that

the study did not use toxicology reports to confirm group affiliation or abstinence. The *former* group self-reported being heroin-free, but *MMTP* participants reported occasional IDU relapse. In addition, alcohol and tobacco use were ubiquitous, and many in the *MMTP* group also acknowledged use of illicit drugs other than heroin.

These findings are expected to provide an alternative understanding of the dynamic interactions between individuals, environmental factors, and drug abuse and addiction. Identifying the role of social capital as a risk (negative) or protective (positive) factor related to substance abuse can inform interventions that are tailored to the specific phase of treatment, leading to better treatment outcomes.

CONCLUSIONS

Identifying the phase of drug use (e.g., abstinence, methadone maintenance, and active use) is important in determining how to intervene with each specific group (Cheung & Cheung, 2003; Cloud & Granfield, 2008; Laudet & White, 2008; Lyons & Lurigio, 2010; Schultz, et al., 2008; Sterling, et al., 2008; Valdez, et al., 2008). Increasingly, the focus is on tailoring adaptations to enhance treatment outcomes, and phase of drug use is yet another realm for adaptation. Increasing positive social capital, or identifying negative capital and helping drug users learn to turn it into positive capital (e.g., channeling family and neighborhood supports toward cessation efforts rather than toward continued use) can be a useful approach to treatment.

In Hispanic communities, family and neighborhood supports are important and can help improve the delivery of culturally-grounded drug interventions, which could reduce the long-term health consequences of substance abuse and increase quality of life for members of this growing population. Furthermore, these findings support the need for

policy changes in favor of developing environmental capacity to maintain positive social capital. Maintaining the infrastructure of community centers, parks, afterschool programs, streets, and sidewalks in economically challenged neighborhoods is vital to positive capital. Holistic interventions taking into account the ecological factors specific to a population can increase access to quality treatment. This study lends support for including social capital as a construct in new and innovative interventions for communities dealing with substance abuse.

Social capital highlights the importance of community building and relationships, as well as focusing on systems (Cloud & Granfield, 2008). Therapeutic approaches based on context and environmental circumstances specific to individuals and culture may result in positive outcomes. In order to effectively address substance abuse, programs must take neighborhood, familial, and socioeconomic factors into account. Environment influences social capital type and perceptions of acceptable behaviors. Future studies are needed to explore the use of social capital as a determinant for substance use, prevention, and treatment. Additional research on marginalized populations such as immigrants, gang members, and LGBT communities is needed, since both positive and negative social capital can take different forms in these populations. Understanding the relationship between social capital and substance abuse in these populations may elucidate both psychosocial and socioeconomic factors that contribute to substance use initiation and cessation.

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TABLES

Table 1.General Demographics

(N= 227)	*n*	*%*	$\bar{x}$	*SD*
Age (Range 45-80)			55.14	8.27
Nativity				
U.S.	223	98.2		
Mexico	4	1.8		
Language				
English	118	51.9		
Spanish	6	2.6		
Both	103	45.4		
Education				
No High School	187	82.4		
GED	117	51.5		
Some College/Grad	21	9.3		
Years formal education		9	9.23	2.37
Marital Status				
Single	56	24.7		
Married	50	22.0		
Separated or Divorced	112	49.3		
Widower	9	3.9		
Employment				
Employed	76	33.5		
Unemployed	74	32.6		
Disabled	54	23.8		
Retired	20	08.8		
Currently Homeless	32	14.1	7.74	13.53
Age of 1st time heroin use			18.93	5.98
Age started weekly use			20.65	6.39
Average duration heroin use			31.15	11.54

Table 2. Social Capital Scores

	Total Sample (N=227) $\bar{x}$ (SD)	Current[a] (n=77) $\bar{x}$ (SD)	Former[b] (n=75) $\bar{x}$ (SD)	MMTP[c] (n=75) $\bar{x}$ (SD)
Total Score	66.50 (3.00)	70.12 (12.00)***[c]	68.64 (10.26)***[c]	60.65(11.14)***[a,b]
Subscale Scores				
Participation in Community	8.32 (3.00)	8.96[†] (3.86)	8.23 (2.69)	7.77 (2.05)
Social Agency Proactivity	17.19 (2.80)	18.10 (2.86) ***[c]	17.88 (2.42)***[c]	15.55 (2.26)***[a,b]
Feelings of Trust/Safety	9.93 (2.60)	10.74 (3.05) ***[c]	10.04 (2.15)***[c]	8.97 (2.21)***[a,b]
Neighborhood Connections	12.57 (3.29)	13.16 (3.41)*[c]	12.72 (3.19)	11.81 (3.15)*[a]
Family /Friends Connections	5.86 (1.22)	6.09 (1.66)	5.87 (1.07)	5.61 (0.66)
Tolerance of Diversity	6.23 (2.30)	6.69 (2.48)**[c]	6.44 (2.28)	5.56 (1.98)**[a]
Value of Life	4.19 (1.56)	4.27 (1.47)**[c]	4.76 (1.53)***[c]	3.53 (1.44)***[a],**[b]

*p< .05; **p< .01; ***p< .001

APPENDICES

Appendix A. Modified Social Capital Scale Questions.

Item number	Version	Modified question and original question
3.	***CHIVA version:***	Have you ever picked up other people's garbage in a public place?
	Onyx & Bullen version:	Have you ever picked up other people's rubbish in a public place?
13.	***CHIVA version:***	How often would you say you have attended a local community event in the past 6?
	Onyx & Bullen version:	Have you attended a local community event in the past 6 months (e.g. church fete, school concert, craft exhibition)?
24.	***CHIVA version:***	In the past 3 years, have you ever taken part in a local community project?
	Onyx & Bullen version:	In the past 3 years, have you ever taken part in a local community project or working bee?
28.	***CHIVA version:***	I you have a dispute with your neighbors are you willing to negotiate a solution?
	Onyx & Bullen version:	I you have a dispute with your neighbors (e.g., over fences or dogs) are you willing to seek mediation?
29.	***CHIVA version:***	Do you think that having people from different cultures in your community makes life in your area better?

Onyx & Bullen version: Do you think that multiculturalism makes life in your area better?

32. ***CHIVA version:*** Do you feel like part of the local community where you work?

Onyx & Bullen version: Do you feel part of the local geographic community where you work?

33. ***CHIVA version:*** Are the people you work with also your friends?

Onyx & Bullen version: Are your workmates also your friends?

35. ***CHIVA version:*** At work do your take the responsibility to do what needs to be done even if no one asks you to?

Onyx & Bullen version: At work, do you take the initiative to do what needs to be done even if no one asks you to?

36. ***CHIVA version:*** In the past week at work have you helped someone at work even though it was not in your job description?

Onyx & Bullen version: In the past week at work have you helped a workmate even though it was not in your job description?

CHAPTER III: STUDY II

From "*Kickeando las malias*" (Kicking the withdrawals) to "Staying clean": The Impact of Cultural Values on Cessation of IDU in Aging Mexican-American Men

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ABSTRACT

Drug use among older adults is a growing concern, particularly for the burgeoning Hispanic population. Older adults seeking drug treatment will double over the next decade to almost 6 million. Cultural factors influence drug use, and more specifically, Hispanic cultural values influence heroin use. This study explored Mexican-American injection drug users' adherence to traditional Hispanic cultural values and their impact on cessation. Ethnographic interviews endorsed contextualized influences of values and heroin use. Cultural values functioned dichotomously, influencing both initiation and cessation. Understanding the impact of cultural values on substance abuse is critical given the changing demographics in American society.

Keywords: Heroin use, cultural values, Hispanics, Mexican Americans, cessation, aging, injection drug use, risk factor, protective factor, qualitative research.

LITERATURE REVIEW

Culture impacts the initiation, duration and cessation of substance use (Castro & Hernandez-Alarcon, 2002; Higgs, Owada, Hellard, Power, & Maher, 2008; Prado, Szapocznik, Maldonado-Molina, Schwartz, & Pantin, 2008) and more specifically, can influence heroin use among aging Mexican-American men (Casavantes, 1976; L. R. Torres, et al., 2011; Valdez, et al., 2008). Traditional cultural values, such as *familismo* (emphasis and obligation to the family over individualism) and *personalismo* (emphasis on warm personal interactions with others) are prevalent in Hispanic communities and have been shown to influence substance use and cessation in Hispanics (Casavantes, 1976; Delgado, 2007; Andres G. Gil, Vega, & Dimas, 1994; Zambrana, 1995). Drug use among older adults, including injection drug use (IDU) is a growing public health concern (Han, et al., 2009; Intitute of Medicine, 2012). Illicit drug use among individuals aged 50 to 54 rose from 3.4% to 7.2% from 2002 to 2010 (Intitute of Medicine, 2012; Substance Abuse and Mental Health Services Administration, 2011b).

These increasing trends of illicit drug use in older adults are highly correlated with the growth of the aging baby boomer demographic, whose rates of drug use far exceed those of previous generations (Colliver, et al., 2006; Gfroerer, 2003; Han, et al., 2009). Moreover, this is significant for IDU-associated health-risks because individuals born between the mid-1940s and 1960s have the highest prevalence of IDU (Armstrong, 2007). Mexican-American IDUs aged 49 and older are at greater risk for IDU health-risks because intravenous injection is the primary route of heroin administration for this population (Valdez, 2008). Additionally, heroin use in the U.S. has been increasing due to restrictions on illegal use of prescription opiates and inexpensive heroin from Mexico

(Riordan & Rappleye, 2012; U.S. Department of Justice National Drug Intelligence Center, 2011).

Moreover, substance abuse treatment for older adults increased significantly over the last decade, and projections of individuals 50 and older in need of treatment will double to almost 6 million by 2020 (Han, et al., 2009). Compounding this expansion of substance abuse in older adults is the predicted increase in substance use among the growing population of older Hispanics (Andrews, 2008). Studies have reported poorer health outcomes for Hispanics and indicate an increased need for health services. However, research on substance abuse treatment outcomes for Hispanics continues to be insufficient (Alegria, et al., 2006; Amaro, et al., 2006; Smedley, et al., 2003). Access and utilization are also impacted by treatment design (i.e., the characteristics of treatment). Substance use treatment and mental health services have been insensitive to the cultural characteristics of the Hispanic family and some treatments based on traditional Anglo values may be incongruent with Hispanic values (Cortes, 1979), thus, potentially contributing to the underutilization of services (Glick & Moore, 1990). This is especially significant for *cholo*[3] families given the limited research and literature on minority, hidden populations.

HISPANIC CULTURAL VALUES

The Hispanic cultural values of *familismo, machismo, personalismo*, and *fatalismo* have been found to greatly influence interpersonal and intrapersonal behaviors (Delgado, 2007; Zambrana, 1995). *Familismo* (Familism) is a passionate obligation to the

[3] *Cholo families* are intergenerational street-based families, typically Mexican American, who struggle with increased rates of poverty, substance use, illicit activities, and incarceration (Moore, 1994; Valdez, et al., 2008).

family that deemphasizes focus on the individual (Smith, et al., 2009). *Familismo* provides an unending support network of emotional and tangible systems for members of the family (Delgado, 2007; Zambrana, 1995). *Machismo* has been described in both negative and positive terms and has been found to influence health-risk behaviors and willingness to access treatment (Cuéllar, Arnold, & Maldonado, 1995; Meyer, 2008; J. B. Torres, Solberg, & Carlstrom, 2002). Negative attributes of *machismo* connote male domination, abusive masculinity, and repression over women, whereas, positive attributes include courage, independence, and the role of the protector of the family (Arciniega, Anderson, Tovar-Blank, & Terence, 2008; Smith, et al., 2009). *Personalismo* (derived from the term "personal") denotes a "formal friendliness" that emphasizes warm and sincere personal interactions with others (Cuéllar, et al., 1995; Smith, et al., 2009). *Fatalismo* (fatalism) is a belief that fate is responsible for events that take place in our lives, and its cultural scripts are possibly correlated with religious beliefs (Cuadrado & Lieberman, 2002; Smith, et al., 2009).

These traditional cultural values are not unique to Hispanic communities, but they are ubiquitous amongst Hispanics and often play a critical role in daily life. These cultural beliefs impact health behaviors, reactions to health status (e.g., being given a diagnosis), and the subsequent health related consequences of those behaviors (A. Gil, Vega, & Biafora, 1994; Andres G. Gil, Wagner, & Vega, 2000). Research on the influence of cultural traditions and beliefs on health behavior has yielded significant associations with health-risk behaviors such as smoking, alcohol use, drug use, and sexual activity (Chen & Unger, 1999; Unger et al., 2002). Furthermore, *familismo* and *personalismo* have been found to influence substance abuse, age of first sexual encounter,

dropout rates, and current health status (Delgado, 2007; A. G. Gil, et al., 1994; Andrés G. Gil, Wagner, & Tubman, 2004; Kimbro, 2009; Zambrana, 1995). *Familismo, Machismo, Personalismo*, and *Fatalismo* influence health-risk behaviors, including determinants of heroin use in Mexican-Americans (Bullington, 1977; Casavantes, 1976; Prado, et al., 2008).

Several studies have documented the significant relationship between culture and substance use (Amaro, et al., 2006; Cuadrado & Lieberman, 2002; Cunningham, Foster, & Warner, 2010; DeLaCancela & Martinez, 1983; Delgado, 2007; Andrés G. Gil, et al., 2004; Higgs, et al., 2008; Smith, et al., 2009; J. B. Torres, et al., 2002; Unger, et al., 2002; Valdez, et al., 2008). Moreover, treatment and prevention interventions developed to address specific cultural aspects of minority populations have been shown to be efficacious and lead to better outcomes (Brisson, et al., 2009; Cloud & Granfield, 2008; Cuadrado & Lieberman, 2002).

Although studies have investigated the relationship between culture and substance use, less is known about Hispanic cultural values in long-term Mexican-American heroin using men and the role these cultural values play in cessation efforts.

GAPS IN CURRENT RESEARCH

Research in substance use, prevention, and treatment among Hispanics continues to be lacking and sorely needed (Alegria, et al., 2006; Glick & Moore, 1990; S. Reif, C. Horgan, & G. Ritter, 2008). Examinations of the influence of cultural values on drug use treatment outcomes is limited (Arciniega, et al., 2008; Castro & Hernandez-Alarcon, 2002; Cuadrado & Lieberman, 2002; Cunningham, et al., 2010). Lifetime prevalence rates of illicit drug use in Hispanics remain high (35%) and will increase as the Hispanic

population both increases and ages (Sharon Reif, et al., 2008). The consequences of long-term IDU are well documented, with significant health and socioeconomic costs (Devlin & Henry, 2008; Musto, 1999; L. R. Torres, et al., 2011; Valdez, et al., 2007). Understanding the relationship between cultural values and drug treatment outcomes is thus critical. The National Institute on Drug Abuse's strategic goals for prevention, treatment, and HIV/AIDS called for identifying contextual and ecological factors that contribute to drug abuse consequences, and the spread of HIV/AIDS (. National Institute on Drug Abuse, 2012). Investigating the influence of cultural values is one method of addressing contextual and ecological factors. The implications are significant for developing culturally-grounded prevention and treatment interventions that can enhance outcomes for minority populations. The current study is a step in that direction.

THE CURRENT STUDY

This study examined the relationship between Hispanic cultural values and cessation of heroin use in a cohort of long-term injection drug using (IDU) Mexican-American men. Using qualitative methods (ethnographic interviews), the study examined how these aging *tecatos*[4] defined traditional Hispanic cultural values, their level of adherence to these values, and the impact of these values on their efforts to cease heroin use.

METHODS

DESIGN

This paper is based on the qualitative portion of a larger, cross sectional, mixed-methods, field-intensive study extensively described elsewhere (L. R. Torres, et al.,

[4] Mexican American injection drug user.

2011). Two-hundred and twenty seven Mexican-American men ages 45 to 80, with a history of injection drug use for at least three years, and who were current injectors, former injectors not in treatment, or former injectors enrolled in methadone maintenance treatment programs were recruited in several inner-city, urban neighborhoods of Houston, Texas, which are predominantly Mexican-American areas with high rates of crime, poverty, and psychosocial challenges. Sixty of these participants (20 per group) were purposely selected based on their health, drug use, or psychosocial profiles for in-depth ethnographic interviews. These 60 participants completed extensive ethnographic interviews for which they were compensated $40. Because cessation of heroin use was the focus of this paper, only ethnographies of former users not in treatment and of former users in methadone maintenance treatment programs were included in the analyses reported here. After an extensive content analysis of the original 60 ethnographic interviews, 11 participants were re-interviewed with a particular focus on cultural values. The final sample for this paper consisted of 26 randomly selected ethnographic interviews from the former user group and the methadone maintenance group.

MEASURES

CHIVA Questionnaire

The CHIVA[5] survey instrument was created to collect both qualitative and quantitative data on demographic variables, living circumstances, family trajectory, family conflicts, and comprehensive medical and sexual histories. Additionally, the instrument focused extensively on substance abuse history, including drug career trajectory; history of injection drug use; drug markets (e.g., access, availability, methods

[5] CHIVA is slang for heroin in Mexican-American Spanish.

of purchase, etc.); drug treatment history; history of illegal/criminal activities, and incarceration. The CHIVA quantitative data is described extensively elsewhere (Flores, Torres, Bordnick, Ren, & Haider, Under Review; L. R. Torres, et al., 2011).

The CHIVA Cultural Values Ethnographic Questionnaire

An ethnographic interview guide was developed to examine the relationship between cultural values and cessation of heroin use. Through an iterative development process and pilot testing, researchers developed an ethnographic questionnaire that elicited thick and rich descriptions of participants' drug use and the influence of cultural values. Questions were designed to probe for specific beliefs about cultural values as they pertained to the individual, his family members, and community. These questions elicited perceptions on: the role/importance of the family (familismo); ways in which we interact with others even outside the family (personalismo); gender roles that dictate what men do and what women do (machismo); and a sense that things are pre-determined and there is no use in fighting them (fatalismo). Below are some examples of the open-ended questions used to assess positive and negative aspects of cultural values, and the full ethnographic guide is included in appendix A.

The format of the questionnaire began with a query regarding ethnic identity followed by a list of prompts trying to further elicit cultural information regarding the construct. For example, *"When you think about race, or ethnicity, how do you typically refer to yourself? For example, if people ask you 'Hey what are you?' do you say I'm, 'Mexican American' or 'Hispanic' or some other term?"* Once the participant responded, a series of follow-up questions were used to explore the concept and its cultural context; for example, *"What does that mean for you, to be [respondent's term]?"* These open-

ended questions allowed for researchers to develop a baseline frame of reference from which to direct further questions. Participants were asked to elaborate on key concepts related to the cultural values *familismo, personalismo, machismo, and fatalismo* and other cultural values they may be familiar with. Interviewers then followed additional prompts to elicit deeper interpretations and associations between constructs. The same line of probing was repeated for each construct.

Data Analysis

An ecological ethnographic approach was applied to glean "thick and rich" (Glaser & Strauss, 1967; Morse & Field, 1995) descriptions of interactions between culture, individuals, institutions, and environmental influences on cessation of heroin use (LeCompte & Schensul, 1999). Ethnography is holistic, contextual, reflective and is informed by the concept of culture (Morse & Field, 1995). This method has been successfully used in researching the effects of culture on health (Davis, 1992). Data consisted of memos, extensive field notes, and ethnographic interviews. Sixty transcripts of open-ended questions were uploaded into NVivo 9© qualitative research software to aid with data storage, coding, and management of themes, and twenty-six were randomly selected for analyses. Research team members included the first author and three additional coders. Team members conducted independent analyses of transcripts and directly coded content. Team members convened several times to collectively review axial codes and identify thematic content. The analysis moved through three stages, summarizing and packaging of the data, re-packaging and aggregating the data, and developing and testing propositions to construct an explanatory framework (Miles & Huberman, 1994). Team members collectively developed and decided thematic

categories, references between categories, positive and negative instances, and example text segments for each code. Incongruities of interpretations were resolved through constant comparison, extensive discussion, triangulation, and continued review of additional exemplars until consensus in interpretation and saturation was achieved (Glaser & Strauss, 1967). Reliability (Warren & Karner, 2010) was established through *checking for representativeness* (Tversky & Kahneman, 1971), *triangulation* (Webb, Campbell, Schwartz, & Sechrest, 1965), *researcher effects* (Miles & Huberman, 1994) *using extreme cases* (Sieber, 1976) and *negative case analysis* (Judd, Smith, & Kiddler, 1991).

RESULTS

Twenty-six (N=26) ethnographic interviews were analyzed for this paper, including former users not in treatment (n= 13) and former users in methadone treatment (n=13), Similar to the parent study, half of the sample was separated, or divorced (n=12, 46.2%), and the remaining were single (n=7, 26.9%), or married (n=6, 23.1%) and one cohabitating (n=1, 3.8%). One-fourth of participants report being employed fulltime or part-time (n=6, 23.1%) with the remaining unemployed (n=5, 19.2%) or disabled (n=10, 38.5%). On average, participants first used heroin at age 19 ($\bar{x}$ =18.93, SD=5.98) and were injecting weekly by age 21 ($\bar{x}$ =20.65, SD=6.39). Over half of the participants (n= 14, 53.8%) reported "never having problems with their families" over the last six months, and the remainder reported "sometimes having problems" (n= 10, 38.5) or "often having problems" (n=2, 7.7%). Fewer participants reported dissatisfaction with family interactions (n= 6, 23.1%) compared to those who reported high levels of satisfaction (n= 20, 76.9). Family *encouragement of cessation of drug use* was reported to be "not at all"

for half of respondents, (n= 12, 46.2%), least for "sometimes" (n= 4, 15.4%), and roughly a third for "often" (n= 10, 38.5%) (see table 1 for a detailed summary of participant characteristics).

Qualitative analyses revealed five primary domains specific to cultural values and their influence on cessation. The major domains to emerge from the data were: (1) *Dichotomization of cultural values*; (2) *Male kinship's influence on initiation of IDU*; (3) *Female kinship's influence on cessation of heroin use;* (4)*"Fed-up with the shit;"* and (5) *Community "negotiated co-existence."*

DICHOTOMIZATION OF CULTURAL VALUES

Familismo

Domains for all cultural values revealed a dichotomous relationship regarding their effect on initiation, duration, and cessation of heroin use. *Familismo* was the most discussed and emphasized. All participants described the importance of the Mexican-American or Chicano family in terms of tolerance, respect, culture, love, solidarity, and forgiveness. The bond between family and individual family members was described as very strong and emerged as a central theme. An example of this bond is described below.

> "As a Mexican-American, to me the family is the most important thing. Family is first; you always have your family, no matter what they do, no matter what happens, you have to have that family. There is nothing that they can do wrong, it is that tight. It is that structure, you have to have or you are not a Mexican man. You got to have that strong family base. You have to, to forgive everything. You

> cannot let anything disrupt the family. Because once you do, you stop being part of the family. And if you don't have that then you don't have nothing." (Pablo) [6]

This bond extends to friends, neighbors, and others in the community as well. The cultural value of *familismo* emphasizes the family, loyalty and interdependence, and cooperation over competition. For this cohort, the embodiment of familismo was interwoven throughout their life experiences in the family and in their community—even for those who committed acts against *familismo's* principles. A common theme was *forgiveness* for family members who fall out of favor with the family due to a direct offense against the family (stealing money to buy heroin) or an ancillary incident (heroin addiction).

A significant finding was that *familismo* served as both a protective and a risk factor for heroin use. In terms of protective factors, *familismo* provided protection from poorer health and homelessness. This cohort was comparable to the general Mexican-American population regarding chronic disease except for increased rates of HCV, but even then much healthier compared to other IDU populations (L. R. Torres, et al., 2011). Participants also had a regular place of residence: none of the 26 participants were homeless at the time of interview (and the rate of current homeless in the overall sample (N=227) was 14%.) Family was the prime motivator for cessation of heroin use and for maintaining abstinence. However, *Familismo* also served to support continued substance use. In the following exemplar quote one participant describes how "enabling" (the participant's term) behaviors of his mother prolonged his heroin use (risk factor) but also facilitated his ability to stop using heroin due to the love of his mother and family (protective):

[6] Participants have been assigned fictitious names in order to protect their anonymity.

> "Well, when I would get sick, I didn't want nobody to be around me but my mom was always there. She's always making sure that I was okay. She called paramedics a few times."
>
> Interviewer: "She was taking care of you?"
>
> "Yeah, she'd knock on my door – she knew I could do it [kick the withdrawals]. She knew I could kick. But I was going through some shit. Sometimes I'd cut [go back to use]. But the last time, she was there for me. She'd knock on the door every 30 minutes, "Jose, you okay?!"
>
> Interviewer: "Is there any part of how your mother used to help you that maybe kept you using?"
>
> "Yeah, in the beginning she would – it's called an enabler. And back in the day, she would give me money just because she didn't know how sick I was. But she knew I needed it. But she didn't know what it was for. But she had an idea that, "he's not right." Because when she did find out, it broke her heart. She said, "I knew something was wrong with you. But she used to give me money, not to go use, but because I was so sick...I don't know, I think if she would've kicked me out of the house and just cut me off, I wouldn't have made it. I'd probably be dead by now. And hearing the things and the prayers being answered is what helped me. " (Jose)

Machismo

Machismo was the second most referred to cultural value. Participants described scenarios in which *Machismo* encompasses desirable qualities such as masculinity, honor, sexual prowess, male dominance, and protection of loved ones. Negative aspects of machismo were also described by participants, including the subjugation of women,

womanizing, and false bravado. References to *machismo* were often described by *tecatos* as specific mechanisms for living in challenging and often dangerous environments. *Machismo* among *tecatos* presented itself as a cultural model of "street masculinity" where specific ideologies, behaviors, values, drug use, aggression, and survival strategies contributed to heroin use and the ability to stop using. The following example encompasses many commonly associated negative attributes of *machismo*:

> "Oh yeah…men are suppose to be real macho, real tough, no feelings, especially no emotion. You can't cry, can't be sad, can't show your love to others. You have to be strong, because you are the rock, you are the foundation of that family so you have to be strong. If you show emotions that means that you are weak that means that you have feelings, and how can you be a rock if you showing emotions? How can you be strong? Now the women, they're supposed to be nurturing, loving, and flexible, real flexible, especially for Mexicans. It's ok to go mess around and have extra marital affairs or…for the men it's ok. But you have a woman who does that and she is a "hoe" she is all kind of stuff. Now the dude does it, it's alright. It's expected, it's suppose to be like that, and she is suppose to accept it and deal with it, and that is all there is to it. She is supposed to be a rock too, secondary to the man, always secondary to the man." (Rogelio)

One participant stated how the realization of his mother's aging leads him to re-evaluate his life and enter into a methadone maintenance program. In the following quote *machismo* served as a positive influence aiding this participant to cease the use of heroin due to his filial responsibilities.

> "The same things that pushed me to it, had an effect in pushing me away from it. Family is the foundation and I need to be the foundation now, because my mother is getting old. So I have to be the rock. I have to start taking responsibility

> for the family because she is getting old. We took her for granted and depended on her for so much. Now she just can't do it. I have to become the rock. It is my turn. And it's about time. We should have done this a long time ago. With my feelings I should have stopped this shit a long time ago. And it took me what, till I was 40 years old before I stopped? I have to take responsibility for my actions. And as a rock, they all depend on me. Where I was ashamed before I'm not any more, I'm strong." (Ricardo)

Personalismo

Personalismo emphasizes the personal quality of interactions. Relationships, even with service providers, are considered personal as opposed to institutional. For our participants *personalismo* was discussed in terms of attitudes towards family and neighbors in the community. Personalismo was expressed in terms of sharing personal information, attending personal family functions, eye contact, shaking of hands, physical proximity, placing a hand on the shoulder, and giving respect, among other examples. One participant expressed remorse in losing old personal relationships due to a fear of relapse:

> "You know some of my best homeboys were dope heads with me. And now that I stopped, I can't even talk to them, I can't see them man. It takes me back to that past that I do not want to have anything to do with. And we were so close; it goes against what I was brought up." (Steve)

Fatalismo

Fatalismo is the belief that life's situations, concerns, and events are typically out of one's control. In this *tecato* subculture a commonly expressed term was "*lo que Dios quiera*" (whatever God wants). Although faith and spirituality are not always

concomitant with *fatalismo* (Abraido-Lanza et al., 2007; Fernandez et al., 2008), many in this cohort reported their interpretations of *fatalismo* as being associated with 'Gods will.' This attitude was expressed mostly in terms of lost opportunities and of resignation about their substance use. Numerous *tecatos* expressed recognition that heroin and alcohol use had adversely affected their lives, but they would simply continue to use until they themselves were ready to quite. For most of this cohort *fatalismo* did not have a significant influence on their heroin use or cessation:

> "Nah, I mean I believe in god, or a spirit, there is something out there, because I'm a product of it, I know, I should have been gone a long time ago, shot, stabbed, run over, wrecks, fights, you know I should have been gone a long time ago. So there has to be something greater than me, guiding me, but letting me make the choices. Even though my choices are wrong sometimes, they are my choices…We have our own choices and path to make even though it might be pre-written, like some people say, you can change it by the right choice. You can change the whole outlook. If that was pre-written how could I make the choices, then I would only be going one way without no choices." (Jaime)

MALE KINSHIP'S INFLUENCE ON INITIATION OF IDU

The second major theme was the influence of male family members and friends on the initiation of IDU. All participants reported being initiated into heroin IDU by an older brother, brother-in-law, friend or uncle. For Mexican-American's the patriarch is typically the head of the family as was the case for most of this cohort. Family context is predictive and critical in the development of youths' cultural orientation and the role of the adult male was a significant factor for these participants during their youth. In the case of these *tecatos*, intergenerational transmission of drug use and deviant behavioral

patterns lead to IDU initiation and the development of negative aspects and traits of family life, contrary to the positive attributes represented by *familismo*. The following quote exemplifies this:

> "My family was involved in drugs. My uncles, my cousins, you know. And that's how I got into it. I started delivering for one of my uncles. I remember the first bicycle I had – my uncle bought it for me so I could make deliveries for him. I was about 6 or 7. I remember cause he would give me a bag, one of those paper sacks, and says, "Take this to Jose and don't open it, God damn it!" I'm gonna be upstairs looking; you better not open it!" As soon as I go around the house, I'd open it and look inside and I'd see a syringe and colored papers that were already packaged up." (Emiliano)

FEMALE KINSHIP'S INFLUENCE ON CESSATION

The majority of participants in this study reported that a female relative provided the impetus for cessation or for seeking treatment. There was only one instance reported in which a girlfriend encouraged continued IDU—but she was not "family" (i.e., sister, mother, or daughter) and was also injecting heroin. Hispanic households are traditional and patriarchal. This is more evident for those less acculturated. Historically, Hispanic women have maintained the home and cared for their children and spouses, in many instances neglecting their own physical and psychological needs. The role of *familismo* is evident in this domain but another cultural construct, *Marianismo,* is a significant contributor to these phenomena. Marianismo is defined as the veneration of feminine virtues; docility, kindness, caring and prioritizing the needs of others. The term is based in attributes of the Virgin Mary and has been described as "bearing the cross of Christ." It

is the duty of the woman to care for members of the family regardless of psychological and physical ramifications. In this study, mothers, daughters, and sisters were reported as instrumental and essential in maintaining the health and welfare of the participants. Many of the men expressed their love and admiration for female family members and credited them for their being alive. Many participants report that when presented with ultimatums from female kin, they were able to immediately stop:

> "Oh, because she's my mom. My mom is a down to earth person. God bless her soul. She wasn't stupid because she was born in the neighborhood. She's a Chicana. So, you know, you can only hide so much from your parents and my jefita [mom] would always find little match boxes from *mota* [marijuana] y *la chingada* [and shit]…But after a while, she kept looking at it and she kept saying, "What the hell's wrong with you?" I kept seeing her eyes. *Pero, mi jefita* [mother], it played a good role in me stopping…Also, *mi hermana* [my sister], man, cause she's like my second mother. She wasn't stupid cause she's another one born in the *barrio* [neighborhood]." (Robert)

Examples of female family members' influence on cessation of heroin use were numerous and profound. The next quote is one of the few times a mother actually forced her son to leave the house due to heroin use. He describes in detail how it affected his ability to quit because of the love for his mother and for fear of losing his wife.

> "Finally she just got tired of it and, "you know what, if you can't quit, m'ijo [son], quit coming around." So after about a month of sitting there with that on my brain and still using, I just said– fuck it. I just went through the *malias* [withdrawals], stomach pains and the monkey scratching and all that for about a month." My mom was the only one I had back at that time…my mom is the one

> that had got me to stop. Even every now and then, man that hurts when I think about it. I think man, I'm gonna lose what I got [if he returns to using]. Because I'm married now, I'll end up losing her too [his wife], the house." (Jose)

"FED-UP WITH THE SHIT"

While the majority reported cessation of heroin due to female intervention, many also reported that they were simply "fed-up" with using and decided to quit for multiple reasons. This construct emphasized the ability of the men to "kick" the use of heroin by *"amarrarse los huevos"*[7] or "manning-up." Quotes for this domain were strongly associated with machismo and descriptions inn the data emphasized "taking the initiative" and "following through" regardless of obstacles. The following participant describes that he was just fed-up and tired of using. Incidentally, this was also the only time one of our participants reported getting off heroin for a male family member, his father.

> "Cause I was fed up with this shit, I was fed up that I needed it to move around, you know what I mean? To actually function, you know what I'm saying? I just got tired of it. It's something that I wanted for myself and mainly for my father, too. Cause it was wrong. It was wrong, man, and he seen that if I kept up that way I probably end up dead. I wasn't gonna amount to nothing." (Armando)

The following quote speaks to the desperation and realization this participant had come to in his heroin use.

> "It just takes that one little push man. You know on a day where something ain't right. I have to be on guard 24 hours a day, its not you know one day I feel it one

[7] Literally, to *tie your eggs*. *Huevos* (eggs) is Spanish slang for testicles. In this case the phrase is used to connote "manning up" and doing what is needed.

> day I don't, but I know that I cannot put another needle in my arm. I just can't man…it's pride in what I've accomplished, I've got pride in that I've stopped, stopped selling, stopped everything, stopped any interaction with that life of bad choices." (Evelio)

COMMUNITY "NEGOTIATED CO-EXISTENCE"

Community negotiated co-existence is the last major theme to emerge from the data. This domain is associated with the cultural values of *familismo* and *personalismo.* Extended kinship networks associated with *familismo* consider most members of the community as extended "family." Community members involved in illicit activities would be provided with the same protections individual family members are provided with and would be tolerated. *Personalismo* typically emphasizes the informal closeness and trust among members of the community; however, in this example the reluctance to report a fellow Mexican-American for illicit activities is more likely related to mistrust of local authorities and a desire to protect community members from corrupt law enforcement. Participants described how drug use in the community was, for the most part, tolerated if not accepted. Even if there was disapproval, conventional (i.e., non-drug using) community residents did not get involved or called the authorities when confronted with illicit activities for fear of reprisal. One individual's perception was that the community was accustomed to the illicit activities because many people in the community were or had been users at one time:

> "Well, it's been here forever in [neighborhood], so they kind of accept it here. They don't care really. Everybody knows everybody. Or at one time they were users, too." (Pablo)

Participants described a *collective ambivalence* in the community regarding a lack of willingness or inability to confront those involved in illicit activities. When asked how the community members perceived drug use in their neighborhood, one participant gave the following quote that provides some insight into why conventional community residents were reluctant to report drug abuse and crime:

> "They frown on it, man. It's just like any other community. You got people that are willing to help you but other people are willing to frown on you or call the police on you. Depending upon your neighbors. They knew about it but they didn't like it. They were like shocked by it. Like, "I didn't know they did that!" But they kept to themselves, whether it was out of fear. Well, it was out of fear, I guess, yeah. I would say out of fear." (Carlos)

Although care and respect for community participants was endorsed, some admitted the lengths they would go regarding their addiction:

> "I wouldn't care less who knew about it. Nah, I mean, I was the type of dude that, that whatever I seen or what I saw, if I wanted, I'd get it, depending if you're an 80 year old woman, or 8 year old kid, I'll take what I want but it's not me taking it, it's the drugs taking it." (Pablo)

Compounding these issues, participants also expressed a collective distrust of authority figures within the community.

> "I guess to them [conventional community members] they still had a lot of the old culture from Mexico, like the police was the enemy. You know if a policeman drove into the neighborhood or something and was to ask anybody, there could be a dead man lying in the street and they could ask anybody what happened but nobody knows. "I didn't see nothing, I was in the back." (Patricio)

DISCUSSION

These findings add to the current literature on cultural values. The *Dichotomization of cultural values* was the most prevalent domain and consistent across all values and themes. Each value, *familismo, machismo, personalismo* and *fatalismo* was discussed in terms of both positive and negative impetuses for initiation and cessation of heroin use. Additionally, the cultural values *familismo* and *machismo* were the two most transcendent themes across all subthemes. References to the family (*familismo*) were consistent throughout the data and all themes would refer back to this dominant domain. Elements of *machismo* were present in all themes as a "backdrop" to the responses. For example, in the domain "fed-up with the shit," men expressed having to *"amarrarse los huevos"* or "man-up" in order to quit heroin use. *Machismo* was also peppered throughout certain behaviors meant to protect ones' status. For instance, methadone users went to great lengths to protect their image and reputation in the community by traveling to methadone treatment clinics far outside their own neighborhoods. In the domain "female kinship's influence on cessation," *machismo* is expressed as an unnegotiated supposition by participants' expectations that their women kin were supposed to accommodate their illicit activities and care for them when they had *"malias"* [sick from withdrawals].

For this cohort, there were many instances of quitting by *"kickeando las malias"* (kicking the withdrawals) or "quitting cold turkey." In other instances, "maturing out" of heroin use was common. Maturing out is the process of cessation of substance use due to maturity, health related reasons, or the consequences associated with use (Maddux & Desmond, 1980; Winick, 1962). Strong family cohesion has been shown to be a significant protective factor against substance abuse and criminality (Rivera et al., 2008).

It has further been shown to be strongly associated with lower levels of psychological distress and greater health outcomes among Hispanic families (Rivera, et al., 2008). Conversely, living in distressed, unstable family environments, and communities with increased crime provide an increased risk for participation in substance abuse, sexual activity and illicit activities (Valdez, Mikow, & Cepeda, 2006).

In this cohort, three specific contextual factors are significant for understanding the role of cultural values among these Mexican-American men. First, the *cholo* family is typically associated with intergenerational street and gang connections (Glick & Moore, 1990). These *Cholo* families live in neighborhoods called *barrios* that are steeped in poverty and psychosocial strife. Second, the *tecato* is a heroin injecting Mexican-American whose subculture maintains a distinct street identity and street-based criminal networks (Valdez et al. 2000). Third, gender roles in these *cholo* families are centered in patriarchal and *Machismo* paradigms that hyper-masculinize men and their position in the *Cholo* society (Jorquez, 1984; Quintero & Estrada, 1998). These three contextualized identities provide a unique perspective to the meaning and interpretation of cultural values distinct from other subsets of Hispanics. The ecological paradigm asserts that individuals' behaviors are influenced by their function in a social context. The "self" is defined by social structures from multiple levels of influence: i.e., family, friends, school, work, community and society (LeCompte & Schensul, 1999). For participants in this study, initiation and cessation were both greatly influenced by family, friends, school, work, community and society.

THE DICHOTOMOUS CULTURAL VALUES PARADIGM

Culture influences perceptions of one's environment, personal responsibility, and drug use (Hongjie, Jian, Zhouping, Wei, & Zhiyong, 2010; Prado, et al., 2008; Unger, et al., 2002). For this study, cultural values functioned along a continuum from heroin use (negative or risk) to cessation (positive or protective). These findings are in accord with other studies demonstrating the influence of cultural values on health-risk behaviors (Chen & Unger, 1999; Unger, et al., 2002). This study provides further evidence regarding the influence of cultural values on substance use. Cultural values continue to enable or inhibit recovery from substance abuse (Cuadrado & Lieberman, 2002; Valdez, et al., 2008). This study suggests that a dichotomous relationship exists between the "positive" and "negative" effects of cultural values. For this particular cohort, the negative effects of cultural values greatly outweighed the positive effects. Moreover, domains concerning community, gender influence, personal ability to cease, and historical effects on heroin use and cessation were present throughout the data. Participants reported that factors directly involved with initiation were also directly related to cessation of heroin use. *Familismo* is an exemplar of this phenomenon—the vast majority reported both initiation and cessation of heroin use due to the direct influence of a family member. Moreover, while initiation of IDU for all participants was through a male family member, cessation was, for most, influenced by a female family member. Gender in this regard, played a significant role in both initiation and cessation.

Examples of this dichotomous paradigm regarding the negative and positive effects of cultural values are found in extant literature. In recovery, researchers found that men who maintained closer relationships with healthy families were more successful in

maintenance of sobriety compared to those who maintained relationships with dysfunctional families—a positive outcome (Lavee & Altus, 2001). In terms of substance abuse, families and social structures may enable or inhibit recovery, because cultural beliefs may dictate that substance abuse be viewed as a private family matter. In such a case, professional help and outside resources may not be considered—a negative outcome (Cuadrado & Lieberman, 2002; Soriano, Soriano, & Jimenez, 1994; Valdez, et al., 2008). Further, strong family cohesion or *familismo* has been associated with overall better mental health among Hispanics (Rivera, et al., 2008). Conversely, negative "street oriented" distressed home environments that include drug use, adults with criminal histories, and incarceration have been found to foster and contribute to deviant behaviors (Glick & Moore, 1990; Valdez, et al., 2006). Children growing up in "*cholo"* families have been found to be at greater risk for criminal behavior, sexual activity, and substance abuse (Valdez, et al., 2006). In this study, *familismo* served to enable drug-using behaviors, but also served as a protective factor regarding participants' health, quality of life, living status, and ultimately, cessation.

Machismo, more than any other cultural value, is known to negatively influence health and substance use. The stigma and shame attached to drug abuse and its effects on the family also prevent or impede many Hispanics from seeking treatment. In this study, machismo was associated with initiation and prolonged heroin use. Individuals enrolled in methadone treatment also reported seeking out clinics in other parts of town to receive treatment due to the shame attached to not being able to "kick" heroin without formal treatment. Many stated that they prefered to drive longer distances rather than be seen at a local clinic receiving treatment. When further probed about this behavior, many stated

that they would be thought of as "less than a man" for not being able to "kick" [stop using] without methadone.

"Cultural Collective Consciousness"

Culture influences the perceptions and interpretations of life's events and how they are communicated between individuals and throughout the community. Cultural beliefs and information endure and are disseminated because of the importance they provide to social groups that espouse them (Lynch, 1996). These concepts progress from individual attitudes to communal memes, and finally culminate in a "social mind" or a "collective consciousness" regarding the acceptance or rejection of certain behavioral norms (Durkheim, 1893; Lynch, 1996). Social norms, traditions, and mores are established within the socialization of family and the greater community regarding the acceptability of behaviors and actions. Activities are then contextualized according to an individual's environment, upbringing, and to a greater extent the characteristics of the community. A socialized "cultural lens" is then formed in communities defining acceptable behaviors. Therefore, activities such as substance abuse are viewed through the socialized cultural lens of that community. In this example, "the collective consciousness" informs the community's perspective on the origins of, responses to, and remedies vis-à-vis substance abuse (Cunningham, 1994).

In economically challenged neighborhoods, a "cultural collective consciousness" of apathy and helplessness develops in reaction to negative environmental forces such as substance abuse and crime (Durkheim, 1893; Kerr, 2008; Mead, 1934). In this regard, individuals learn to act and react to certain stimuli through learned experiences, "significant symbols," and conversations in contextualized societal relations (Kerr, 2008;

Mead, 1934). If the "significant symbols" and conversations are negative in nature, individuals may participate in the negative behaviors (i.e., substance abuse, crime) or withdraw from participation in the community (i.e., unwilling to report illicit activities in the community due to fear of reprisal).

Neighborhoods with high rates of poverty and psychosocial strife, encompassed by high rates of crime and substance abuse, become less cohesive and are reluctant to engage in monitoring needed to discourage illicit activities (Rosenfeld, Messne, & Baumer, 2001). Classic disorganization theory supports these assertions in that weak informal social controls foster criminal activities in disjointed communities (Kornhauser, 1978; Rosenfeld, et al., 2001; Streeten, 2002). Individuals in this cohort live in disjointed and closed, but interconnected, enclaves situated within *barrios.* A culture of "negotiated co-existence" among conventional and criminal residents is achieved in these *barrios* through extensive neighborhood networks (Browning, 2009; Rose & Clear, 1998; Sampson & Raudenbush, 1997). The interconnectedness of these closed neighborhoods provides protection for individuals involved in illicit activities. (Browning, 2009; Rose & Clear, 1998; Sampson & Raudenbush, 1997).

Studies have observed that in poverty-ridden minority communities, substance abuse and criminal activities are perceived as unavoidable, and are tolerated by conventional residents (Browning, 2009; Liu, 2004; Rosenfeld, et al., 2001; Silverman, 2004). This "negotiated coexistence" reinforces illicit activities because conventional residents are less likely to report criminal activities due to mistrust in authority, fear of reprisal, self-preservation, and the closed nature of these enclaves (Browning, 2009; Liu, 2004; Rosenfeld, et al., 2001; Silverman, 2004). These "collective coping behaviors" to

illicit activities in the community help to perpetuate the isolation and deterioration of the community for ensuing generations (Kuo, 2012).

CONCLUSIONS

This study endeavored to examine how aging Mexican American IDUs defined traditional Hispanic cultural values, their adherence to these values, and the role these values played in their ability to stop using heroin. The ethnographic interviews elicited thick and rich descriptions of participants' drug use and the influence of cultural values. Most participants were unfamiliar with the terms used by academics to describe cultural values (i.e., *familismo, machismo, personalismo* and *fatalismo*). Some were familiar with machismo mainly because of its dissemination in the English vernacular, but it was not widely recognized across participants. The academic method of labeling social behavior raises an interesting discourse regarding the ability to disseminate and communicate findings to the general public. The challenge for researchers who assign terms to behaviors is the "goodness of fit." Often researchers will use a term to describe a behavior rather than describe the behavior itself. This post-hoc method of describing behaviors may not always be accurate. This study asked participants for descriptions of values and behaviors and then looked for corresponding terms in the literature. Cultural values exist in all cultures but the expression and interpretation may be different from one culture to another. Further research on cultural values across groups is needed to better understand cross-cultural differences.

Culture influences perceptions of substance use and how these perceptions are communicated within the community (Cuadrado & Lieberman, 2002; Hongjie, et al., 2010; Prado, et al., 2008). In the case of substance use, culture can influence familial

views for causes, responses, assistance, enabling, and personal responsibility (Cunningham, et al., 2010; Hongjie, et al., 2010). Integrating cultural values into traditional psychotherapeutic and psychopharmacologic treatments for substance abuse, such as cognitive behavioral therapy, motivational interviewing, acceptance and commitment therapy, and medication therapies such as Methadone, Suboxone, and Antabuse, can greatly improve the effectiveness of future interventions. A practitioner's understanding and application of cultural values in treatment as well as incorporating positive elements of familial relationships for support could potentially increase positive outcomes for substance users.

One limitation of this study is the homogeneity of this population. The ability to generalize, even to other IDU populations, is limited by the unique experiences of these individuals including the time in which most were introduced to IDU. The Vietnam war, public opinion on drug use in the 1960's, deviance containment, and the marginalization of Mexican-Americans during these times contributed greatly to the development of this culture and substance using nature. Although *barrios* exist today, their experiences, types of drugs commonly used, and public perception of drug use is different.

Themes such as filial responsibility, community, Mexican-American culture, male initiation of drug use, female support for cessation of drug use, historic trauma, and cultural values, should be further explored in larger, multiethnic longitudinal studies. Findings from this study could be disseminated and integrated into clinical practice, program development, and research interventions for those dealing with addiction and their families. Future studies are warranted to determine other cultural mediators associated with substance abuse.

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TABLES

TABLE 1. GENERAL DEMOGRAPHICS

(N=26)	*n*	*%*	$\bar{x}$	*SD*
Age (Range 45-75)			58.9	9.4
Nativity				
U.S.	26	100.0		
Education				
No High School	13	50.0		
GED	12	46.2		
Some College/Grad	2	7.7		
Years formal education	8		8.2	8.5
Marital Status				
Single	7	26.9		
Married	7	22.0		
Separated or Divorced	12	49.3		
Have at least 1 child	21	80.8		
Employment				
Employed	4	15.4		
Unemployed	5	19.2		
Disabled	5	19.2		
Retired	12	38.5		
Currently Homeless	2	7.7		
Problems with family over				
past 6 months	14	53.8		
Never	10	38.5		
Sometimes	2	7.7		
Often				
Satisfied with family				
interaction	6	23.1		
Somewhat	20	76.9		
Very much				
Family encouraged	12	46.2		
cessation of drug use	4	15.4		
Never	10	38.5		
Sometimes				
Often				
Age of 1st time heroin use			17.1	5.2
Age started weekly use			18.5	5.4
Age last used heroin			51.3	8.9
Average duration heroin use			31.15	11.54

APPENDICES

Appendix A. *The Cultural Values and Substance Use Questionnaire*

Torres & Flores, 2011

Q: When you think about race, or ethnicity, how do you typically refer to yourself? For example, if people ask you 'Hey what are you?,' do you say I'm, '*Mexican American,' or "Hispanic*," or some other term?

Prompt if other term is used i.e., *Hispanic, Chicano, Raza, Latino, American, Mexican*, etc.

If multiple terms are Identified query: Is there one term that you prefer more than the other? If so, why?

Q: What does that mean for you, to be '[respondent's term]?

Prompt-Tell me a little bit about that, when you say that you have that strong [respondent's term] culture, what does that mean?

Q: So being [respondent's term] means [whatever they mentioned first; for instance, foods you eat or music you listen to, a language you use, a way you relate to others, etc.?

Prompt- Give me some examples of [things you do in first area mentioned], because you are [respondent's term].

NOTE to Interviewer:

- Make sure the respondent mentions and you ask him to expand on, or that you ask about:
    - Importance of the family (familismo)

- Ways in which we interact with others even outside the family (personalismo)
- Gender roles that dictate what men do and what women do (machismo)
- Sense that things are pre-determined and there is no use in fighting them (fatalismo)
- Other cultural values they may discuss (*marianismo, respeto, simpatia, compadrazgo, curandero, dignidad, verguenza, Religion*)

- Repeat the same line of probing for each construct; *familismo, personalismo, machismo, and fatalismo.*

  Prompts:

  1. What does [elicited cultural value example] mean to you?
     a. Explain it to me?
  2. How does it determine your role in the family?
  3. How does determine your role in the community?
  4. Give me some examples of how it's manifested in your behaviors?
  5. Can you think of some ways in which it has a positive impact and perhaps some ways in which it may have a negative impact?
  6. Do you think it in any way played a role in your starting to use drugs in general?
  7. What about in you're starting to use [substance of choice]?
     a. If so, explain or tell me more about that?
  8. Do you think it in any way played a role in your remaining in the [substance of choice]-using life for as long as you did?

   a. If so, explain or tell me more about that?

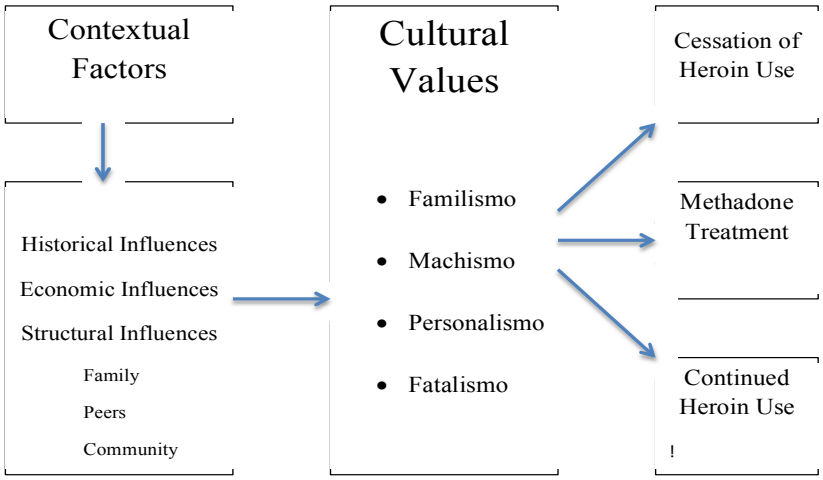
9. Do you think it in any way played a role in your ability to stop using [substance of choice]?

   a. If so, explain or tell me more about that?"

FIGURES

Figure 1.

Etiological Model of the Effects of Cultural Values on the Cessation of Heroin use among Aging Mexican-American Men



Adapted from Valdez and Torres, 2009

CHAPTER IV: CONCLUSIONS

This study has found empirical evidence supporting the roles of social capital and cultural values in heroin use initiation and cessation in a cohort of long-term heroin using Mexican-American men. In Study 1, current users had levels of social capital similar to former users, and those in methadone treatment had the lowest levels of social capital. These data suggests that those who maintain stable drug using relationships and connections in drug-using communities are provided with high but negative social capital compared to methadone clients who may be in a transition phase. Methadone clients are literally "between groups" (the drug using and the drug free) but have no strong association to either, resulting in fewer connections and networks (i.e., less social capital). Current users sustain high levels of negative social capital by maintaining their drug using networks, whereas former users go on to establish conventional positive relationships in the community. This may explain the similar social capital scores between current and former users—only one is negatively and one is positively associated.

In Study 2, qualitative methods were used to determine the influence of traditional Hispanic cultural values on the initiation and cessation of heroin use. For these participants, cultural values functioned along a continuum from initiation (negative) to cessation (positive). Findings from this study further support current literature regarding the influence of cultural values on health and health risk behaviors, and more specifically for substance abuse (Chen & Unger, 1999; Hongjie, et al., 2010; Kopak, Chen, Haas, & Gillmore, 2012; Prado, et al., 2008; Unger, et al., 2002). Individuals' perceptions are socialized through the context of their environments and social networks. These

perceptions inform attitudes regarding personal responsibility and discernments towards behaviors such as drug use. For participants in both studies, environment and family played a significant role in normalizing their drug use. In Study 2, participants provided numerous accounts of normalization of drug use, which subsequently influenced their perception of heroin i.e. *"growing up around the shit [heroin]"* or *"my uncle used to sell it."* For many, drug use was simply an activity similar to drinking a beer.

Findings from this study identified a dichotomous relationship between "positive" and "negative" effects of cultural values. These relationships were contextualized to the life experiences of the participants. The environment, family, and time period in which they were raised informed their perspectives that normalized drug use early on during childhood. Cultural values influenced the drug use patterns of the participants both negatively and positively. All participants reported being initiated into IDU by a male family member and many who stopped injecting or entered methadone treatment reported doing so at the beseeching of a female family member. Negative influences of the cultural value *familismo* served as a *provocateur* for the initiation of IDU for the men that were introduced to IDU by a male family member. Participants listed additional negative influences of familismo, including "enabling" (participants' term) by mothers to allow continued or prolonged use by providing them food, shelter, security, and in some cases funds to purchase drugs. Positive examples that emerged from the data include the cessation of IDU due to *the care and love of family*, typically at the pleading of a female family member. Gender and *familismo* in this regard played a significant role in both initiation and cessation of IDU. Additional domains yielded from the qualitative data

included *community co-existence* with illicit activities, *gender influence*, *personal ability to cease*, and *historical influences* on heroin use.

Examples of this dichotomous cultural values paradigm and the important role of social capital can be found in the literature, though terminology may vary and not include these specific labels. For instance, researchers found that men who remained drug-free after therapy were more apt to maintain closer relationships with healthy families compared to those who maintained close relationships with dysfunctional families (Lavee & Altus, 2001). This outcome could be interpreted as "positive *familismo"* for individuals with close, supportive, and positive familial relationships. A recent study examining family cohesion, parental control, parent–child attachment, and substance abuse among Mexican heritage and White families found that positive family cohesion for both Mexican-heritage youth and White youth attenuates drug and alcohol problems for these adolescent substance users (Kopak, et al., 2012). Kopak et al.'s(2012) findings support our study's assertions regarding the existence of cultural values across all ethnic identities. Family values are important across ethnicities and cultural contexts in dealing with substance use. The study on which the Recovery Capital Theory was originated sought to understand the influence of relationships (*familismo*) and resources (social capital) on 'natural recovery' among drug users (Cloud & Granfield, 2008; Granfield & Cloud, 2001). Recovery capital is the totality of resources individuals have at their disposal that can be accessed to aid in the initiation of substance use treatment, cessation of substance use, and maintenance of cessation. In accord with recovery capital theory, the family (*familismo)* functioned as "human capital" (*capital*) for participants in both studies. Participants in Study 2 were provided with the aid and support needed to recover

from heroin use. The influence of family and access to resources were significant in this study and are further supported in the literature.

A better understanding of the relationship between social capital and cultural values as related to substance use can aid in addressing health and mental health concerns within these communities. Social capital and cultural values were found to function contextually as positive or negative. Negative attributes were associated with initiation and positive attributes were associated with cessation. This study supports the *dichotomous paradigm* perspective for both social capital and cultural values. Both exist in positive or negative contexts and function as either risk or protective factors.

Findings could inform methods for developing and delivering culture-specific drug interventions within Hispanic communities or other minority subcultures. Reducing the long-term health consequences of substance abuse and increasing quality of life for members of this growing population is an achievable goal. These results support the need for policy changes in favor of developing and maintaining positive environmental capacity such as community centers, parks, afterschool programs, streets, and sidewalks in economically challenged neighborhoods. This study stresses the development of "holistic" interventions that account for all ecological factors specific to the population for which they are being designed. Policy changes towards immigrants and undocumented immigrants, especially of Hispanic decent, need to be addressed regarding deportation of family members—especially for individuals brought over as children. The breaking up of families and communities further exacerbates substance use and comorbid mental health conditions.

The strength of this study is its unique and novel approach of analyzing both positive and negative paradigms juxtaposed by contextually socialized perceptions. *Contextualizing capital* and *the cultural collective consciousness* provide further discourse for future research. Examining social capital and cultural values in hidden, under-studied, drug-using populations provides some understanding of determinants that influence drug abuse and illicit behaviors in similar populations. It is expected that these findings will provide an alternative understanding of the synergistic interactions between individuals, environmental factors, and drug abuse and addiction. Identifying risk and protective factors associated with substance abuse and applying these findings to intervene in communities struggling with drugs would create safer, healthier communities.

THE ROLE OF RECOVERY CAPITAL IN THE LIVES OF PARTICIPANTS

Recovery capital maintains that recovery and addiction are based in "capital." The basic theoretical supposition of recovery capital is that "those who misuse substances but who have access to the various kinds of resources that constitute recovery capital have greater capacity to terminate substance misuse than those who do not have access to such resources" (Cloud & Granfield, 2008). In study 1, current users maintained their drug using connections, had the highest levels of social capital, and continued to be addicted. In Study 2, all participants expressed qualitatively the importance of family in the initiation ***and*** cessation of IDU. The *cultural collective consciousness,* or more specifically, those indoctrinated beliefs and attitudes entrenched in the culture of the participants, embodied the protagonist of cultural capital.

Recovery capital also asserts that individuals who are financially stable and have

resources have increased chances of successful recovery. Physical capital (financial means) allows individuals to remove themselves from toxic drug using environments by entering treatment rehabilitation. For these participants with low education attainment and living in an economically impoverished *barrio*, physical capital was not readily available. Elements of human capital were understandably diminished in this population due to prolonged drug use, marginalization by society, historical deviance containment, history of family substance use, participation in illicit activities, and high rates of unemployment.

Recovery capital's precept that unemployment can further drive individuals into illicit activities associated with the drug culture was supported by these findings. Roughly two thirds of participants were unemployed. Recovery capital emphasizes that substance abusers that develop conventional norms and desire to be part of society have increased chances for recovery compared to those who reject conventional societal norms. In both studies, participants described and endorsed being historically marginalized, mistrusting of law enforcement, being feared by their local community, and feeling rejected by the dominant society. Many participants endorsed and embraced the drug-using culture at the expense of separation from conventional society. Despite these challenges and historical marginalization, others were able to develop societally-congruent norms and values (e.g., "*I just want to be normal, I want to be part of the neighborhood"*) and to cease heroin use.

Values associated with prison and "street culture" impede recovery. The impact of incarceration on this cohort was significant. All 227 participants in this study had been incarcerated at least once in their lives, with an average time of incarceration of 10 years.

Participants stated that incarceration and prison culture adaptions reinforced their drug using behaviors. Moreover, many stated that drugs were readily available in prison. For the majority of participants, incarceration compounded drug use and reinforced negative attitudes towards society and authority. Thus, as recovery capital theory suggests, incarceration actually *prolonged* their drug use. These factors greatly increased the probability of continued use and illicit criminal activities once released from prison.

Implications for Drug Abuse Treatment and Research

Social capital and cultural values must be further explored in larger, multiethnic, longitudinal studies. Findings from this study and future studies should be disseminated and integrated into clinical practice, program development, policy change, research, and interventions for those dealing with addiction and for their families. Future studies are warranted to determine other cultural mediators associated with substance abuse. Future directions might include assessing social capital and cultural values of other sub-populations such as other ethnicities, immigrants, gangs, and LGBTQ communities. Alternatively, research is needed to study the resiliencies of individuals that do not succumb to substance use or criminal activities in these same communities (Cloud & Granfield, 2008). More empirically sound interventions should be developed and implemented focusing on understudied minority populations. As uncovered in this study, these populations have specific needs that conventional treatment modalities find difficult to address. Continued research supporting correlations between cultural values, social capital, and substance abuse could stimulate discourse and reevaluations of policies deleterious to minorities and family cohesiveness, such as deportation of undocumented individuals. Lastly, these findings suggest the need for a paradigm shift in terms of the

perception of substance abuse by families and health professionals. Factors perceived as enabling behaviors in this study also served as protective factors for the health and shelter status of these men. Participants' chronic health conditions were unremarkable compared to the general Mexican-American population and rates of homelessness were low compared to other IDU populations. These two conditions were directly associated with the strong family bonds (*familismo* and capital) that exist in these communities. Participants in study 2 stated that the assistance and support provided by their families significantly facilitated recovery attempts and greatly increased success for cessation of heroin use. These findings are encouraging for "sparing the rod" and endorse the importance of patience and tolerance for those suffering from addiction.

Implications for Social Work Practice

This study highlights the importance of relationships and community building. Therapeutic approaches based on context and environmental circumstances specific to the individual are essential for positive outcomes. Practitioners who work with clients understand the necessity of *meeting the client where they are* and addressing the ecological circumstances specific to the client. In order to effectively address substance abuse, practitioners must consider the impact of social capital and cultural values. This study, in accordance with the literature, asserts that cultural environment has a major impact on the perceptions of behaviors. Emphasizing the positive attributes of an environment and focusing on cultural strengths can facilitate constructive change. Mental health professionals should consider these concepts when working with clients of all backgrounds. Understanding the interactions between culture and capital in specific

environments can help the practitioner better understand the psychosocial and socioeconomic concerns within marginalized communities.

Strengths-based and cultural assets frameworks could be utilized to strengthen positive social capital and emphasize positive cultural value attributes for clients. The application of a client's *capital capacity* and *culture* in overcoming substance abuse could increase chances for cessation. Unfortunately, for individuals living in communities similar to the ones in this study, capital capacity is limited. Many individuals from these communities who seek out assistance for substance use are limited to indigent services. Indigent care typically focuses on the physiological conditions of the patient, but generally does not address external factors associated with substance use—the greater *person-in-environment* context. Once stabilized, individuals return to their environments unequipped to navigate the potential negative elements in their community. This *unequal capacity* diminishes the individual's 'recovery capital' for cessation (Cloud & Granfield, 2008).

Social capital and cultural values are undeniably linked to basic social work philosophy. They both highlight the importance of community building, relationships, and focusing on systems. This is congruent with the person-in-environment perspective which is a foundational approach to social work practice on multiple levels (Brisson, et al., 2009). This study supports the importance of assessments based on context. In order to effectively address substance abuse, social workers must take into account social support, SES, and cultural context. Accounting for these factors and addressing them appropriately are keys to efficacious treatment. Understanding the dynamic interactions of social capital and cultural values on substance abuse can aid social workers in the

application of culture-specific interventions. Identifying how social capital and cultural values influence substance use and cessation is an important step towards improving treatment.

Studies have demonstrated that substance abuse impacts health/mental health negatively and the co-morbidity of substance abuse and psychiatric disorders is becoming more prevalent among Hispanics. As the Hispanic population grows, so too does the importance of finding culturally competent treatments and interventions aimed at increasing the quality of life. Identifying methods of promoting protective behaviors and addressing behaviors deleterious to recovery are important, especially for younger individuals. Understanding the cultural distinctions and needs of hidden populations will better enable social workers, physicians, and other mental health professionals to provide adequate and effective care. Cogently communicating information regarding substance abuse, substance abuse treatment, and resources available to Hispanic communities is a priority. Healthcare workers and patients both stand to benefit from increased communication, making for a more successful healthcare experience. The profession of social work is distinct in the breadth of services offered as well as the multiple roles social workers must assume when assisting clients. Social work encompasses elements of psychology, sociology, political sciences, and economics, providing the flexibility needed to navigate a myriad of social settings. Additionally, social workers are trained in contextualized practice and cultural sensitivity to better understand and address the needs, beliefs, and traditions of specific populations. Cultural awareness and sensitivity are of utmost importance given the changing face of U.S. demographics. Social work practice and research is unique in that it is guided by the application of compassion and

determination to improve lives. Social work is an ever-evolving field, striving to keep up with the pertinent changes in society.

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Chen, X., & Unger, J. B. (1999). Hazards of smoking initiation among Asian American and non-Asian adolescents in California: A survival model analysis. . *Preventive Medicine, 28*, 589-599.

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Granfield, R., & Cloud, W. (2001). Social context and "natural recovery": The role of socail capital in the resolution of drug-associated problems [Article]. *Substance Use & Misuse, 36*(11), 1543.

Hongjie, L., Jian, L., Zhouping, L., Wei, L., & Zhiyong, Z. (2010). Does Chinese culture influence psychosocial factors for heroin use among young adolescents in China? A cross-sectional study. [Article]. *BMC Public Health, 10*, 563-570. doi: 10.1186/1471-2458-10-563

Kopak, A. M., Chen, A. C., Haas, S. A., & Gillmore, M. R. (2012). The importance of family factors to protect against substance use related problems among Mexican heritage and White youth. *Drug and alcohol dependence, 124*(1-2), 34-41. doi: 10.1016/j.drugalcdep.2011.12.004

Lavee, Y., & Altus, D. (2001). Family Relationships as a Predictor of Post-Treatment Drug Abuse Relapse: A Follow-Up Study of Drug Addicts and Their Spouses. [Article]. *Contemporary Family Therapy: An International Journal, 23*(4), 513-530.

Prado, G., Szapocznik, J., Maldonado-Molina, M. M., Schwartz, S. J., & Pantin, H. (2008). Drug use/abuse prevelance, etiology, prevention, and treatment in Hispanic adolescents: A cultural perspective. [Article]. *Journal of Drug Issues, 38*(1), 5-36.

Unger, J. B., Ritt-Olson, A., Teran, L., Huang, T., Hoffman, B. R., & Palmer, P. (2002). Cultural values and substance use in a mutiethnic sample of California adolescents [Article]. *Addiction Research & Theory, 10*(3), 257-279. doi: 10.1080/16066350290025672

APPENDIX A: CURRICULUM VITA

DAVID V. FLORES

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CURRENT POSITION

2012 **Assistant Professor**, University of Texas Medical School, Department of Internal Medicine, Division of Geriatric and Palliative Medicine.

2012 **Assistant Director**, Texas Elder Abuse and Mistreatment Institute (TEAM). Consortium of academic and governmental agencies that investigate and intervene in cases of elder self-neglect, abuse, or mistreatment.

EDUCATION

2012 **PhD, Social Work**, Magna Cum Laude, University of Houston Graduate College of Social Work.
Dissertation: "Drug Use in Aging Mexican-American Men: The Role of Culture and Capital." Chairperson: L. Torres, PhD, University of Houston, Houston, TX.

2010 **Master of Social Work,** Magna Cum Laude, Graduate College of Social Work, University of Houston, Houston, TX.

2009 **Master of Public Health,** in Health Promotions and Behavioral Sciences, University of Texas Health Science Center's School of Public Health, Houston, TX
Thesis: "Latino perceptions of and barriers to healthcare in the Southwest United States" Chairperson: Cayla R. Teal, Baylor College of Medicine.

2003 **Bachelor of Arts, Sociology,** Magna Cum Laude, University of Houston, Houston, TX.

2002 **Bachelor of Arts, Psychology,** Magna Cum Laude, University of Houston, Houston, TX.
Senior Honors Thesis: "Downward assimilation and its effects on conspicuous consumption of Mexican American adolescents"
Chairperson: Luis Salinas, University of Houston's Honors College.

Research interests: Ethnic minority health disparities, cancer, and

substance abuse, specifically, Hispanic/ Latino populations, geriatrics.

Teaching experience and interests: Transtheoretical, DSM, Human Behavior and the Social Environment, Qualitative methods research, Social Work Research Methods, Clinical Social Work with Latinos.

LICENSURE AND CERTIFICATIONS

2012 **Licensed Masters of Social Work, LMSW**, State of Texas. Association of Social Work Boards exam passed, July 12, 2012.

2010 **Certified in Public Health, CPH**, The National Board of Public Health Examiners.

RESEARCH EXPERIENCE

2011-2012 **Social Work Research Intern,** MD Anderson Cancer Center, Office of Cancer Survivorship, (Analyze and transcribe qualitative and quantitative data, assist in manuscript development for studies "Effects of Cancer Symptoms on Minority Caregivers"- National Cancer Institute (KO7 CA102482) G. Palos PI and "Perceptions of Cancer Survivors towards the Survivorship Experience" - G. Palos PI.

2010-2012 **Graduate Research Assistant (Doctoral Level),** National Institutes of Health, National Institute on Drug Abuse, University of Houston Drug Abuse Research Development Program (5R24DA019798-05), P. Bordnick (PI), L. Torres (Investigator and Project Director, "Health Consequences of long-term heroin use in aging Mexican-American men Project"), University of Houston.

2010-2012 **Graduate Research Assistant (Doctoral Level)**, "Hispanic Healthy Marriage Initiative Grantee Implementation Evaluation," funded by Administration for Children and Families/DHHS, S. Bouchet (The Lewin Group, Inc., PI), L. Torres (Co-Investigator/Evaluator).

2010 **Graduate Assistant Teaching Fellow (Doctoral level),** National Institute on Drug Abuse, University of Houston Drug Abuse Research Development Program (5R24DA019798-04), Avelardo Valdez (PI), Luis R. Torres (Investigator and Project Director, "Health Consequences of long-term heroin use in aging Mexican-American men Project") Center for Drug and Social Policy Research, University of Houston.

2010 **Social Work Fellow**, MD Anderson Cancer Center, Houston, TX. Provided clinical, counseling, and resource services under the supervision of Licensed Clinical Social Worker.

2006-2007 **Research Coordinator III,** Michael E. DeBakey Veterans Administration Medical Center Hospital, Houston Center for Quality of Care & Utilization Studies, Mark E. Kunik MD MPH, Melinda Stanley PhD,. Baylor College of Medicine, VA Mental Illness Research and Education Clinical Center (MIRECC).

Interventions and Practice Research Infrastructure Grant:

Primary objective to aid in the acquisition of an NIMH *IP-RISP Grant* in order to expand the number of partnerships between community based, clinical services settings and academic institutions with the goal of enhancing the capacity to provide evidence –based mental health care in community settings that is sensitive to the social and cultural need of the patients and providers and to the feasibility concerns of community organizations involved.

Responsibilities:

- Literature review compilation and organization
- Maintain and update regulatory documents, procedures manuals, subjects' case report forms, and source documents
- Assist Faculty with preparation of P20 grant
- Coordination of meetings, conference calls, and events among investigators
- Ongoing maintenance of logs and minutes
- Development and dissemination of materials
- Construction of matrices and tables
- Recruitment and screening of subjects for eligibility in both English and Spanish populations.
- Maintenance of IRB certifications, administration and informed consent for Human Subjects

Responsibilities on Other Related HCQCUS Research Projects:

- **Partners in Dementia Care:** Mark Kunik MD, MPH**;** A national multi-site study that proposes to implement and test a new system of coordinated care and support services for patients with dementia and their caregivers, the people who have a major responsibility in caring for the patients at home. The study's ultimate goal is to improve care for veterans with dementia and their caregivers.
    - Development of resource manual and CD-ROM for use at multiple sites
    - Literature reviews
    - Construction of matrices for multiple instruments and consumer ready resources
    - Coordination of multi-site phone conferencing.
- **Prostate Cancer Symptom Management for Low-Literacy Men:** David Latini, PhD; Symptom management patient education

intervention for men treated for localized prostate cancer with low health literacy.
    - Construction and organization of Protocol Binders
    - Data analysis
    - Literature reviews
    - Assist in the coding of Qualitative and Quantitative data.
- **Vida Tranquila (Tranquil Life):** Louise Quijano PhD MSW, Melinda Stanley PhD, Mark Kunik MD MPH; a Spanish Skills-Based Therapeutic Intervention for Older Hispanics Patients with Generalized Anxiety; Recruiting and consenting of only Spanish speaking patients within the Harris County Hospital District.
    - Maintenance of data base
    - Recruiting of Spanish speaking Older Hispanics with generalized anxiety disorder
    - Research materials and mailings.
- **Emotional Characteristics Associated with Impulsive Aggression:** Andra Teten, PhD; To identify the nature and scope of aggressive behaviors reported by impulsive aggressive individuals and to identify the emotional characteristics associated with impulsive aggression;
    - Recruiting
    - SPSS database entry
    - Construction of protocol binders
    - Enter results of all psychological testing in project database
- **Bi-Polar Trial Network Registry:** Lauren Marangell MD; Database for the study of causes, treatment, and illness course of affective disorders;
    - Recruiting and consenting patients at Ben Taub Hospital Harris County Hospital District
    - Data entry for NIMH funded registry of patient with mood disorders.

2003-2006 **Psycho-Diagnostician**, Baylor College of Medicine, Houston, TX. Dana Giulian, MD: Clinical interviews and neuropsychological testing for dementia under supervision of a licensed neuropsychologist, score and norm protocols for research purposes. Provided technical support and data entry for maintaining patient database.

2003 **Neuropsychology Intern**, MD Anderson Cancer Center, Christine Meyers, PhD: Interviewing and assessing patients enrolled in research protocol investigating neurological effects of chemotherapy, radiation, and the outcome of brain metastases, Spanish translator. University of Houston, Houston TX.

2003 **Latino Family Project**: Luis Salinas PhD, Collaborated in the development and delivery of an instrument measuring attitudes of Latino adolescents towards changing Latino family rituals and traditions. University of Houston, Houston TX.

2001-2002 **Youth Relationship Project**, Ernest Jouriles PhD, Renee McDonald PhD: Intervention for the prevention of violence among high school students in the Fort Bend School District. University of Houston, Houston TX.

2000-2001 **Project Support/NIH**, Ernest Jouriles PhD, Renee McDonald PhD: Shelter coordinator for activities of R.A.s and children in local shelter for families in abusive situations. Child mentor in a home based intervention research project. University of Houston, Houston TX.

OTHER PROFESSIONAL EXPERIENCE

1981-Present **Professional Recording Musician, Saxophonist/Woodwinds**: Highlighted events include recordings with six-time Grammy award winning Latin group *La Mafia and* RCA recording-artist *Valentino.* Currently, *David Flores Latin Jazz Combo*.

TEACHING EXPERIENCE

2011 Fall **Teaching Assistant** to Dr. Torres in various modules of Foundations of the Social Work Profession (New MSW Curriculum Foundation Semester).

2011 Spring **Teaching Assistant** to Dr. Torres in PhD course Grant Writing.

2010 Fall **Teaching Assistant** to Dr. Torres in various modules of Foundations of the Social Work Profession (New MSW Curriculum Foundation Semester).

2009 Fall **Teaching Assistant** to Dr. Torres in various modules of Foundations of the Social Work Profession (New MSW Curriculum Foundation Semester).

1996-2002 **Band Director, Houston Independent School District, Reagan High School**: Jazz, Concert, and Marching Bands instructor for inner-city urban high school. Additional responsibilities: logistics, travel, acquisition of instruments, uniforms and fundraising.

PUBLICATIONS

Palos, G., **Flores, D.V.,** & Valenzuela, J.O. (In Progress), Men of Steel: Men Caring for Patients Receiving Treatment at Public Hospitals for Advanced Cancer.

Torres, L. R., **Flores, D.V.,** & Bordnick, P.S. (In Progress). Culture and Health Outcomes in Aging Mexican- American Heroin Users.

Torres, L. R., **Flores, D.V.,** Bordnick, P.S. (In Progress). Culture and Mental Health Outcomes in Aging Mexican- American Heroin Users.

Flores, D.V. & Torres, L.R., Ren, Y., Torres, M.I.M, Deleon, F., & Bordnick, P.S. (In Progress). *"Sangre Malo, Sangre Bueno"* : "Good blood, bad blood": The role of *Familismo*, Family centeredness as risk and protective factor in heroin-injecting Hispanics.

Flores, D.V. & Torres, L.R., Torres-Vigil, I., Bordnick, P.S. Ren, Y., Torres, M.I.M., DeLeon, F., Valverde, I.P., & Lopez, T. (Under Review). From "Kickeando las malias" (Kicking the withdrawals) to "Staying clean": The Impact of Cultural Values on Cessation of IDU in Aging Mexican-American Men.

Flores, D.V. & Torres, L.R., Torres-Vigil, I., Ren, Y., Hader, A., & Bordnick, P.S. (Under Review). "El Lado Oscuro": "The dark side" of Social Capital in Aging Mexican-American Heroin-Using Men.

Flores, D.V. Latino Perceptions and Barriers to Preventive Health Care Maintenance in the Southwest United States. Masters thesis, University of Texas Health Science Center, School of Public Health.

Flores, D.V., Salazar, J. M., & Hergenroeder, B. (2009). El Centro de Corazon's depression screening report: Eastwood and Navigation Clinics. El Centro de Corazon a Federal Qualified Health Center, Mental Health Department, Houston, Texas.

Latini, D. M., Hoffmann, D. J., **Flores, D. V.**, McNeese, T. D., Hart, S. L., & Knight, S. J. (2008). Symptom management strategies of men treated for localized prostate cancer. Supportive Care in Cancer, 16, 21-223.

REFEREED POSTER PRESENTATION AT SCIENTIFIC MEETINGS

Palos, G., Valenzuela, J., **Flores, D.V.,** Liao, K. P., Gilmore, K., Garcia-Gonzalez, A., & Balderas, L. "Symptom Burden In Men Caring for Underserved Patients Diagnosed with Cancer," has been accepted for Poster Presentation at the 6th Biennial Cancer Survivorship Research Conference: Translating Science to Care, June 14-16, 2012, Arlington, VA.

Flores, D.V., Markham, C.M., & Teal, C.R. Latino Perceptions and Barriers to Preventive Health Care Maintenance in the Southwest United States, 55th Annual Program Meeting of the Council on Social Work Education, November 6-9, 2009, San Antonio, TX.

REFEREED PRESENTATIONS AT SCIENTIFIC MEETINGS

Flores, D.V., Torres, L.R., Torres, M.I., The Impact of Cultural Values on Heroin Cessation Among Aging Mexican-American Men, Accepted for Oral presentation at the Annual Program Meeting of the Council on Social Work Education, November 9-12, in Washington, DC.

Flores, D.V. & Torres, L.R. "El Lado Obscuro:" The Dark Side of Social Capital in Aging Mexican-American Heroin-Using Men, Oral presentation at the 2011 Annual Conference of the Society for Social Work and Research, January 12-16, 2011, Tampa, FL.

Flores, **D.V.** From Bench to Practice: Translational Research with Hispanic Clients. Translational Research: A Social Work Perspective in Research, 7th Annual Doctorial Symposium, University of Houston Graduate College of Social Work, March 3, 2011, Houston, Texas.

Flores, D.V., Lopez, S., & Torres, L.R. Culturally Competent Practice with Hispanics: Challenges and Opportunities, Faculty Development Workshop, presented at 56th Annual Program Meeting of the Council on Social Work Education, October 14-17, 2010, Portland, Oregon.

Flores, D.V. & Torres, L.R. Challenges in Assessing Mental Health Issues in Latinos, Oral presentation at the NASW/Texas 34th Annual State Conference, October 8-10, 2010, Houston, TX.

Flores, **D.V.** Hispanics Barriers to Healthcare Utilization and Healthcare Reform. Shaping Transitions: A Social Work Perspective in Research, 6th Annual Doctorial Symposium, University of Houston Graduate College of Social Work, March 4, 2010, Houston, Texas.

Flores, D.V., Markham, C.M., & Teal, C.R. Latino Perceptions and Barriers to Healthcare in the Southwest United States, Oral presentation at the 14th Annual Society for Social Work Research Conference: A World of Possibilities, January 14 - 17, 2010, San Francisco, CA.

INVITED PRESENTATIONS

Flores, D.V. Working with Endnote. Center for Drug and Social Policy Research, Graduate College of Social Work, University of Houston, May 30, 2012, Houston, TX.

Torres, L.R. & **Flores, D.V.** Working Successfully with Hispanic Families: What do we need to Know? Faculty Development Workshop, Ben Taub General Hospital, Harris County Hospital District, September 22, 2011, Houston TX.

Torres, L.R. & **Flores, D.V.,** & Torres, M.I.M. Working Successfully with Hispanic Families: What do we need to Know? Faculty Development Workshop, The Children's Assessment Center, September 1, 2011, Houston TX.

Flores, D.V. Latinos and Cancer: Overcoming Challenges and Providing Effective Care. Invited oral presentation, University of Texas MD Anderson Cancer Center, June 29, 2010, Houston, TX.

Flores, D.V. Latino Perceptions of and Barriers to Healthcare in the Southwest United States. Questions and Research in Progress, Veterans Hospital Houston Center for Quality Care & Utilization Studies and Baylor College of Medicine, May 10, 2009, Houston, Texas.

FUNDING

2011-2012 Doctoral Fellowship Award in Clinical Training from the Council on Social Work Education's Minority Fellowship Program (MFP), sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), 24,000 per year.

2010-2012 Graduate Research Assistant (Doctoral Level), "Hispanic Healthy Marriage Initiative Grantee Implementation Evaluation," funded by Administration for Children and Families/DHHS, S. Bouchet (The Lewin Group, Inc., PI), L. Torres (Co-Investigator/Evaluator).

2010-2012 Graduate Research Assistant (Doctoral Level), National Institutes of Health, National Institute on Drug Abuse, University of Houston Drug Abuse Research Development Program (5R24DA019798-05), P. Bordnick (PI), L. Torres (Investigator and Project Director, *Health Consequences of long-term heroin use in aging Mexican-American men Project)*.

2010 MD Anderson Cancer Center Social Work fellowship 9,041.10.

2010 Phi Alpha Honor Society Mu Lambda Chapter Scholarship 500.00

2008 Hogg Foundation for Mental Health Bilingual Scholarship-MSW scholarship 23,250.

HONORS AND AWARDS

2011 Recipient of the Doctoral Fellowship Award in Clinical Training from the Council on Social Work Education Minority Fellowship Program (MFP) sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA).

2010 Honoree, University of Houston's Graduate College of Social Work's "Heroes Among Us," River Oaks Country Club, Houston, TX.

2010 Recipient, Phi Alpha Honor Society Mu Lambda Chapter Scholarship, University Houston.

2010 Recipient MD Anderson Social Work Fellow Scholarship.

2009 Recipient of the Hog Foundation for Mental Health Bilingual Scholarship-MSW scholarship education, University Houston.

2005-2007 Dean's List, University of Texas Health and Science Center's School of Public Health.

2005 Recipient of Sever-Risser Foundation award for the advancement of epidemiological studies for the paper: *"Breastfeeding and its Potential Impact on the Physical and Emotional Wellbeing of Newborn Infants to Two Years of Age."* University of Texas School of Public Health, Houston, TX.

2002 University Honors in major, University of Houston Honors College.

2001 Psi Chi National Honor Society, University Houston.

1999-2002 Dean's List, University of Houston.

1999 Phi Theta Kappa National Honor Society-Omega Sigma Chapter

1999 Golden Key National Honor Society

JOURNAL MANUSCRIPT REVIEWS

2011 Reviewer: Journal of the Healthcare for the Poor and Underserved.

2010-2011 Co-Editor, Perspectives in Social Work, Doctoral student online journal, Graduate College of Social Work, University of Houston.

2008-2010 Member, Editorial Board: Perspectives in Social Work, doctoral student edited online journal Graduate College of Social Work, University of Houston

SERVICE TO COMMUNITY

2010 Paper session monitor, October 16th CSWE conference, Portland, OR.

2010 Moderator, *Impact of Gender and Ethnicity on Use of Health and Mental Health Services*, 14th Annual Society for Social Work Research Conference: A World of Possibilities, Sunday, January 17, 2010 from 10:45 AM to 12:15 PM., January 14 - 17, 2010, San Francisco, Society

	for Social Work and Research Chair, SSWR 2010 Conference Program Planning Committee.
2009	Paper session monitor, November 8th CSWE conference, San Antonio, TX.
2009	Ticket Tracker, November 8th CSWE conference, San Antonio, TX.
2009	Paper session recorder, November 6th CSWE conference, San Antonio, TX.
2009	Volunteer, Bellerive Retirement Community-provided musical entertainment.
2005-2008	Volunteer, University of Texas Annual "United to Serve" Texas Medical Center provided musical entertainment.
2005-2008	Volunteer, University of Texas Student Epidemic Intelligence Society.
1995-1997	Volunteer, Talento Bilingue de Houston Music Instructor, provided free private saxophone lessons to underprivileged inner city school children, assisted with center-sponsored events.
1997	Volunteer, City of Houston's After School Achievement Program: *C*ity of Houston sponsored program providing a safe, supervised place for youth aiming reduce delinquency, crime, and school dropout.

LANGUAGES

English
Spanish

RESEARCH SOFTWARE EXPERIENCE

NVivo 9, Qualitative data analysis software
Atlas.ti 7, Qualitative data analysis software
IBM SPSS, Predictive analytics software
Endnote, Software for publishing and managing bibliographies

SELECTED PROFESSIONAL MEMBERSHIPS

SAMHSA Minority Fellowship Program
National Hispanic Sciences Network on Drug Abuse
University of Texas Student Epidemic Intelligence Society

University of Houston Alumni Association
University of Houston Graduate College of Social Work's Alumni Association
Society for Social Work Research
Council on Social Work Education
National Association of Social Workers
Texas Society for Public Health Education
American Psychological Association
School of Public Health Student Association
National Association of Jazz Educators
American Society of Composers Artists and Performers