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In this paper I examine the impact of recent immigration, in addition to other community predictors on community counts of violent and property crimes in Austin, Texas, a multiethnic city. I combine data from the 2000 US census of population and housing with census tract level uniform crime report data from the Austin police department's records management system in order to examine the impact of recently arrived immigrants predominantly from Mexico. Negative binomial regression models do not provide any support for the assumption that increased immigration is associated with an increased threat to public safety, and in fact show partial evidence to suggest a protective effect off recent immigration against property acquisition crimes and rape. The increase in exclusionary and restrictive immigration policies in the United States have been premised on the increased threat to public safety that immigrants, whether legal or illegal, pose. I discuss the impact of such practices that continue to overlook the empirical evidence.

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**Unsubstantiated Fears: Assessing the effects of recent immigration  
on part I index crimes.**

by  
Richard Stansfield

AN ESSAY

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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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## TABLE OF CONTENTS

	<u>PAGE</u>
1 Introduction.....	1
1.1 Immigration Policy in the United States.....	1
1.2 What this study adds to the current literature..	7
1.2.1 Extending the dependent variable.....	7
1.2.2 Race/ethnicity and crime.....	8
1.2.3 Extending the measurement of immigration	9
1.2.4 Community context.....	10
2 Literature Review.....	11
2.1 Social Disorganization.....	11
2.2 Economic disadvantage.....	12
2.3 Sub-cultural adaption.....	13
2.4 Acculturation.....	15
2.5 Empirical evidence of Latino immigrants.....	19
3 Data, Methods, and Analysis.....	22
3.1 Austin, TX.....	22
3.2 Data.....	24
3.3 Variables.....	24
3.3.1 Violent and property crime .....	24
3.3.2 Recent Immigration .....	25
3.3.3 Neighborhood Disadvantage .....	27
3.3.4 Neighborhood Stability .....	31
3.3.5 Additional Control Variables .....	32
3.4 Analysis.....	33
4 Results.....	37
4.1 Violent Crime.....	39

4.2 Property Crime.....	42
5 Discussion.....	44
6 Conclusion.....	47
6.1 Limitations.....	47
6.2 Policy Implications.....	49
7 References.....	52
8 Appendices.....	59
8.1 Appendix A Disadvantage index factor analysis	59
8.2 Appendix B Recent immigration factor analysis	59

# **Unsubstantiated Fears: Assessing the effects of recent immigration on part I index crimes.**

## **Abstract**

In this paper I examine the impact of recent immigration, in addition to other community predictors on community counts of violent and property crimes in Austin, Texas, a multiethnic city. I combine data from the 2000 US census of population and housing with census tract level uniform crime report data from the Austin police department's records management system in order to examine the impact of recently arrived immigrants. Negative binomial regression models do not provide any support for the assumption that increased immigration is associated with an increased threat to public safety, and in fact show partial evidence to suggest a protective effect off recent immigration against property acquisition crimes and rape. The increase in exclusionary and restrictive immigration policies in the United States have been premised on the increased threat to public safety that immigrants, whether legal or illegal, pose. I discuss the impact of such practices that continue to overlook the empirical evidence.

## **1. Introduction**

### *1.1 Immigration Policy in the United States*

Both public opinion and political behavior today is hostile towards immigrants. Myths, stereotypes, and media misperceptions commonly show concern about the impact of the new arrivals on public safety, crime, violence, and drugs in our cities. Politicians themselves have been guilty of flatly misrepresenting evidence on the extent of crime committed by immigrants (Casey 2006). In response to Juan Quintero's murder of a police officer in Texas, Representative Ted Poe made the highly exaggerated claim, that

“We know that 25 homicides a day are committed by people who are illegally in the country, and this is one more.”

Although the claim is outrageous and defies official FBI figures, the claim can go seamlessly unquestioned, and become part of conventional wisdom (Casey 2006). This has served in part as a basis for a surge in exclusionary immigration policies from which

we have seen an increase in detention of non citizens and limitations of their civil rights (Hagan and Phillips 2008).

Immigration policy faces a delicate back and forth in the United States. Although the country was formed on the very principle of immigration, we have witnessed a severe departure from inclusionary policies upholding the rights of immigrants, towards policy focused on preventing the entry of immigrants and the quick removal of those who have found there way to America.

The 1990s bore witness to a militarization of the US-Mexican border, with an estimated \$2 billion channelled into personnel and technology for the purpose of securing the southwest border (Andreas 2000; Nevins 2002). As Andreas reports, by the end of the decade, the number of U.S. border patrol agents along the southwest border reached well over 7, 000. The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 and the Anti-Terrorism and Effective Death Penalty Act of 1996 both served to funnel more money into border enforcement, and made it easier for the arrest, detention and “expedited removal” or deportation of non citizens (Hagan and Phillips 2008).

A post 9/11 climate of fear of the foreign born population in America added further fuel to the anti-immigrant policy fire. The U.S.A. Patriot Act of 2001, enacted within one months of the terrorist atrocities of 2001, further increased federal authority in the detention and removal of immigrants perceived as a threat to national security. Naturally the number of deportations has increased substantially, averaging 180, 000 a year over the last 10 years, the majority of which have been poor Latin American immigrants removed for non criminal reasons (Hagan and Phillips 2008).

In addition, the explosion of exclusionary and enforcement policies have had a negative human impact. For example Phillips, Hagan, and Rodriguez (2006) have provided evidence to suggest immigrants are often subject to excessive force and racially hostile language during arrest, as well as mistreatment and neglect among detainees. There has also been the unintended consequence of tearing apart families. Hagan and colleagues (2008) found that more than half of their sample of Salvadoran deportees had to leave behind either spouses or children, irrespective of whether they were born in the United States or not.

These policies however have largely failed in their goal to reduce immigration into the United States, rather often deflecting immigrants into more remote rural areas to cross the border, or increasing the likelihood that those who do arrive stay a lot longer given the increased cost and risk of re-entry (Hagan and Phillips 2008). Yet aggressive exclusionary immigration policies are still advocated for by politicians, faces of the media, and groups such as the Center for Immigration Studies. This may largely be due to commonly held belief that illegal immigrants and immigrants from new cultures are criminal and they undermine public safety in the United States. Immigration has long been thought to influence crime due to the disorganization it brings to local communities and institutions (Shaw and McKay 1942; 1969). However the public anti-immigrant sentiment is stronger than it ever has been. A surge in support for border enforcement has flourished in a post 9/11 climate. Hagan and Phillips (2008, 84) contend this has less to do with deterring illegal crossings than with “symbolically reasserting national and territorial sovereignty”.

Despite often intense anti-immigrant public-opinion, recent immigrant groups in the United States tend to exhibit lower rates of crime and incarceration than native born Americans (Butcher and Piehl 1998; Hagan and Palloni 1999; Rumbaut and Ewing 2006; Rumbaut, Gonzales, Komaie, and Morgan 2006). This includes Latinos, who typically are less violent than American native born groups (Martinez 2002; Sampson and Bean 2006). In the last two decades, as immigration primarily from Central American countries has been increasing, there has been a consistent decline in crime rates (Martinez, 2006). Indeed Sampson, Morenoff, and Raudenbush (2005) have further argued that this may be more than just a coincidence; that the increase in Latino immigration during the 1990s may in fact help to partly explain the simultaneous reductions in crime rates.

Immigration status and race per se are in general very poor predictors of one's criminal propensity, often termed the theory of 'racial invariance' (see Hannon, Knapp, and DeFina 2005; Sampson and Wilson 1995). Rather the patterns of violence amongst racial groups are more attributable to macro structural factors. A number of recent community level studies for example have consistently found community disadvantage and instability to be significant predictors of criminal outcomes independent of race.

Analyzing census tracts in Columbus, Ohio, Krivo and Peterson (1996) find that the effect of extreme deprivation on violent crime was consistently significant for predominantly black communities and also for predominantly white communities. Pointing out the limitations to these analyses, McNulty (2001) examines the relationship between disadvantage and violent crime in 400 neighborhood blocks in Atlanta. He argues that macro level analyses have important limitations, largely due to the insufficient number of black and white neighborhoods with comparable levels of

disadvantage (see also Sampson and Wilson 1995). This later study offers partial evidence to suggest stronger, positive effects of disadvantage on violent crime in white neighborhoods. Both these studies highlight that extreme disadvantage, poverty, the percentage of female-headed families, and unemployment, which tend to be more prevalent in black neighborhoods, are associated with violent crime independent of race.

A wealth of recent research also suggests the racial invariance hypothesis is just as applicable to communities with large concentrations of Latino immigrant populations, in that the size of the Latino population tends to exhibit very little effect on violence in these communities (Alaniz et al. 1998; Lee et al. 2001; Martinez et al. 2004; Morenoff, Sampson and Raudenbush 2001). Violent and property crime is more demonstrably associated with the structural conditions of extreme disadvantage, economic restructuring and the disorganization facing communities where many Latino immigrant groups tend to settle.

Despite the presence of criminogenic factors such as extreme poverty, a large number of high school drop outs, a large number of young males, and residential instability facing many of the destination cities for today's Latino immigrants (such as Los Angeles, Miami, or Houston) (Rumbaut and Ewing 2006), some research has actually shown a slight negative effect on rates of violent crime at the community level of recent immigration of Latino groups (Martinez et al. 2008). This reduction in levels of violence and criminal offending constitutes the "Latino paradox". The Latino Paradox is where criminal outcomes tend to be much better than we would theoretically expect given the prevalence of criminogenic conditions. The paradoxical results have been found in multiple studies of Latino immigrant groups (Martinez and Lee 2000, Sampson and

Raudenbush 1999). This inverse relationship has been attributed to the strong presence in Latino communities of family values and a religious conservatism that tend to provide a stabilizing factor to communities, helping them to overcome the strains of economic disadvantage (Martinez 2006; Rumbaut and Ewing 2006). The lower than expected levels of homicide amongst Latino populations have suggestively been explained by the strength of Latino immigrants and immigrant communities (Martinez 2002), and because certain Latino cultures are typically more conservative in terms of their values and behavior related to crime than American society is in general. The paradox is often specifically attributed to a strong family support structure and a greater emphasis on family values (Bush, Supple, and Lash, 2004; Sabogal, Marin, Otero-Sabogal, Marin, and Perez-Stable, 1987; Vega 1995) that may provide a buffer against the impact of negative emotion and criminal activity. Indeed as Sabogal and colleagues (1987) note, this connection may serve to lower crime by increasing the social control over family members through a sense of obligation, support, and reference, particularly youth who constitute the largest demographic amongst immigration from Latin America. We therefore expect that lower levels of acculturation typically embodied by the most recent immigrant groups, may have a significant impact for criminal outcomes amongst immigrant groups.

Studies generally find that American born children and grandchildren of first generation immigrants (second and third generations) tend to exhibit higher rates of crime and incarceration than first-generation immigrant cohorts (Bradshaw, Johnson, Cheatwood, Blanchard 1998; Hagan and Palloni 1998; Rumbaut and Ewing 2006). The explanations for this are largely cultural. Second generation immigrants born in the

United States grow up amidst American culture, which emphasizes material and economic success. The pressure to succeed is often thought to be analogous to crime, property crime in particular (Merton 1938).

It is important to note that we would expect that this relationship to be curvilinear over time. Second and third generation immigrant groups born in America may face a greater risk of criminal involvement but this would eventually wane as these communities begin to be characterized as fourth or fifth generations, and the late 20<sup>th</sup> century wave of immigrants (Largely Latino and Afro-Caribbean) become fully assimilated into society.

Austin, like many other cities in America's sunbelt states, continues to experience rapid growth from immigration. The inverse relationship between immigration and crime would too be expected in Austin. However there is relatively little research that captures Latino origin specific explanatory variables such as levels of language use, nativity status, and timing of arrival in the United States (Martinez et al. 2008), limiting our knowledge of the relationship between crime and the Latino foreign born population (Krivo and Peterson 2005).

## *1.2 What this study adds to the current literature:*

### *1.2.1 Extending the dependent variable*

Firstly, despite a wealth of literature examining the immigration-homicide or violent crime relationship (Lee et al. 2001; Martinez 1997; 2002; Martinez and Lee 1998), to date very few studies have examined the effect of immigration on property crimes too (for exceptions see Hagan and Palloni 1998; Reid et al. 2005), thus limiting our understanding of the impact on local communities. Indeed there are theoretical

reasons to expect a greater impact of immigration on property offending than on violent crime given the often greater economic hardship faced by recent immigrants.

Hagan and Palloni (1998) did find a positive relationship between the size of the immigrant population and rates of property crime across metropolitan areas pointing out that thefts may be a way for young male immigrants to get by whilst trying to find work.

Also relatively little is known about how much Latinos and Latino communities specifically are influenced by a variety of violent crimes such as rape and robbery, with existing research tending to focus on homicide (Lee et al. 2001; Martinez, 1996, 2002; Martinez and Lee 1998, 1999). Restricting studies to homicide severely limits the generalizability of such findings because murder is one of the rarest forms of violence.

### *1.2.2 Race/ethnicity and crime*

Secondly, as the United States continues to undergo change in its ethnic composition, a greater understanding of criminogenic factors affecting different racial groups other than blacks and whites is increasingly necessary to broaden our understanding of the race/crimes nexus (Peterson and Krivo 2005). The wealth of literature examining race, ethnicity, and crime has largely focused on the criminal involvement of blacks in contrast to whites (Sampson 1997). However the fastest growing racial group in America is Hispanics, estimated to comprise 25% of the population by 2050 (US Census 2008).

Structural and cultural conditions affecting Latinos may be different from the historical and contemporary conditions faced by African Americans in the United States (Martinez 2000, 2002; Portes and Rumbaut 1996; Zhou 2001). Social and economic

phenomena affecting African Americans are partly rooted in the history of slavery, and although crime rates tend to be higher amongst African Americans, it is a population with a long history and tradition in the United States and thus offers a rather crude reference category for Latinos. Cultural traditions and access to American society through the labor market is thought to differ between Latinos and African Americans for example (Martinez 2006). It is therefore important to increase our understanding of race, ethnicity, and crime to include the growing Hispanic population. As Sampson (2008, 29) highlights, “immigration is a major social force that will continue for some time” and so consideration of the community implications of recent immigration will remain a salient and worthwhile pursuit.

### *1.2.3 Extending the measurement of immigration*

Finally, an important task for future research is to tackle the so called Latino Paradox and examine what it is about immigration that makes it a possible predictor of lower rates of violence, and other crimes (Sampson and Bean 2006). Progress has been made in way of using community characteristics to capture levels of immigration beyond simple measures such as the percentage foreign born in a community, such as examining the percentage of residents born specifically in Latin America, or the percentage of the community who arrived within a given time period. Yet relatively little research has incorporated additional factors that may begin to capture elements of culture, which remains “an open empirical question and under examined issue” (Martinez, Stowell, and Cancino 2008, 14).

The pursuit of citizenship is closely associated with the immigration process. Others have argued that due to the residency, language, and cultural knowledge requirements of the naturalization process, citizenship may embody a person's level of exposure to US culture above and beyond time of arrival in the United States or country of origin (Gonzales, Aravena, and Hummer 2005). Capturing this additional factor of the level of social/cultural integration of recent immigrants is an important step forward in research on immigration. In addition to using traditional measures of immigration to understand its influence on violence and property crimes therefore, I will include a measure of immigration more specifically capturing recent and Latino immigrants.

#### *1.2.4 Community context*

Community level processes within city boundaries can greatly affect the incidence of crime across racial and ethnic groups (Kubrin 2003; Lee et al. 2001; Nielsen, Lee, and Martinez 2005; Peterson and Krivo 2005; Rose and McClain 1998) necessitating analyses of community crime across a variety of cities. Using census tracts, commonly employed as a proxy for neighborhoods (Alaniz et al. 1998; McNulty 2001), I examine the immigration-crime relationship in Austin, Texas, a city exhibiting a relatively high rate of total crime. The rate of violent crime in Austin is comparable to the rates seen in El Paso, Houston and San Antonio, and the rate of property crime in Austin is higher than El Paso (Federal Bureau of Investigation 2007). Austin is also ethnically diverse and lies at the heart of Texas, a Sunbelt State experiencing a fast rate of immigration. The growth of the Latino population in America is a trend set to continue. Between 2005 and 2007, the Hispanic population of Austin has risen from 30 % to 35.9% (US Bureau of the Census

2007). To my knowledge analyses of Austin crime patterns have yet to be conducted and given the importance of unique city-specific factors in understanding differential rates of crime (see Lee, Martinez, and Rodriguez 2000), it is important to study different cities in developing a wider picture of the relationship.

## **2. Literature Review**

The link between immigration and crime is undeniably a topic of heated discussion and debate. Studies looking at the effect of immigration and violent crime, particularly homicide, have merely begun to shed light on an understanding of the relationship. Current theories tend to focus on either the impact of social processes immigrants must go through (Padilla 1980), such as acculturation, or more commonly on structural explanations (Shaw and McKay 1942; Wilson 1987; 1996). Taking the latter first, there are ample theoretical reasons to expect higher criminal propensity among certain immigrant populations. These perspectives can simply be collapsed into broad categories of social disorganization, economic disadvantage, and sub-cultural adaption.

### *2.1 Social disorganization*

One may expect immigration to increase rates of crime largely through the mechanism of social disorganization and economic disadvantage that is synonymous with the immigration process. After studying male delinquency in Chicago and other areas, Shaw and McKay (1942; 1969) found that delinquency was highest in inner city zones, independent of the ethnic groups that were subject to the structural conditions in these areas. These disorganized and unstable communities were characterized by economic

deprivation, high population turnover, and family instability, serving to weaken social control and increasing the likelihood of adolescence engaging in delinquency.

More recent applications of the theory have also focused on the ability of disorganization measures to explain the variation in offending across different racial groups (Bursik 1988; Kubrin and Weitzer 2003; Mears 2001; Sampson 1997; Sampson and Raudenbush 1999). For example Sampson (1997) and with colleague Raudenbush (1999) found that the structural characteristics of Chicago neighborhoods, particularly concentrated disadvantage, a lower sense of 'collective efficacy' and a lack of social control through community supervision tend to be associated with public disorder. Also consistent with social disorganization theory, modern research suggests that factors such as residential instability and economic disadvantage may account for a large percentage of variations in ethnic violence, rather than inherent characteristics of the ethnic groups (Krivo and Peterson 1996; Morenoff, Sampson, and Raudenbush 2001). Together these ideas suggest that disorganizing cultural and social processes, perpetuated by immigration, may facilitate higher rates of crime.

## *2.2 Economic disadvantage*

Related to social disorganization theory, there may in fact be a more direct effect of economic deprivation on criminal outcomes, whether through the loss of labor market opportunities and manufacturing jobs from inner cities (Crutchfield 1989; Wilson 1996), the resulting increase in poverty (Wilson 1987), or residential segregation as the result of discrimination (Massey and Denton 1993; Peterson and Krivo 1993). Residential segregation is criminogenic as it signifies that areas inhabited by minority residents are

inferior in many ways to areas occupied largely by white Americans (Shihadeh and Flynn 1996) and this simply serves to exacerbate economic inequality and crime by implication (Hagan 1994). Peterson and Krivo (1993) for example found that segregation and the resulting lack of social control in socially isolated communities is related to black violence, particularly for acquaintance and stranger killings.

Contemporary research focusing on the underclass has also shown extreme poverty and deprivation to have a positive effect on crime (Anderson 1990; Blau and Blau 1982; Hannon and Defronzo 1998; Messner 1983). As recent waves of Latino immigrant groups have come to the United States, they too have settled and become concentrated largely in inner urban areas of big cities such as Houston; LA; Miami; San Diego; or El Paso, communities subject to disproportionate amounts of instability, unemployment, and poverty. We may therefore expect this population group of immigrants to engage in violence out of frustration of their relative conditions as has been demonstrated for black groups in the past (Blau and Blau 1982; Shihadeh and Flynn 1996), or property crimes due to financial desperation (Hagan and Palloni 1998; Reid et al. 2005).

### *2.3 Sub cultural adaptation*

Reflecting the organization of the community, some neighborhoods may be characterized by a criminal subculture in response to the strain, frustration and lack of legitimate opportunities (Merton 1938). The different community contexts experienced by various racial/ethnic groups may also increase the likelihood of subcultural adaptations rejecting conventional values and norms, and replacing them with their own,

such as a code of the street (Anderson 1999) in the pursuit of desired respect or status for example (Cohen 1955). There may be reason to suspect that the status of ethnic groups in the U.S., particularly amongst youth, can also explain the higher prevalence of group conflict, gangs, violent subcultures, or even participation in organized property crime (Cloward and Ohlin 1960; Short 1997). Gangs for example can offer more accessible, albeit illegitimate, paths to wealth and status in otherwise frustrated conditions.

Immigration and the socio economic positioning of minorities have been a major factor in shaping youth gang culture in America and some ethnic traditions may even encourage violence (Short 1997). This may particularly be the case from some Latino groups (Horowitz 1983; Lopez 2003; Vigil 2002). Like other ethnic groups such as Philadelphia's African Americans as depicted in Anderson's (1999) ethnographic depiction of the 'Code of the Street', some Latino groups may have a unique code emphasizing honor rooted in Latin American culture analogous to gang related violence (Horowitz 1983). This culture could further be to the detriment of local community organization, stability, and safety.

Taken together, these theoretical positions suggest we could expect certain immigrant groups to be at a higher risk of criminal involvement. Indeed Latinos should provide prima facie evidence of this relationship considering the conditions of disadvantage facing Latinos are comparable to those faced by African Americans (Martinez 2002). Many predominantly immigrant Latino communities, irrespective of the precise ethnic composition, can be characterized in a similar way by poorly funded schools, low educational attainment, and high rates of drug addiction (Portes and Rumbaut 1996). This is in addition to other challenges specific to recent immigrants such

as language difficulties, stress associated with social integration, and employment barriers. The disproportionate exposure to these strains place Hispanics at high risk of violence and other crimes.

#### *2.4 Acculturation*

The growth of immigrant communities could have either a positive or a negative effect on crime depending on the levels of acculturation and assimilation foreign born groups experience (Portes and Rumbaut 2001), in addition to the macro structural variations such as labor market conditions as described above. There is nothing new about realising the importance of acculturation and how it could lead to higher crime rates. Indeed Edwin Sutherland (1924, 1934) proposed that acculturation was key to understanding varying rates of crime amongst ethnic groups, providing evidence of the greater rate of offending amongst 2<sup>nd</sup> generation immigrants as compared to first. The acculturation process today may be central in understanding this ‘Latino paradox’ that exists among Mexican Americans, namely the reduced risk of stress, drug use, and criminal involvement among recent immigrants compared with subsequent generations (Escobar, Nervi, and Gara 2000).

Acculturation involves the adoption of new cultural information and social skills by an immigrant group, which often replaces traditional cultural beliefs, practices, and interaction patterns to varying degrees (Vega, Alderete, Kolody, and Aguilar-Gaxiola, 1998; Vega and Gil, 1998). As cultural identity begins to modify, people should differ in the extent to which aspects of their previous culture remain evident in their new identity (Cuellar et al 1995). The length of exposure to a new culture would theoretically be an

important factor in this process. Some recent immigrants may acculturate and in fact naturalize a lot quicker depending on how easy it is to merge or even replace aspects of the old cultural identity with the new. However the speed of the acculturation process is also contingent upon the structural and social community conditions into which immigrants are acculturating (Cabassa 2003).

The process often specifically involves the adoption of English language proficiency, higher levels of education and valuable new job skills that improve their chances of success in their new environment (Rumbaut and Ewing, 2006). With years of continuous exposure to American culture, the decision to naturalize may then be the natural progression of immigrants wanting to fully acculturate to the level of their native born counterparts, although not every immigrant chooses to become a citizen. The naturalization process should engender good citizen behaviour through a sense of commitment to American culture and society (DeSipio 1996), however this assumption with regard to criminal behaviour has gone untested empirically. In line with existing studies and theories of acculturation and criminal outcomes, it is possible that as immigrants become naturalized and develop a way of life and values comparable to that of their native born counterparts, the risk of criminal involvement may become higher for a number of reasons (Anderson and Rodriguez 1984).

Various theories attempting to explain the link between acculturation and deviance have been proposed. Recent immigrants for example may be at lower risk than native-born and acculturated Mexican Americans due to a lower sensitivity to deprivation (Hagan and Palloni 1998). Latino-Americans born in the United States who have higher expectations generated by their presence in America may feel a greater urgency and

frustration with conditions of deprivation compared to those born and raised in Latin America (Burnham, Hough, Karno, Escobar, and Telles 1987). Portes and Zhou's (1993) theory of segmented assimilation proposes that immigrant youth who assimilate into disadvantaged neighborhoods, and who do not have the same system of family support that their parents had are more likely to learn non-conventional values prevalent in inner cities amongst American youth subculture.

There may therefore be a process of "downward assimilation" occurring (Morenoff and Astor 2006, 56) whereby the protective factors of family and social control is gradually being weakened with time spent in America. This weakening of control and simultaneous adoption of American cultural values can occur at such a fast rate, that it causes conflict with previous generations. This is what Portes and Rumbaut (1996, 241) term "dissonance" forms of acculturation (see also Rumbaut 1997). This provides a second reason why low levels of acculturation may actually be protective for Latino immigrant populations.

Research suggests that the process of acculturation also produces associated stress, referring to the societal pressures that force immigrants to alter their behavior and values, as well as the stress derived from neighbourhood disadvantage and instability facing recent (particularly first and second generation) Hispanic immigrants. In contrast a lower level of acculturation and attachment to Hispanic values may uphold ethnic pride and self esteem by implication, again reducing the risk of delinquency induced by stress (Anderson and Rodriguez 1984).

Taken together, one could predict that the more acculturated Latino immigrant groups will have a higher risk of criminal engagement, especially if they are assimilating

into disadvantaged neighborhoods. Conversely those who are less acculturated could be protected from high rates of criminal involvement, a relationship we would certainly expect in co ethnic communities upholding Latino origin values, customs and family traditions.

As such, although co-ethnic community (communities with high concentrations of Latinos) conditions may have some negative consequences, such as discouraging the development of English proficiency which could make transition into higher education and the labor force more problematic (Borjas 2000; Nee, Sanders, and Sernau 1994), we may also expect co-ethnic Latino communities to provide a buffer against downward assimilation by assisting each other in looking for viable economic, educational, or social opportunities (Portes and Rumbaut 1996), and controlling the behaviour of adolescents and upholding a respect for authority (Bush et al. 2004; Martinez 2002; Sabogal et al. 1987).

Consistent with these theoretical expectations, using a language acculturation scale based on adolescents language proficiency and preference, Morenoff and Astor (2006) found that increasing acculturation is moderately associated with higher probabilities of adolescent violence such as hitting someone, throwing objects at someone, or being involved in a gang fight. In addition, first and second generation immigrants are generally protected from the potential criminological effects of disadvantage in Chicago, however this is far more of a risk factor for third generation groups. In another study Sampson and colleagues (2005) have found that foreign born immigrants in Chicago aged 18 to 25, particularly Latinos, are 45 percent less likely to commit violent crimes than third generation immigrants. Paradoxically therefore, the

more 'Americanized' and subject to a range of economic and social conditions descendents from Latin American cultures become, the greater the likelihood of criminal activity and incarceration (Butcher and Piehl 1998 ; Rumbaut and Ewing, 2006).

Although the effects of acculturation should largely be seen as positive, studies have continued to show negative consequences of acculturation. The likelihood of incarceration has for example been shown to increase with acculturation (Hagan and Palloni 1998; Tonry 1997). In addition to the specific challenges of recent immigration, problems of social integration and stress derived from the acculturation process, combined with the lack of protective factors of family associated with low acculturation may place more acculturated Latino immigrants at a higher risk of criminal involvement.<sup>1</sup>

Despite the increased likelihood of criminal involvement amongst second and third generation immigrant groups however, all of these groups still have lower rates of involvement when compared to their American native counterparts. Hence immigration, particularly for the most recently arrived groups, tends to be a protective force against common risk factors present in the United States.

### *2.5 Empirical evidence of Latino immigrants*

Historically we have seen comparatively higher levels of violence in predominantly black communities. Theoretical association between crime and the disorganization caused by immigration, we do not tend to see the same trends for some

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<sup>1</sup> It is important to note that it remains very difficult to differentiate specific generations of immigrant groups in the United States with official data sources. The process of immigration from Mexico has been occurring for hundreds of years. What we do know however is that there is an increased rate of incarceration amongst those who have been in the country for more than 10 years, compared to those who have been here less than 5 (Sampson 2008).

Latino groups in terms of multiple social harm indicators such as homicide (Lee et al. 2001; Martinez 2002; Sampson and Raudenbush 2005), property crime (Reid et al. 2005), and drug offences (Epstein, Botvin, and Diaz 2001; Vega, Alderete et al. 1998; Vega, Gil and Wagner 1998).

As Wesley Skogan (2006) has noted, this may be partly explained by the fact that the large numbers of undocumented Hispanic immigrants, especially those from Mexico, purposely try to “stay off the radar” and have a cultural distrust of legal authority, resulting in an underreporting of crime. Nevertheless potential reporting biases have not been reflected in official data collected on homicide rates, the most valid official measure of crime and the one crime that has a body as evidence. Homicides committed by or on immigrants would still be included in official homicide figures yet these are not any higher in communities known to have higher rates of both legal or illegal immigration (Sampson 2008). Furthermore the concentration of Latino immigrants provides a much more stable outcome than large concentrations of African Americans.

Relevant for this research, focusing first on recent immigration, either no association, or a negative association, between recent immigration and homicide has consistently been demonstrated at the community level of analysis. Using ethnic-specific homicide data from 1985-1995 to examine Latino-specific homicide, Lee, Rosenfeld, and Martinez (2001) found the independent effects of social and economic conditions on rates of homicide in three border cities: El Paso; Miami; and San Diego, to have greater explanatory power for Latino homicides just like for other ethnic groups, than the change in size of immigrant populations. They found immigration to generally have no effect on homicide. Negative binomial regression models by Nielsen et al (2005) have also found

recent immigration to be negatively associated, or not associated at all with 4 different homicide types in Miami and San Diego, and Martinez et al (2004) find similar results of recent immigration drug related violence in these two cities. More recently, Martinez and colleagues (2008) used negative binomial regression models to estimate the effect of neighborhood factors including recent immigration, measured as the percentage of Latinos who arrived in the 1990s, on homicide in two border cities. They again found no evidence of a positive relationship between recent immigration and lethal violence in San Antonio and San Diego.

These studies have commonly found a non relationship between violence and immigration, however there has also been a focus of these studies on the rare violent crime of homicide. Other studies have found partial evidence to suggest immigrant Latino communities may be able to buffer other violent crimes such as robbery and aggravated assault relative to other racial/ethnic groups (Martinez 1997; Sampson et al. 2005) and across a sample of US Metropolitan areas, Reid et al. (2005) found no evidence of a positive relationship between recent immigration and the property crimes of burglary or theft. Yet relatively little is known of the extent to which Latino neighborhoods are influenced by additional violent crimes such as rape and robbery, and property crimes.

### **3. Data, Methods, and Analysis**

#### *3.1 Austin, TX*

Across the United States, geographic context can have very important implications for crime and its causes (Martinez et al. 2008). The State Capitol of Texas – Austin – is an interesting setting for gaining a greater understanding of the immigration, acculturation, and crime relationship. Austin has a relatively high rate of both index and non index crime, comparable to that of neighbouring cities such as Houston or El Paso, commonly used in research examining the Latino immigration/crime linkage (see Lee et al. 2001; Martinez et al. 2005). In addition, the city had a population of over 656,500 people including a relatively large immigrant population, although certainly not as high as neighboring Sunbelt cities of Houston or San Antonio. Nevertheless 17% of the population of Austin is foreign born, and 61% of these arrived between 1990 and March of 2000, highlighting that Austin is experiencing a rapid recent growth in immigration.

The term “Hispanic” used to encapsulate persons of Spanish speaking origin is problematic, and there are myriad cultural, social, and economic differences within this group (for example between Mexicans, Cubans, or Salvadorans), possibly as large as the differences between racial groups. The Hispanic population of Austin is made up predominantly of Mexican immigrants (77%), with the second and third largest immigrant groups from Puerto Rico and Cuba respectively (US Department of Census 2007).

American-Hispanics are not a homogenous population. Latino subgroups differ in their socio-economic position (Ramirez and de la Cruz 2003; Zhou 2001). Immigrants from Mexico typically enter the United States without a college degree. Indeed 26.7% of

Austin's Hispanic population lives below the poverty line, higher than the 26.2% of Blacks (US Census 2007). Furthermore, as recent immigration is lower in Austin than many other sunbelt cities, immigrants may be more likely to adopt the norms of the disadvantaged native born, whereas other cities with predominant Latino communities, such as Miami, may offer more effective social control (Akins, Mosher, Smith, and Gauthier 2008; Bursik and Grasmick 1993).

I expect violent crimes to be influenced by neighborhood disadvantage and poverty given the known association between these two variables. Recent immigrants do tend to settle in disorganized and disadvantaged communities, however unlike concentrations of African Americans, concentrations of Latino Americans tend to be a stabilizing force, either reducing or having no impact on violent crime (Martinez 2002; Sampson 2008). Yet very few studies have considered how differences in nativity, citizenship, the timing of arrival in the United States, and other measures inclusive of the acculturation process may influence the immigration/crime relationship (Martinez et al. 2008).

In Austin almost 70% of the foreign born population was born in Latin America, and over 75% of the foreign born population have not become naturalized American citizens (US Census 2000). It is possible that in neighborhoods where there is a higher percentage of first generation immigrants, concentrations of Latin Americans, and higher percentages of those who are non citizens of the US, the corresponding level of acculturation may buffer the impact of both violent and property crime.

### 3.2 Data

The units of analysis for this study 181 of a total of 182 census tracts encompassing the city of Austin, commonly used as a proxy for neighborhoods (see Krivo and Peterson 1996; McNulty 2001; Sampson et al. 2005). Each tract had a minimum of 500 residents with an average tract population of 4,574. Consistent with a number of similar studies (Lee et al. 2001; Martinez 1997), the minimum population requirement is necessary to stabilize crime incident counts, avoiding areas with very few residents where the significance of criminal activity, or lack of activity, may be statistically inflated. The one tract subsequently eliminated due to small populations was tract BNA 16.06 located in the heart of Austin, with a population of only 450.<sup>23</sup>

### 3.3 Variables

#### 3.3.1 Violent and property crime

Counts of violent crimes (murder, rape, robbery, and assault) and property crimes (theft, burglary, motor vehicle theft) were obtained from the Austin police Department Records Management system. The data represent part I index crimes reported to the Austin police department for the years 2004-2006. The data provide counts of each incident by census tract in which it occurred, including those “unfounded”. These were then converted into rates per tract scaled by 10, 000, which is generally considered more appropriate for community level analysis (Peterson and Krivo 1996)). To stabilize the count figures, average rates for each crime were calculated for the three year period

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<sup>2</sup> I also considered the possible impact of tracts 5.0, 6.3, and 6.4, tracts encompassing the University of Texas Campus and off campus housing. However running the analyses without these tracts did not noticeably change the results.

<sup>3</sup> The analysis was run both with and without tract 16.06. The results were not significantly affected.

2004-2006, in an attempt to help reduce the impact of annual fluctuations (Crutchfield 1989).

### 3.3.2 *Recent immigration*

This research moves beyond traditional measures of immigration such as the percentage of the population who are foreign born. In expanding our knowledge of the crime – immigration association, I specifically consider the effect of recent immigration on rates of crime. *Recent immigration* consists of: immigrants who have recently arrived within the last 10 years; immigrants who are not citizens of the United States; and immigrants who born in Latin America.

Previous research investigating the effect of immigration on rates of homicide (Lee et al. 2001; Martinez et al. 2008) and other violent crime (Martinez 1997; 2004) have favored a simple measure of immigration as the percent of a census tract population that is foreign born and that arrived within a given time period. To capture the effects of changes in immigration, I include a measure of the percentage change in immigration between 1990 and 2000 (percentage of the tract population that arrived in the US between 1990 and 2000). These values were obtained from the 2000 US Census<sup>4</sup>.

Despite limited progress made on this measure (e.g. capturing recent ethnic-specific immigration), there is a dearth in the literature when it comes to additional Latino origin predictors worth investigating (Martinez et al. 2008). For example few studies have yet to consider how differences in nativity, the timing of arrival in the

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<sup>4</sup> Crime data from 2004-2006 was matched to the closest available decennial census which was in 2000. The figures of population and housing should not significantly change over the 5 year time lapse and matching to the most recent decennial census is an accepted method (see Martinez 1997).

United States, and other measures inclusive of the acculturation process may influence the immigration/crime relationship.

The naturalization process is also closely associated with recent immigration, capturing not only potentially the time of arrival, but also additional factors differentially affecting recent immigrants, namely how well integrated these groups have become (Gonzales, Aravena, and Hummer 2005) and the level of social contact with their destination community (Yang 1994). Naturalization requires continuous residence in the United States, and thus continuous exposure to American cultural forces, as well as a level of English proficiency and cultural knowledge required of the naturalization test (INS 2008). Indeed as Gonzalez and colleagues note (2005, 583), citizenship helps capture “a person’s increased level of exposure to U.S. cultural norms...over and beyond duration in the country”. Immigrants who are not U.S citizens are considered less acculturated and thus more tied to their original culture than citizens. I therefore also include a measure of the percentage of foreign born individuals who are not naturalized in order to further capture less acculturated and first generation immigrants.

I also consider the percentage of the foreign born population that was born in Latin America. We would expect that the higher the percentage of the Hispanic population born in Latin America in one community, the less likely the exposure to American cultural norms, there may be a potential buffer against criminal adaptations to conditions of community disadvantage. Indeed community level research has found concentrations of Latino immigrants to provide a stabilizing effect on neighborhoods,

diametrically opposing the effects we tend to see of concentrated African Americans in America's cities (Sampson 2008). The percentage of the foreign born population born in Latin America was obtained directly from the 2000 US census population and housing.

As expected, these three measures of recent immigration are highly correlated. Entering all of three of these variables into a multiple regression model may produce unstable parameter estimates and wide standard errors. To address this issue of multicollinearity, the three variables were entered into a factor. Using principal components factor analysis, only one factor was extracted. The factor loadings were greater than + .67 for each of the three variables and the Eigenvalue was 1.85. In order to test the internal reliability of the factor I conducted a theta reliability test which is interpreted similarly to other reliability coefficients (Carmines and Zeller 1980; Zumbo, Gadermann, and Zeisser 2007). The theta reliability coefficient was .69, indicating an acceptable degree of reliability. Popular stereotypes would have us expect that communities scoring high in terms of recent immigration will also have higher rates of violent and property crime due to the instability and disorganization potentially brought to the destination city (Sampson 2008).

### *3.3.3 Neighborhood disadvantage*

Concentrated disadvantage is thought to weaken social control of communities, resulting in increased risks of crime by implication (Sampson and Bean 2006). Both violent and property crime are more common in neighborhoods exhibiting higher rates of poverty, income inequality, unemployment, a high percentage of young males, and communities exhibiting a large non white population. And as Martinez and colleagues

have found (2002), the association between deprivation and homicide for example are similar for Latinos as for Blacks. Research has consistently found measures of economic disadvantage to be strong indicators of community violence across racial and ethnic populations (Wadsworth and Kubrin 2004).

Consistent with extant ecological research on the effects of neighborhood disadvantage and extreme poverty (Anderson 1999; Crutchfield 1989; Massey and Denton 1993; McNulty 2001; Nielsen et al. 2005; Sampson et al. 2005; Sampson et al. 2008; Wilson 1987, 1996) I include various measures of disadvantage shown to be linked with criminal outcomes: the percentage of families living below the poverty line; the percentage of families receiving welfare; the percentage of males unemployed; the percentage of female headed households; the percentage of African Americans; the percentage employed in managerial/professional occupations; and the percentage with a bachelor's degree or higher.

*The percentage of families living below the poverty line*

The percent of families living below the poverty line was obtained directly from the 2000 census of population and housing.

*The percentage of families receiving welfare*

I include a measure of welfare given its potential significance beyond a simple measure of poverty. Poverty and resource deprivation has been shown to have a significantly lower effect on crime rates in areas where residents receive a higher level of

public assistance (Hannon and Defronzo 1998). The percentage of families receiving welfare was measured as ‘the number of households receiving some form of public assistance’, as defined in the 2000 census of population and housing, divided by the total number of households for each tract.

*The percentage of males unemployed*

The percentage of males unemployed in each census tract was obtained directly from the 2000 census of population and housing.

*The percentage of female headed households*

The prevalence of family disruption in disadvantaged neighborhoods has commonly been invoked as explanation of high rates of violence, increasing rates of juvenile, and to a lesser extent adult, robbery and homicide in communities (Sampson 1987). Given the theoretical importance of family to crime as a social control mechanism, and that female headed households may be softer targets for property offenders, I also include a measure of the percentage of female headed households. Family and the sanctity of marriage are important foundations underpinning Hispanic culture (Sabogal et al. 1987). We would expect recent immigrants, who likely retain a closer connection to their cultural heritage, are more committed to the ideals of ‘familism’. This family bond may provide a protective buffer against criminal outcomes as children with strong “familism” tend to have a greater adherence to authority (Bush et al. 2004), possibly deterring an unknown amount of street crime, again through the social control

mechanism. The total number of households headed by a female was divided by the total number of households yielding the percentage of female headed households.

#### *The percentage black*

The percentage of the population that is black has traditionally been found to be an important predictor of aggregate crime rates, especially with regards to serious violent offending (Blau and Blau 1982). Although the link between race and violent crime is not definitive and likely mediated by the interplay of race and social class, African Americans generally do commit more serious and visible violent offenses and 32% of African American males are likely to face prison sentences at some point in their lives compared to only 17% of Hispanic males, and less than 6% of white males (US Bureau of Justice 2007). This figure was obtained from the 'profile of general demographic characteristics' from the Bureau of the Census 2000.

#### *The Percentage with a bachelor's degree or higher*

I include a measure of education level. I include the percentage of persons aged 25 years or older who have achieved a minimum of a bachelor's degree. These data were obtained from 2000 census of population and housing.

#### *The percentage employed in managerial and professional occupations*

The total number of persons 16 or older employed in "administrative and managerial" occupations was added to the total number of persons over the age of 16 in "professional" occupations. Both of these figures were obtained from the 2000 US census

of population and housing. The resulting sum was then divided by the total number of people over 16 employed in the civilian labor force to yield the variable.

In order to address the excessively high collinearity between these 7 variables (see Table 1), principal components factor analysis was used to generate a neighborhood disadvantage factor. All of these components loaded on to a single factor with all 7 variables loading at over +/- .53, and with an Eigenvalue of 4.377. This factor is normally distributed. In order to test the internal consistency of the factor, a theta reliability test was performed, generating a theta reliability coefficient of (.900), suggesting a high reliability of the presence of a single underlying factor.

#### *3.3.4 Neighborhood stability*

Consistent with several neighborhood level studies of crime (Martinez 2008; Nielsen et al. 2005), a neighborhood stability index was created using two measure of stability: the percentage of owner occupied houses; and population turnover. The index was created by summing z scores of the two variables, rendering the index. This method was preferred to principal components factor analysis given the presence of only two variables. This is a commonly used and appropriate method to index stability measures (Martinez et al. 2008).

#### *Population Turnover*

To obtain the percentage of the population who resided in the same house in 1995, the number of persons 5 years of age or older who lived in the same house in 1995

was obtained from the 2000 census of population and housing and divided by the total number of persons 5 years and older in 1995.

#### *The percentage of owner occupied houses*

From the same table data was obtained to calculate the percentage of households that are occupied by the home owner. For each tract, the total number of owner occupied housing units was divided by the total number of housing units.

#### *3.3.5 Additional control variables*

In addition I also include a variable commonly employed in ecological research thought to be associated with both violent and property crime. This is the percentage of young males (Martinez 1997; McNulty 2001; Sampson et al. 2005). The age crime association is well known. Property crime tends to peak in the late teens and violent crime a little later, and then both begin to decline with social maturity (Hirschi 1969). Land et al. (1990) note that the specific age range is not necessarily of great significance in a study, however consistent with the theoretical association between young recently arrived Latinos and acculturation, I utilize the percentage of young males between the ages of 15 and 19, calculated by summing the number of males in each census tract between these age groups and dividing the total by the total population of each tract.<sup>5</sup>

Although not reported here, models were also run including a control for the sex ratio in each neighborhood measured as the number of males per 100 females under the age of 18. This was to control for the higher probability of crime, particularly violent

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<sup>5</sup> The analyses were also run using 21 as the upper age limit given that criminal behavior often remains high into the twenties. There was no difference in the findings or significance of the results.

crime, committed by males than by females. We may expect communities with higher ratios of females to have lower overall rates of crime. Immigration may also be male skewed. Including the variable however did not change any of the results reported and was not a significant predictor of index crimes.

### 3.4 Analysis

Count data are highly skewed across census tracts (or any ecological unit) and the dependent variables are over-dispersed. Given therefore that the offense counts are not highly aggregated across crime type or census tract, more common statistical estimation models such as Ordinary Least Squares Regression would be unsophisticated and inappropriate (Osgood 2000). Instead Poisson or negative binomial models are more applicable in this case. After performing a likelihood ratio test, the goodness of fit statistics confirm the negative binomial distribution fits the data well. For example fitting a Poisson distribution to the model of burglary rates and poverty as the explanatory variable, the deviance is 7042 with 179 degrees of freedom, giving value/df far greater than one, suggesting Poisson may not be adequate to describe the counts of burglary. When we fit the negative binomial model in contrast, which naturally accounts for overdispersion, almost no overdispersion is seen ( $\phi = 1.1766$ ) and is assumed to be the appropriate model therefore, rather than other count models such as Poisson or Zero-inflated models (Cameron and Trivedi 1998).

Post factor analyses, the correlation between the *Neighborhood Disadvantage* and *Recent Immigration* factors is .699. It is difficult to determine whether particular levels of multicollinearity will become a problem in particular regression models, given the low

likelihood that any regression model's independent variables would be completely uncorrelated (Schroeder et al. 1990). Although it is difficult to know how high is too high, correlations exceeding .70 are generally thought to be problematic. Although the correlation between recent immigration and neighborhood disadvantage is higher than desirable, the two represent very theoretically different variables which I expect to exhibit contrasting effects on criminal outcomes. In addition to this correlation, there are no further problems of multicollinearity between the independent variables (see Table 2).

One common way of detecting multicollinearity is by assessing the Variance Inflation Factor (VIF). High variance may indicate a model that carries redundant predictors. A general rule is that the VIF should not exceed 10 otherwise the model may likely be mis-specified and excessively collinear (Belsley, Kuh, and Welsch 1980). After running a VIF on the model, a score of 8.71 was produced, suggesting the model does not contain redundant variables and does not suffer from excessive multicollinearity.

**Table 1: Correlation Coefficients Between Independent Control Variables**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
<b>1. Yng Males (15 to 19)</b>	1.00												
<b>2. Foreign Born entered in 90s</b>	.031	1.00											
<b>3. Foreign Born non naturalized</b>	.053	.388	1.00										
<b>4. Foreign born in Latin America</b>	.114	.290	.574	1.00									
<b>5. % Families Below Poverty Line</b>	.404	.397	.608	.560	1.00								
<b>6. % families Receiving Welfare</b>	.136	.243	.416	.640	.604	1.00							
<b>7. % Female Headed Households</b>	.146	.168	.386	.692	.551	.785	1.00						
<b>8. % Males Unemployed</b>	.592	.196	.273	.259	.612	.343	.279	1.00					
<b>9. % Black</b>	.114	.199	.385	.473	.453	.619	.778	.260	1.00				
<b>10. Bachelor's Degree</b>	-.076	.240	-.322	-.704	-.434	-.500	-.696	-.235	-.515	1.00			
<b>11. Professional/ Managerial Jobs</b>	-.310	-.274	-.520	-.846	-.660	-.631	-.789	-.458	-.564	.791	1.00		
<b>12. % In same House</b>	-.143	-.268	.020	.229	.037	.284	.344	-.116	.263	-.291	-.155	1.00	
<b>13. % Owner Occupied House</b>	-.105	-.305	-.583	-.174	-.518	-.137	.007	-.321	-.068	.046	.269	.234	1.00
<b>Mean</b>	7.002	51.357	66.983	51.543	8.977	1.793	11.198	3.990	9.771	40.422	42.956	43.4790	51.753
<b>Standard Deviation</b>	5.223	18.649	16.738	32.149	8.607	2.078	7.027	3.344	12.920	22.543	17.491	12.80363	27.119

**Table 2: Correlation Coefficients Between Variables Post Factor Analysis**

	<b>Stability Index</b>	<b>Disadvantage</b>	<b>YngMales</b>	<b>Recent Immigration</b>
<b>Stability Index</b>	1.00			
<b>Disadvantage</b>	0.003	1.00		
<b>YngMales</b>	-0.158	0.297	1.00	
<b>Recent Immigration</b>	-0.283	0.699	0.084	1.00
<b>Mean</b>	0.00	0.00	7.003	43.670
<b>Standard Deviation</b>	1.571	1.00	5.223	16.480

**Table 3: Descriptive Statistics of Crime Rates**

	Homicide	Rape	Robbery	Assault	Burglary	Theft	Motor Theft
Mean	.321	4.476	13.300	22.296	97.227	457.570	38.349
St. Deviation	.599	6.595	19.888	31.985	67.261	590.778	52.691
Variance	.359	43.491	395.542	1023.023	4524.020	349018.575	2776.331
Min	.00	.00	.00	.00	.00	.00	.00
Max	3.37	69.03	186.93	336.50	399.61	6192.11	599.65

#### 4. Results

**Table 4: Coefficients for the negative binomial regression of Violent Crime rates**

	<b>Estimates</b>			
	<b>Murder</b>	<b>Rape</b>	<b>Robbery</b>	<b>Aggravated Assault</b>
<b>Stability</b>	-0.157 (0.100)	-0.182** (0.056)	-0.348*** (0.058)	-0.293*** (0.049)
<b>Disadvantage</b>	0.466** (0.174)	0.628*** (0.125)	0.935*** (0.116)	1.071*** (0.100)
<b>% Young Males</b>	-0.053 (0.053)	-0.046** (0.017)	-0.049** (0.013)	-0.053*** (0.078)
<b>Recent Immigration</b>	0.136 (0.206)	-0.294** (0.107)	-0.059 (0.088)	-0.149 (0.078)
<b>Intercept</b>	-1.004**	1.719***	2.545***	3.094***

**Table 5: Coefficients for the negative binomial regression of Property Crime rates**

	<b>Estimates</b>		
	<b>Burglary</b>	<b>Theft</b>	<b>Motor Vehicle Theft</b>
<b>Stability</b>	-0.096* (0.045)	-0.218*** (0.049)	-0.300*** (0.050)
<b>Disadvantage</b>	0.361** (0.100)	0.273** (0.105)	0.654*** (0.111)
<b>% Young Males</b>	-0.038** (0.012)	-0.036** (0.012)	-0.052*** (0.012)
<b>Recent Immigration</b>	0.038 (0.091)	-0.194* (0.091)	-0.183* (0.090)
<b>Intercept</b>	4.765***	6.317***	3.825***

Tables 4 and 5 present the results of the negative binomial regression analyses. Table 4 presents the regression coefficients for the four violent crimes: murder; rape; aggravated assault; and robbery. For each crime, coefficients for all control variables and recent immigration are presented along with the intercept of the model. Table 5 presents the same information as table 4 for the three property crimes of burglary, theft, and motor vehicle theft. As a test for robustness of the results, the model was also run using ordinary least squares regression. The results were unchanged in terms of significance of the parameter estimates.

#### *4.1 Violent crime*

The mean homicide rate in Austin was less than 1 murder per 10, 000 of the population. The mean rate of Rape, Robbery and Aggravated Assault were 5, 13, and 22 per 10, 000 respectively (see Table 3). Austin provides a good location to study the effects of immigration given the concentration of foreign born populations in certain areas. For example some neighborhoods such as tract BNA 23.04 have 0% foreign immigrants who have arrived within the last 10 years, whereas others such as tract 16.02 located just outside the city center north of the Colorado River has almost 90%.

Recent immigration, used to capture predominantly first generation immigrant groups in Austin, is not a strong predictor of lethal violence. This may be partly explainable by the low count of homicide in Austin. The only significant predictor of Homicide in the model is disadvantage. This is consistent with several studies' findings that economic inequality is associated with homicide (Pratt and Godsey 2003), and men at the lower end of the socioeconomic ladder are more likely to engage in lethal violence (Messerschmidt 1993).

Consistent with neighborhood level studies, disadvantage is also a significant predictor of community robbery rates. The frustration caused by extreme poverty and disadvantage would be conducive to robbery according to classic strain theory (Merton 1938). All three of the control variables in the model are significant predictors of robbery. A greater level of neighborhood stability is significantly related to a reduced rate of robbery, as is the percentage of young males which is the opposite of what would expect given the association between age and crime. It may be the case that younger recent immigrants are more likely to be involved in more menial jobs as part of working to support the family, resulting in less involvement in crime. The relationship between young males and rates of all violent crimes takes on the positive parameter sign as we would expect when the upper age limit on the variable was changed to 24 or higher. In this case, the significance of our other estimates were not affected as a result. Recent immigration is not significantly associated with a change in rates of robbery.

The same three control variables are also significant predictors of assault. Like murder and robbery however, recent immigration is not associated with either a significant increase or a decrease in assault. This finding is important as it is contrary to public concern and also criminological theory that would suggest immigration creates higher rates of violence because of the disorganization brought to neighborhoods and the unconventional cultural values held by some recent immigrant groups.

Further contrary to such concerns, when we consider the other violent crime of rape, recent immigration is actually associated with a significant reduction in rates of incidence. The negative influence of recent immigration on rape may theoretically be explainable by the cultural emphasis placed on family and the sanctity of marriage

within Hispanic cultures. This is consistent with data on rape and ethnicity. Research has shown increased acculturation to be predictive of criminal involvement partly as a result of a weakening commitment to the family, which tends to provide a protective effect for recent Hispanic immigrants (Vega et al. 2002). Research has also shown sexual assault to be more common among non-Hispanic whites than Hispanics. A study of over 3,000 LA residents revealed that the lifetime prevalence of sexual assault is 2.5 times higher for white non-Hispanics (Sorenson and Siegel 1998). As Sorenson and Siegel suggest, the difference in sexual assault levels for Mexican Americans born in America versus those born in Mexico suggest higher rates of sexual violence in the United States.

It is important to note however that Rape is also one of the most underreported of crimes (Russell 1982; Sorensen and Siegel 1998), and this may be especially true regarding intra-marital sexual assault involving *Latinas*. Lira, Koss, and Russo (1999) found 'keeping quiet' to be a consistent theme in focus group discussions exploring rape among Mexican immigrant women in Arizona, suggesting underreporting amongst Latino immigrant women may be a significant problem. Harris, Firestone, and Vega (2005) similarly find that Mexican born *Latinas* with more traditional orientations and less economic power are less likely to report abuse. As a result it may be unlikely that familism affords them greater protection from abuse. However although US culture may help *Latinas* in the recognition and response to rape, the disconnect from valued family and community roles needs to be considered (Low and Organista 2000).

Across violent crimes, disadvantage was the only consistently significant predictor, with higher scores of disadvantage associated with a lower rate of violent crime. As extant research on the underclass, inequality, and extreme poverty would

suggest, neighborhood disadvantage is strongly associated with higher rates of violent crime. There is no supporting evidence of the feared immigration-violent crime linkage, even when controlling for the factors of disadvantage, neighborhood stability and other important demographic considerations known to be associated with higher rates of violent crime. This is consistent with existing findings on the effect of recent immigration on homicide for example (Lee et al. 2001; Martinez 2002). These findings can further be extended to include the violent crimes of rape and assault, moving beyond a focus on relatively rare forms of violence.

#### *4.2 Property crime*

Given the high rates of disadvantage often faced by some Hispanic immigrant groups, there may be theoretical reason to expect a higher rate of property offending than violent crime among recent immigrants (Hagan and Palloni 1998). The mean rate of burglary in Austin, TX in 2005 was 97 per 10, 000 of the population. The mean rates for theft and motor vehicle theft were 458 and 38 per 10, 000 respectively (see table 3).

Burglary is significantly associated with disadvantage as we would expect given the property and material acquisition associated with burglary. Stability is also associated with a significant reduction in the likelihood of burglary. When controlling for disadvantage however, we do not see a significant positive effect of recent immigration on rates burglary. Recent immigrants are unlikely to feel the same sense of cultural pressure for economic success and material wealth which underlies much property crime (Hagan and Palloni 1998; Sampson and Bean 2006) and this may help to explain the non finding between immigration and burglary.

Further contrary to expectations of higher rates of property offending, recent immigration is associated with significantly lower rates of both theft and motor vehicle theft. Economic arguments are commonly used to underlie assumptions about the greater incidence of property offending and income producing crimes amongst predominantly low income Hispanic communities. Disadvantage is associated with a significant increase in theft, whilst neighborhood stability and the % of young males are associated with significant declines. The presence of recent immigrants however is also associated with a significant reduction.

A significant negative association of recent immigration with motor vehicle theft is also seen, along with the three control variables all remaining significant predictors.

Across these three property crimes, disadvantage, neighborhood stability, and the percentage of young males are consistent predictors of rates of crime. Interestingly, recent immigration is associated with a significant reduction in rates of both theft and motor vehicle theft. This relationship does not hold for burglary however.

Taken together, these results across 7 index crimes provide more counter evidence to the notion that immigration and crime are positively associated. When controlling for community conditions of instability and disadvantage, as well as the relative size of crime prone groups such as young populations, the results consistently demonstrate no clear effect of immigration on community crime. In fact, there is partial evidence to suggest immigration may actually provide a protective factor. These findings are consistent with recent research into the crime and immigration relationship across US cities that have experienced immigrant growth (Alaniz et al. 1998; Lee et al. 2001; Reid et al. 2005; Sampson and Bean 2006).

## **5. Discussion**

This research has attempted to provide further evidence in the immigration-crime debate by examining the relationship in a previously unstudied location. I utilized multiple measures of immigration to capture differences in levels of exposure to American culture differentially affecting first generation and recent immigrant groups, more inclusive of the acculturation process. I also extended the research to see how immigration affects a wider range of violent crimes and investigated the potential for differing effects on property crimes.

The findings regarding the relationship between recent immigration and criminal involvement are consistent with existing research (Alaniz et al. 1998, Lee et al. 2001; Martinez 2004; Reid et al. 2005). That is to say there is a clear non-, or negative association between levels of recent immigration into Austin, and rates of index offenses. Theories of the immigration-crime relationship drawn from social disorganization, economic disadvantage, and cultural mechanisms would all suggest legitimate reason why increased levels of immigration could lead to higher rates of crime. However the findings reveal that this is not empirically founded at the neighbourhood level. There is in fact partial evidence to suggest a slight a negative association between the two with regards to the violent crime of rape.

With regards to homicide, assault, and robbery, the results exhibit further evidence of the lower than expected levels of violence despite deprivation. The fear of apprehension and deportation from a country that offers greater freedoms and a comparatively high standard of living may offer a strong deterrent from engaging in violent crime. This however does assume rational decision making amongst recent immigrants when it comes to crime.

There may be a more plausible informal deterrence explanation for the presence of this Latino Paradox in Austin. More than 40% of the Hispanic population live in a neighbourhood with a predominance of likewise other Hispanic residents, increasing the likelihood of a close knit community with low levels of conflicting values and interests. In explaining the lower rate of violence among Mexican Americans in Chicago, Sampson et al. (2005) point to a combination of having married parents and living in communities with high concentrations of immigrants. Living in areas of concentrated immigration is associated with a reduced risk of violence for Latinos (Nielsen et al. 2005). Far from disorganizing communities (Shaw and McKay 1942; 1969), the concentration of less acculturated recent immigrants appears to be a protective factor against violence.

The strongest effect of immigration on violence may be with regards to a violent crime rarely studied with regards to immigration: rape. One could posit the significant negative effect of recent immigration on rape rates is due to the effectiveness of informal social control mechanisms which typically remain strong among less acculturated Mexican Americans, such as family values, the sanctity of marriage, and respect for authority. A collective sense of obligation and commitment to the family may be “one of the most important cultural specific values” regarding Latinos (Sabogal, Marin, Otero-Sabogal, marin, and Perez-Stable, 1987, 397). Indeed consistent with social control theories of crime, Padilla (1980) has observed the difficulties facing recent immigrants especially when traditional family life breaks down, increasing the likelihood of second generation immigrants (their children) being increasingly exposed to and swayed by American cultural forces.

These findings of the Latino paradox are also mirrored with regards to property offenses, with recent immigration providing a protective buffer against property acquisition crimes of theft and motor vehicle theft.

There may be two explanations why we see lower rates of property offending amongst predominantly immigrant communities. Firstly we would simply expect lower levels of individual offending by recent immigrants due to a lower sense of deprivation (Hagan and Palloni 1998). Recent immigrants from Latin American countries, especially Mexico, are less likely to view their economic and social position relative to American cultural standards, and avoid strain by implication (Merton 1938). Furthermore, Hispanic immigrants are more likely to have access to the labor market in specific occupations than African Americans traditionally (Martinez 2006). Even if wages are low by American standards, this may be comparatively better than conditions facing recently arrived immigrants in their country of origin, lessening the potential need for property offending amongst recent immigrants.

The lower rates of property crime could also be a result of the economic neighbourhood revitalization theory of immigration. A growing consensus argues that immigration revitalizes and stabilizes communities (Lee et al. 2001), and has done so around the country, such as the revitalization of Queens in New York driven largely by the success of black immigrants from the Caribbean, or the rejuvenation of inner city areas in LA, Miami, and other immigrant hotspots (Sampson 2008). Revitalization lessens criminal outcomes, particularly property crimes, which would be consistent with the significant negative association with theft and motor vehicle theft in the findings. Hence some have argued that property rates may not just be lower amongst communities of Hispanic immigrants, but may also fall amongst all

population groups because of the increase in jobs actually made for native Americans in serving the needs of the expanding population (Rosenfeld and Tienda 1999). The net economic benefit of immigration to communities may thus explain why we see a reduction in rates of property offending in neighborhoods with high numbers of recent immigrants. Indeed many communities across America have been transformed into economically vibrant communities because of the influx of immigrants.

The effect of recent immigration on crime may be mediated by the acculturation process. By moving beyond simple measures of immigration and including a composite measure more inclusive of the acculturation process, recent immigrants in Austin that remain less acculturated, or acculturate at a slower rate, are significantly less likely to experience involvement with property crime and violence in their local community. However one task for future research will be to incorporate additional Latino specific predictors of crime worth investigating such as language proficiency, in an attempt to gain a greater understanding of the processes behind the Latino Paradox.

## **6. Conclusion**

### *6.1 Limitations*

There are some limitations to this study. The data are cross sectional and thus can not follow immigrants over time. It currently remains difficult to adequately study second generation immigrants using official data sources such as the demographic information provided in the Census only. Studying the US born children of immigrants would not only provide a greater insight for research but also provide greater guidance to policy makers, yet official data sources do not allow consideration of theoretically important factors such as exact time of arrival, generation, specific reasons for entering the United States, and measures of acculturation such as social

contact (Heckathorn 2006). There are further elements within the acculturation process that we may want to know. It would be important to know for example the age at which recent immigrants first entered the United States. Entering a new country in one's formative and developmental years could clearly influence their adoption of cultural values than an immigrant entering the United States for the first time in his/her 30s (Amaro et al 1990; Vega, Gil, and Zimmerman 1993).

A second difficulty in examining the relationship between immigration and crime lies in separating illegal from legal immigration. For obvious reasons, 'illegal immigrants' represent a very hard group to gather research on (Heckathorn 2006), although we would expect undocumented immigrants to settle in the same areas with large concentrations of legal immigrants (Sampson 2008). Theoretically communities experiencing high levels of illegal immigration may have higher rates of under reporting of offenses as they wish to stay under the radar or risk apprehension and deportation. However as Sampson (2008) has noted potential reporting biases have not been reflected in homicide victimization rates, the one crime that has a body as evidence. Homicides committed by illegal aliens would thus still be included in homicide rates.

Thirdly, the ecological boundary of the neighbourhood is not necessarily as fixed as this neighbourhood level research has to assume. For example neighbourhood boundaries can be arbitrarily drawn through the middle of a street, yet we would expect residents of the same street to share the same social ties. As Sampson (2004) and others have also highlighted, geographical proximity to: surrounding neighborhoods where known offenders live; neighborhoods with high rates of disadvantage and instability; and violent incidents, all lead us to expect that crime rates will be clustered in adjacent neighborhoods (positive autocorrelation). Spatial

modelling techniques are increasingly required in neighborhood level research in order to control for the potential spatial patterning of crime and violence (see Martinez et al. 2008; Sampson and Bean 2006).

Despite these limitations, the significance and the consistency of the findings make this an important addition to the literature informing policy regarding immigration, providing evidence consistent with existing literature in a city previously unstudied before. Not only has this research replicated similar findings of the potential protective effect of immigration against serious violence, but we are also able to extend this to include other violent crimes such as rape, as well as property crimes.

## *6.2 Policy implications*

Policy makers have increasingly considered immigration and issues of national security symbiotically in post 9/11 America. Politicians themselves have been guilty of flatly misrepresenting evidence on the extent of crime committed by immigrants (Casey 2006). Political rhetoric on the issue of criminal aliens and the threat they pose to American public safety can also in turn shape public perceptions on immigration and crime (Hickman and Suttorp 2008). Hagan and colleagues (2008) further argue that immigrants are criminalized through a public perception of immigrants as inherently criminal; the public and political association of crimes with immigrants, and the excessively punitive response by the state to immigrants. Given the scale of national debate on immigration and perceived threats to public safety, we are beginning to see popular concern further breed public policy (Nevins 2002).

Firstly many Border States, including Texas, have overseen implementation of stricter border security in an attempt to reduce illegal immigration into America, and

criminal consequences by implication (Nevins 2002). The militarization of the southwest border that was facilitated in the 1990s, has been given increasing funds in the last few years, and President Bush requested an additional \$13 billion for border controls and enforcement in the 2008 budget to Congress (Hagan and Phillips 2008).

We have also witnessed a surge in exclusionary immigration policies from which we have seen an increase in detention of non citizens and a strong threat to their civil rights. Indeed Phillips, Hagan, and Rodriguez (2006) have provided evidence to suggest immigrants are often subject to excessive force and racially hostile language during arrest. The conventional beliefs, and what Martinez (2008, 54) has termed “hyper-concern”, can also serve as justification for the ‘expedited removal’ and deportation of undocumented immigrants due to the perceived inherent threat to American society (Hickman and Suttorp 2008).

There are consistent empirical findings however of no clear association between immigration and violence in border communities (Martinez et al. 2008; Sampson 2008; Sampson and Bean 2006). This study has demonstrated that higher levels of recent immigration into Austin have either no effect, or a modest negative effect on rates of index offenses. This suggests the importance for laws and public policy relating to immigration to be continually based on demonstrated facts rather than on conventional wisdom and public hysteria over the immigration and crime link.

Although we are no closer to the comprehensive immigration reform that is called for by both proponents and proponents of immigration, leaving the system unchanged may be the greater danger for society, running the risk of great human tragedy through the breaking up of families or through illegal immigrants paying the ultimate cost of their life to enter the United States. Offering a path for legalization,

especially for those with family ties in the United States, requires consideration as a central concern to immigration policy, rather than letting unsubstantiated fears dehumanize a population who are simply seeking a better way of life in America.

Resources tend to be focused on the prevention of entry, and expedited removal of foreign born nationals, many of which have family ties in America, and the majority of which are here to work. This is all the while ignoring the role of employers for example, who after all offer the end goal for waves of immigrants entering the United States (Hagan and Phillips 2008). Immigrants, particularly from Mexico, are thought to selectively migrate to areas driven by their work ethic and ambition, things that engender lower rates of crime (Sampson 2008). As a result, the presence of non violent norms and values held by new arrivals, which in turn are spreading through American society is not something we should fear. In addition given the economic benefit of immigrant workers to the United States, it suggests other policy options such as the possibility of guest workers programs or other means of legitimate social inclusion should at least be considered.

Securing a protected work tie to America may help immigrant families stay together and avoid raising 2<sup>nd</sup> and third generation groups in unstable or relatively more deprived conditions. Addressing the increased likelihood of crime facing 2<sup>nd</sup> and 3<sup>rd</sup> generation immigrants as they are continually exposed to American cultural forces is perhaps our greatest challenge. One very important task for future research will be to trace the process of immigration and assimilation, and seek to identify how and why the protective factors amongst recent Latino immigrant groups begin to be counter-balanced and then outweighed by emerging risk factors.

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## 8. Appendix

### 8.1 Disadvantage Index Factor Analysis

<b>Variable</b>	<b>Loading</b>	<b>Extraction</b>
African Americans	.769	.668
Bachelors Degree	-.772	.673
Males Unemployed	.533	.878
Families in Poverty	.770	.796
Pub Assistance	.826	.688
Managerial/Professional	-.898	.807
Female Households	.907	.905
Eigenvalue	4.377	

### 8.2 Recent Immigration Factor Analysis

<b>Variable</b>	<b>Loading</b>	<b>Score</b>
% Foreign Born 1990-2000	.67	.45
% Foreign Born who have not naturalized	.86	.74
% Born in Latin America	.81	.66
Eigenvalue	1.85	

