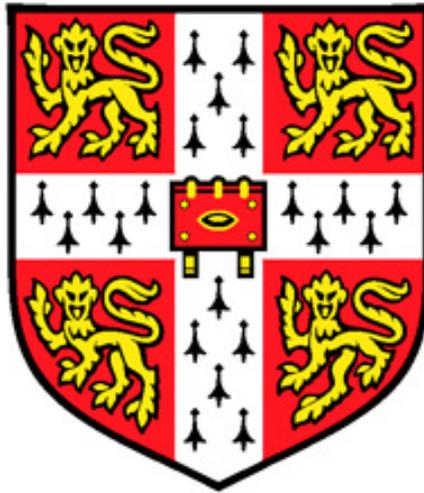# Youth and Organised Crime in Ciudad Juárez, Mexico: An exploration of contributing factors

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Abstract

Youth and Organised Crime in Ciudad Juárez, Mexico: An exploration of contributing factors

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This research explores why young men participate in organised crime in Ciudad Juárez, Mexico. From an ecological perspective, decisions are the result of a combination of factors at the macro, micro, and individual levels. The research explores factors at each of these levels, particularly the role of unfulfilled aspirations, the family and community environments, as well as different dimensions of poverty. In doing so, it uses an original survey covering a sample of 180 delinquent young men aged 12 to 29, who were in prison for organised criminal activity, and a sample of 180 non-delinquents with the same age, social background, and geographical origin in Ciudad Juárez, Mexico. Twenty in-depth interviews were also carried out with a sub-sample of delinquents. To my knowledge, this is the first study to use a quasi-experimental approach to understand why young men in Mexico participate in organised crime that considers their aspirations and measures multidimensional poverty amongst a population that is commonly excluded from census data.

The thesis draws on several theoretical frameworks from the fields of criminology and sociology, including anomie and attachment theories. The findings lend support to the importance of aspirations at the individual level. Opportunity constraints predict criminal participation and delinquents tend to place greater value on material items than their non-delinquent counterparts, which calls for the co-creation and management of aspirations of former delinquents and at-risk youth with the aid of counsellors.

In the family environment, being raised in a single parent household was a significant predictor of participation in organised crime. As these households are often headed by women, greater support for working mothers is pressing, as work in the assembly plants in Juárez (the prime source of employment) is not accompanied with childcare. More involved fathers who constitute positive role models are necessary to mitigate the risks of criminal participation. In the community environment, regularly spending time in a gang significantly predicted organised crime participation. Although gangs constitute a gateway, they do not unequivocally lead to organised crime. This calls for an adequate assessment of gangs, a phenomenon that is still poorly understood in Mexico.

At the macro level, the findings reveal that those who are more income deprived have a lower probability of having participated in crime, suggesting that participation reduces income poverty marginally. However, a higher proportion of delinquent participants are vulnerable due to deprivation in several social indicators and most delinquent participants are still multidimensionally poor, despite their participation in organised crime. This indicates that participating in crime does not constitute an effective or sustained pathway out of poverty, a message that should be communicated to at-risk youth. A more robust poverty and inequality reduction program accompanied by fiscal reform and higher minimum wages are also among the key policy recommendations.

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text.

It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text

It does not exceed the prescribed word limit for the relevant Degree Committee.

Acknowledgements

This research is the product of an intellectual challenge that started with a personal experience of insecurity in Mexico. In August 2011, after a notoriously violent year, where bodies hanging from pedestrian bridges and shoot outs between rival criminal groups on the streets of the city of Monterrey were not uncommon, a casino was attacked by members of an organised criminal group. In retaliation for the refusal of the casino owner to pay *piso* (a form of tax on territory under the control of organised criminal groups), the casino was burned down. Fifty-two people did not manage to escape the fire and tragically lost their lives. Some of these people I knew personally; one in particular, I cannot forget. This experience has consequently shaped my thoughts. 'Why would someone do something like this?' became a guiding question. After the fear, which later became anger, came a profound desire to look back on what Mexico has experienced in recent years and better understand how it is that we got there.

This work would not have been possible without the guidance and support of important people in my life. First, I am immensely grateful to Dr. David Clark, for his valuable insights, dedication, and time to making this thesis what it is. I am also especially thankful to Dr. Graham Willis, who has encouraged me to teach and share my experiences at the Centre of Latin American Studies. To those who participated in this research, I am exceptionally indebted. First, to María Cristina Montaño, whose insights, conviction, bravery, and dedication made my fieldwork possible. In the most unlikely of circumstances, I found a mentor and a friend. I also wish to express my gratitude to Fernando Figueroa and Luis Fernando Figueroa, for their time and dedication during the fieldwork stages of this thesis. To Juana María, whose dedication, encouragement and good humour kept us going after hours of survey implementation. To other proud 'juarenses' who helped me greatly in personal and professional ways, including the Salgado family, Alejandro Ruelas, Jacqueline Haros, and Arturo Morales. To Daniel Peña, who was there every step of the way to offer kind words of support and encouragement. To every participant who agreed to be a part of this study; I am immensely grateful. This thesis would not be possible without their contribution.

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Abbreviations[1]

ACA	American Correctional Association
AFI	Agencia Federal de Investigación
AFORE	Administradoras de Fondos para el Retiro
AMLO	Andrés Manuel López Obrador
CAP	Chicago Area Project
CCT	Conditional Cash Transfer
CERESO	Centro de Rehabilitación Social
CERSAI	Centro de Rehabilitación para Adolescentes Infractores
CIA	Central Intelligence Agency
CISEN	Centro de Investigación y de Seguridad Nacional
CNS	Comisión Nacional de Seguridad
COLEF	El Colegio de la Frontera Norte
CONEVAL	Consejo Nacional de Evaluación de la Política de Desarrollo Social
CONSAR	Comisión Nacional del Sistema de Ahorro para el Retiro
DEA	Drug Enforcement Agency
DFS	Dirección Federal de Seguridad
DIF	Agencia para el Desarrollo Integral de la Familia
DTO	Drug Trafficking Organisation
EMS	Escuela Media Superior
ENADIS	Encuesta Nacional sobre Discriminación en México
ENIGH	Encuesta Nacional de Ingresos y Gastos del Hogar
ENLACE	Encusta Nacional del Logro Académico en Centros Escolares
ENVIPE	Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública
ENSI	Encuesta Nacional sobre Inseguridad
FAO	Food and Agriculture Organisation
FBI	Federal Bureau of Investigation
FFT	Funcional Family Therapy
GAFE	Cuerpo de Fuerzas Especiales
ICE	Immigration and Customs Enforcement
ICESI	Instituto Ciudadano de Estudios sobre la Inseguridad A.C.
IFE	Instituto Federal Electoral
IMF	International Monetary Fund
IMJUVE	Instituto Mexicano de la Juventud
IMSS	Instituto Mexicano del Seguro Social
INMUJERES	Instituto Nacional de las Mujeres
INEE	Instituto Nacional para la Evaluación de la Educación
INEGI	Instituto Nacional de Estadística y Geografía
ISI	Import Substitution Industrialisation
ISSSTE	Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado
LAC	Latin America and the Caribbean
LAPOP	Latin American Public Opinion Poll
MFY	Mobilization for Youth
MPI	Multidimensional Poverty Index
NIDA	National Institute on Drug Abuse
NYPD	New York Police Department

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[1] Some of these have been translated in the main text into English but are included in this section with their original names in Spanish.

OECD	Organisation for Economic Co-operation and Development
OAS	Organisation of American States
OPHI	Oxford Poverty & Human Development Initiative
PAN	Partido Acción Nacional
PEMEX	Petróleos Mexicanos
PJF	Policía Judicial Federal
PNPSVD	Programa Nacional de Prevencion Social de la Violencia y la Delincuencia
PRD	Partido de la Revolución Democrática
PRI	Partido Revolucionario Institucional
SAT	Servicio de Administración Tributaria
SAR	Sistema de Ahorro para el Retiro
SEDESOL	Secretaría de Desarrollo Social
SEGOB	Secretaría de Gobernación
SEMS	Subsecretaría de Educación Media Superior
SEP	Secretaría de Educación Pública
SSP	Secretaría de Seguridad Pública
TF-CBT	Trauma-Focused Cognitive Behavioural Therapy
UACJ	Universidad Autónoma de Ciudad Juárez
UAVI	Unidades de Atención a la Violencia Intrafamiliar
UN	United Nations
UNAM	Universidad Nacional Autónoma de México
UNODC	United Nations Office on Drugs and Crime
UNDESA	United Nations Department of Economic and Social Affairs
USAID	United States Agency for International Development

Preface

This is the story of Alberto and Jose Luis.[2] Both young men grew up in a similar community, attended public schools, and their families had similar income levels. They may even have played football on the street together when they were young. Both of them are from Ciudad Juárez, a city with a current population of over one million that has a long and troubled history as the (other) backyard brothel of the United States (I believe the first one was Cuba): the place where Americans would go since the Prohibition era to do what was unlawful in their own country. Everybody loves doing what they shouldn't, but they also love doing it where they are less likely to get caught. While Americans were, and still are, quick to criticise the pervasive unlawfulness that characterises Mexico, they were, and certainly still are, even quicker to take advantage of it. But Juárez today has not ceased to be the Mexican 'Sin City': it is the birth place of the Margarita cocktail (the name of the place is Kentucky, and you can get one of their famous Margaritas for less than GBP £2.00), but in recent years it has also become a hotbed of hipster new age millennials that have benefited from the boom and growth caused by 'J-town's' (the name used by the upper-middle class millennials to refer to Juárez) location on the border with the United States and the expansion of the '*maquilas'*, or assembly plants. It is also one of the locations where the use of drugs has become widespread. It's not true that the entirety of drugs in Mexico are destined for the American consumer, as in Juárez there is a growing consumer base. In 2009, Juárez, already famous to locals and a true source of pride for anybody who identifies themselves as 'juarense' (local from Juárez), became common news in the international media. The carnage that was unleashed led to it being classified as the city with the highest homicide rate in the world at the peak of the 'war on drugs' that took place in Mexico during Felipe Calderón's presidential term. Given this context, let's return to our two characters. In 2009, Alberto is about to complete his third year of university. Jose Luis is behind bars, sentenced for large scale drug trafficking. How can two people who grew up in a similar environment have such different fates? Through the implementation of 360 surveys, divided equally into a sample of young male delinquents serving time for organised criminal activity and a sample of non-delinquent young males residing in a marginalized area of Juárez, the present research will attempt to explain why young men in Ciudad Juárez participated in organised crime by exploring macro, micro and individual level factors.

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[2] These characters are fictional.

Chapter 1. Introduction

"We pass through the present with our eyes blindfolded. We are permitted merely to sense and guess at what we are actually experiencing. Only later, when the blindfold is untied, can we glance at the past and find out what we have experienced and what meaning it has."
-Milan Kundera (1999), *Laughable Loves*

1.1 Background

Developing countries are home to 87% of the world's youth (UN, 2014),[3] and in the case of Latin America and the Caribbean (LAC), the region was home to 108 million youths between the ages of 15 and 24 in 2012 (World Bank, 2014a). According to the *World Development Report*, the large numbers of young people in developing countries constitute important opportunities, but also have the potential for great risk (World Bank, 2007). On the one hand, young individuals can represent a 'window of opportunity' for the further growth of developing countries; on the other, when opportunities are lacking, this specific population group can become a burden, and even an important source of unrest (Mesquida & Wiener, 1996; Moller & Esler, 1974; Urdal, 2001, 2013).

In Latin America, we have witnessed that political movements led by youth – although visible[4] – have had less of an impact than in other parts of the world.[5] Instead, the main source of unrest witnessed in LAC has taken the shape of unprecedented levels of crime (Saravi, 2009),[6] reflected especially in high homicide rates (UNODC, 2013b).[7] Violent crime is globally the highest in LAC when compared to other regions (see **Figure 1.1**), a phenomenon that has led to an extremely polarised image of Latin American youth (Rodgers & Jones, 2009).[8] Despite evidence that disproportionately points to young individuals as perpetrators of crime and violence, it is important to emphasise that they have also been the principal victims (Cunningham et al., 2008).[9] According to the *World Report on Violence Against Children* published by the United Nations in 2006, Latin America has the highest regional youth

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[3] Defines "youth" as individuals between the ages of 15 and 24.

[4] Youth protests were staged in Chile over disconformity with the education system as well as in Mexico in the period before the 2012 elections (the "YoSoy132" movement").

[5] In comparison to movements that have taken place in the MENA region.

[6] According to Saravi (2009), the disappointments that have been experienced by youth in the Latin American region in both the educational and work spheres have led to the emergence of alternatives for the achievement of social mobility. Saravi cites migration, evasion, and criminality as responses to the situation of exclusion.

[7] In countries like El Salvador, where 15 to 24 year olds constituted 21.6% of the population in 2010 (UNDESA, 2010), homicide rates per 100 thousand population reached 64.1 in this same year –the second highest rate of homicide in the world, only surpassed by Honduras. Honduras had a rate of homicide of 81.8 per 100 thousand population for 2010 (UNODC, 2013b).

[8] According to Rodgers and Jones (2009), there is an increased tendency to blame the 'youth bulge' –which refers to a large presence of young individuals in the demographic structure of the population, for the increasing levels of violence in the developing world today.

[9] In countries of the Latin American region, the percentage of homicide victims that correspond to the age group 15 to 24 range from 27% in Guatemala, to 30% in Venezuela, and to a staggering 43% in the case of Brazil. Figures are for the latest available year, for Guatemala (2009), Venezuela (2008), and Brazil (2008) (OAS, 2012).

homicide rate in the world (Pinheiro, 2006).[10] In the Mexican case, where there is a significant percentage of youth aged 15 to 24 constituting the population (18.4% in 2010) (UNDESA, 2010),[11] the country's homicide rate has more than doubled in the period from 2006 to 2010: from 9.3 to 21.8 per 100,000 of the population (UNODC, 2013a), and by 2014, nine cities in Mexico were amongst the 50 most violent cities in the world (Chávez, 2014). In 2010, more than one third (34%) of homicide victims were between the ages of 15 and 24 (OAS, 2012).

Figure 1.1 Average regional homicide rate, 2014
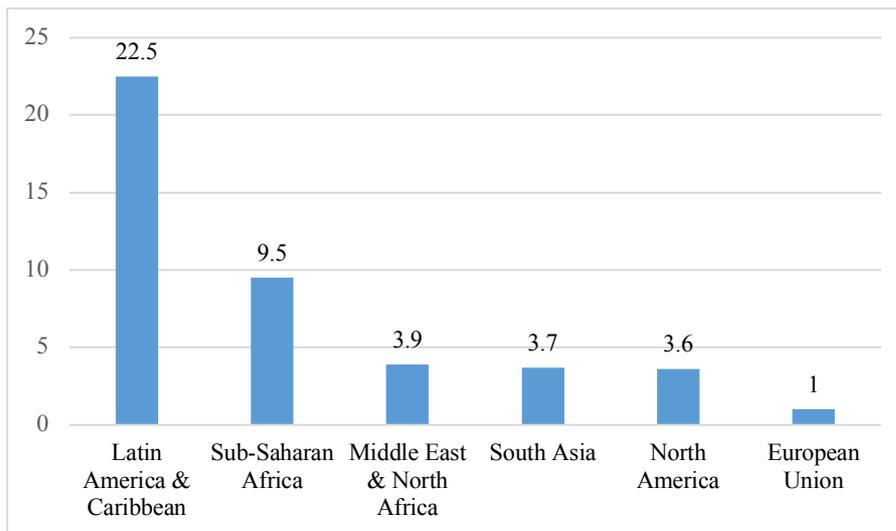
Source: Author's elaboration based on data from World Bank (2014b).

The dramatic rise in homicide rates experienced in the country, which disproportionately affected young people, followed the declaration of the 'war on drugs' issued by former president Felipe Calderón. One of the most worrying aspects of this war is that organised criminal groups involved in the drug trade and in a host of other high impact crimes (including extortion and homicide), are recruiting young individuals to fill up their rapidly depleting ranks, particularly targeting those who are idle and come from a background of deprivation and marginalisation.[12] The failure to understand the deep causes of this problem (partly a consequence of simplistic explanations) has led to inadequate policies to address the issue. The main approach, led by the Calderón administration, was characterised as hard-line,

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[10] According to the report: "In some regions, notably in Latin America, the highest homicide rates of any age group across the population occur among 15-19 year olds." It also mentions that apart from the United States, most of the countries with the highest adolescent homicide rates are either developing countries, or those experiencing rapid social and economic change. See Pinheiro (2006).

[11] Considered a young population by comparative standards. For other countries of the region, the percentage of youth aged 15 to 24 in 2010 were as follows: Brazil (17.2%), Chile (17.3%), Colombia (18.3%), El Salvador (21.6%). See UNDESA (2010).

[12] For example, in the case of Rio de Janeiro —a city where poverty rates are extremely high, and 36% of adolescents from the lowest socioeconomic group are neither studying nor economically active— the income opportunities offered by drug trafficking gangs can be exceptional. See Benvenutti (2003).

involving attempts at the beginning of a questionable election[13] to convince the Mexican public that the most viable policy choice at hand was military intervention and an embittered fight against drug cartels.[14] The current administration of Enrique Peña Nieto's has followed the same line.[15] As Matthew Ingram (2014) emphasises in the recently released report *Building Resilient Communities in Mexico: Civic responses to crime and violence*, "…the policy response to violence [in Mexico] emphasizes a more effective enforcement apparatus and efficient justice-sector while neglecting a large literature addressing the root social and economic causes of crime—why crime occurs in the first place" (p. 27). As he points out, in a place like Mexico, the neglect of the deep literatures in sociology and criminology that address why crime originally takes place is particularly startling.

Instead of channelling efforts towards a deep understanding of the issue, political attention has focused on the introduction of social policies for poverty and inequality reduction. An example of this is the country's largest and most prestigious conditional cash transfer program, *Progresa/Oportunidades,* which has now been rebranded as *Prospera*. While poverty reduction is in general a laudable aim, there are several shortcomings with this approach. First, these indirect efforts to address structural problems, like poverty and inequality, have largely ignored the connection between the latter and physical security. Second, it is a shared sentiment among academic circles in Mexico that the *Prospera* program is the only strategy that the government pursues to correct inequality, which in turn implies that the Mexican administration lacks the will to significantly reduce poverty and redistribute income.[16] The latest statistics from 2014 reveal that 46.2% of the country's population are multidimensionally poor, and 9.5% of the population are in extreme multidimensional poverty (CONEVAL, 2014a).[17] In addition to

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[13] The election results in 2006 were questioned by the leading opposition candidate, Andres Manuel López Obrador (AMLO). According to the polls, the victory for Calderón was based on a very narrow margin of 1.04%. Calderón's party (Partido Acción Nacional, PAN) received 35.9% of votes, while López Obrador (Partido de la Revolución Democratica, PRD) received 35.3% of votes. See IFE (2006).

[14] In his first speech as president in 2006, Calderón instructed members of the security forces to direct efforts towards the eradication of organised crime, ensuring Mexicans that violence was the main and principal threat to society. See Rábago and Vergara (2011).

[15] Despite boasting a dramatic reduction in crimes, research has shown that the decrease in homicide rates witnessed throughout the Peña Nieto presidency has been accompanied by an increase of other high impact crimes, such as extortion and kidnapping (Sefchovich, 2014). Moreover, citizen perception of insecurity remains high: According to data from Americas Barometer (2012), almost half of participants surveyed in Mexico were concerned 'almost all the time' that they could be victims of violent crime and over 50 percent indicated that public safety in the country was either 'bad' or 'very bad'.

[16] Data shows that in the period from 1985 to 2008, income inequality in Mexico has increased. See OECD (2011).

[17] Extreme multidimensional poverty refers to the population with an income below the minimum well-being line – meaning that income is insufficient to purchase the food basket, and who are also deprived in three or more of the six social indicators used by CONEVAL. Multidimensional poverty refers to the population with an income below the well-being line –meaning that income is insufficient to purchase both a food a non-food basket of essential items, and are deprived in at least one of the social indicators used by CONEVAL.

high poverty rates, the distribution of wealth is extremely unequal, with 10% of the people with the highest incomes appropriating almost 40% of total income (CONEVAL, 2010).

1.2 Aims and Contribution

Despite immense inequality, not all young individuals on the losing side of the income distribution have turned to criminal and deviant behaviour in the ranks of drug cartels to address their grievances. The present dissertation is motivated by a desire to understand the root causes of the phenomenon that shapes Mexico today. As such, the present study addresses the following question: **Why did young individuals participate in organised crime in Mexico?** From an ecological perspective, decisions are the result of a combination of factors at the macro, micro, and individual levels. The present research explores factors at these levels to understand why young individuals have participated in organised crime in the country, by looking at the specific case of Ciudad Juárez, a city that became the epicentre of organised criminal activity at the peak of the 'war on drugs'.

Although this subject has recently sparked interest in academia, several gaps are visible. First, existing work has focused on explaining the causes of violence in Mexico, and violence has often been defined uni-dimensionally using homicide rates. This study will look at violence not solely through homicides, but will consider a range of offenses associated with organised crime, involving a population of offenders serving prison sentences for organised crime related activity. To the best of my knowledge, no work in Mexico has attempted to address this crucial question. One of the reasons is that access to offenders in social rehabilitation centres –the term used for prisons in Mexico– is complicated and difficult. In the rare cases where it has been achieved, the work with these populations has not been used to specifically understand participation in organised crime. Instead, the literature on prison populations in Mexico has provided socio-demographic information of the inmate population and detailed corrupt practices in correctional institutions in the country. From the field of journalism, there have been courageous efforts to depict the experiences of former participants of organised crime, but these accounts have lacked a representative sample and have been limited to a few interviews.[18] Moreover, they have focused on the nature of the crimes committed, work that carries with it a tone of sensationalism that at times discredits some of these efforts. This work also lacks the

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[18] For example, see the work of Julio Scherer (2013), who conducted interviews with 49 young offenders in Mexico City. His work aimed to portray the biographical details of young offenders in order to understand whether children who have assassinated "have a soul". Also see the work of Almazán (2013) who documents fourteen stories of women who have participated in organised crime as hired assassins.

systematic, large sample data that is needed to reach defining conclusions about the nature of this problem.

With this in mind, the present study will look at factors contributing to organised crime participation at several levels: At the macro level, this study will build on existing evidence and refine concepts that have traditionally been used to explain violence, such as poverty and inequality. Instead of defining poverty strictly along income lines, it will work with the multidimensional approach to understand the poverty-crime dynamic in a more comprehensive way, and to determine whether any of these specific dimensions are useful in explaining organised crime participation. At the micro level, the study will focus on factors stemming from the family and community environments to determine which of these contribute to explaining organised crime participation. At the individual level, it will use concepts and frameworks from the development literature (including the capability approach) that have traditionally not been used to explain crime, to explore what offenders' aspirations prior to criminal engagement were, and whether opportunity constraints constitute an explanatory factor for organised crime participation.

1.3 Brief Overview of Structure and Methodology

The study relied a *purposive sampling method* for the administration of 180 surveys, exclusively amongst young males between the ages of 12 and 29 (defined by the Mexican Youth Institute, IMJUVE, as the age group for youth and the group largely responsible for an important share of crime), who were serving a sentence or being processed for crimes related to organised crime at the time of the fieldwork, which took place in October 2014 in Ciudad Juárez. Twenty in-depth semi-structured interviews were carried out with some of the offenders selected by the researcher and the research team working with her. A second round of 180 surveys were also administered to a non-delinquent sample of young males in the same age group sharing similar socio-economic characteristics and who were residing in a marginalised area of Juárez at the time of the fieldwork. All surveys and interviews were conducted face to face with all participants of the study.

To fully explain the contents of this research effort, the present thesis consists of eight chapters. The first chapter introduces the phenomenon that will be studied, in addition to posing the central research question, as well as the overarching theoretical framework upon which the research is designed. The second chapter describes the theories used to inform the research and provides a review of the relevant empirical evidence on the factors that contribute to youth criminality. The third chapter contains a brief historical overview of organised crime in Mexico

and the fourth chapter lays out the research methods implemented, as well as an explanation of the study location, sampling technique, and ethical considerations. It also contains a general description of the survey instrument used in the study. The methods chapter is followed by three analyses chapters (five to seven), which constitute the core of this thesis. These chapters are included to document the individual, micro and macro level factors that are associated to the phenomenon of organised crime participation. These three chapters are structured in the same way, providing first a detailed description of the questions used in the survey followed by descriptive statistics and a quantitative analysis of the survey data. A discussion bringing together the quantitative evidence from surveys with the qualitative findings derived from in-depth interviews as well as conclusions, are provided at the end of each analysis chapter. The last two chapters of the thesis contain public policy recommendations and general conclusions of the study.

Chapter 2. Theoretical Framework

2.1 Manichean Worldviews and Flawed Public Policy

Because of their upbringing and as a natural consequence of socialisation, individuals are taught to view the world in simplistic terms and to categorize things in binary terms. Although this seems to simplify problems and how they are approached, such a view has had significant and often negative, effects. In *Contemporary Social Problems*, Robert Nisbet (1963) explains that as a result of religious and philosophical heritages, individuals tend to think that social problems are the sole work of evil elements. As a consequence, this has produced the view that good is derived solely from good, and only evil from evil. If a crime is therefore committed, "it is because of evil persons, evil groups, evil values" (1963: p.9). According to Phillip Zimbardo, "the idea that an unbridgeable chasm separates good people from bad people" (2007: p. 6) is comforting for two reasons: first, because it creates a binary logic, where someone is categorized strictly in terms of good or evil and second, because this logic takes those defined as "'good people' off the responsibility hook" as "they are freed from even considering their possible role in creating, sustaining, perpetuating, or conceding to the conditions that contribute to delinquency, crime, vandalism," and so on (2007: p.6).

The danger of this structure of thought is that it allows the public mind to categorize a certain individual, or group, as 'purely evil', without recognising that behind every display of deviant behaviour there are multiple intricacies involved. As Gadd and Jefferson point out in *Psychosocial Criminology*, "those we do not understand, we can more readily demonize…" – a process that is more likely to deepen divisions and further aggravate social problems by allowing "'folk devils and moral panics' to continue to figure prominently in the contemporary politics of law and order" (2007: p.2). In public policy in Mexico, the Manichean approach to crime has translated into failed attempts to provide solutions to problems that are far from being properly understood. As exemplified by a Border Recon[19] 'volunteer' who works to eliminate the risks associated with spill-over violence from Mexico into the southern state of Arizona in the United States, and who comments on the phenomenon of organised crime in Mexico:

> There's an imaginary line out there between right and wrong, good and evil. I believe what I am doing is good. And I believe what I am standing up against is evil. It's the cartels. They're the ones terrorizing their own country…(Heineman, 2015)

This specific mind-set of good combating evil, however loosely defined, has often led to the implementation of corrective hard-line measures in public policy that have failed to address the more complex nature of problems. In the Latin American region in general, and in

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[19] Proclaimed NGO that locates and documents the smuggling activities on the United States-Mexico border.

Mexico more specifically, this is visible in the move towards the American model of penalisation as a response to criminality (Wacquant, 2009). This is evidenced by increasing rates of incarceration, in which the rate of imprisonment in Mexico rose more than two-fold: from 93.6 per 100,000 population in 1995 to 239.9 in 2012 (Zepeda, 2013). As a result, Mexico is currently the country with the second highest prison population in the Latin American region in *absolute* terms, surpassed only by Brazil (UNODC, 2012).

Furthermore, there has been a recent move towards prison privatisation in Mexico, despite incontrovertible evidence in the U.S. that this is to the detriment of prison residents and the public budget. An investigative report found that federal prisons in the U.S. were more unsafe, had fewer resources and were cost ineffective (Swaine, Laughland, & Kasperkevic, 2016). Lastly, Mexico's security sector has been actively seeking accreditation from the American Correctional Association (ACA) for prisons in the country, with heavy investments made in prisons to fulfil security standards and operative procedures set out by the U.S.-based accreditation agency. No evidence exists that ACA accreditation has contributed towards desistance and to the rehabilitation of offenders in Mexico, despite the fact that this is the main and explicitly stated purpose of prisons in the country, known as Centros de Rehabilitacion Social (or social rehabilitation centres).

2.2 Theoretical Approach

Multiple theories from the Western literature have informed the study of crime and served as a blueprint for policy direction to address criminality and a host of other social problems in developing countries. Little to no consideration has been given as to whether the extrapolation of theories and policies from developed countries are appropriate in such settings. This study will draw on the theories explained below to inform the research and will determine their relevance by exploring a developing country context. The theories laid out in this chapter will be contrasted with the evidence of the study in each discussion section of the analysis chapters.

There are two main approaches to the phenomenon of youth and crime. According to Muncie, when searching for the specific causes of criminal behaviour, positivist criminology is interested in what is "tangible and quantifiable", as opposed to the abstract and qualitative (2015: p.84). As such, it supports the idea that crime has a specific set of characteristics. For example, it supports the view that crime is often committed by young males. Most research in this area has attempted to identify clear differences between delinquents and non-delinquents (Muncie, 2015). In contrast, radical criminology, an 'umbrella term' under which several

theories are grouped together, has moved away from explaining why certain individuals break the law (2015: p.119). The first traces of anti-positivism began in the 1930s with the interactionist school of sociology, which instead supports a view of the world that highlights the "flexibility of individual responses to social situations" (2015: p.120). The present research does not want to defend one camp over the other, but instead, proposes to build bridges across both theoretical approaches. It also proposes that the development literature has much to contribute to the criminological theoretical framework, reason for which an attempt will be made to put these together. The next section will first make a brief reference to the ecological approach to crime addressed Urie Bronfenbrenner's work –which constitutes the overarching theoretical framework upon which the research in designed - and will then focus briefly on theories that will frame this thesis.

The conceptual framework from the field of developmental psychology indicates that youth and their behaviour are the result of several environmental factors at the individual, micro, and macro levels (Bronfenbrenner, 1979). According to the literature, "the ecological environment is conceived as a set of nested structures, each inside the next, like a set of Russian dolls" (1979: p.3). At the individual level, lies the individual's perception of the environment (or immediate setting) in which he/she develops. The immediate setting is the place where human interaction takes place, such as the home (1979). The next level requires looking at relations between the immediate settings (1979) and could include for example, how preferences formed by the *family* or the *community* influence the individual (Cunningham & Bagby, 2010). The role of the individual, or the set of expectations that are linked to societal position (for example, brother, cousin, father, etc.), as well as activities and interpersonal relations are the constitutive elements of the microsystem (Bronfenbrenner, 1979). Finally, the third level involves events that take place in a setting where the individual person is not even present (1979), and could include macro factors such as national poverty, gender/race discrimination, and economic inequality (Cunningham & Bagby, 2010).

Bronfenbrenner's work serves as an overarching framework to incorporate different levels to the study of youth organised crime (see **Figure 2.2**). The theories that will inform each of these levels will be explained briefly, but greater detail will be provided in the next section. At the individual level, **Robert Merton's anomie theory** and **institutional anomie theory** will be used to look at aspirations and opportunity constraints to access items considered part of a good life. **Robert Agnew's general strain theory,** which highlights the association between negative emotions and its role in the development of delinquent behaviour will also be used to inform the theory for the chapter on individual level factors. The development literature will be used to complement the sociological approach to crime (**Chapter 5. Individual Level**

Factors).

For micro factors in the form of immediate relationships (with community members and family), **Albert Cohen's theory of subcultures**, which proposes that delinquent behaviour could be a consequence of poor school performance, driving youths to abandon the education system and to associate with individuals that have had a similar experience, will be considered. **John Bowlby's attachment theory**, which contributes to explaining why family dynamics (particularly, factors regarding the relationship between parents and children), are important aspects to consider in the explanation of this phenomenon, will also be used to inform **Chapter 6** of this study. For macro level factors, the study will look at which dimensions of poverty used in the national multidimensional poverty index in Mexico are associated with participation in organised crime. Although anomie theory and general strain theory provide important insights, the framework for the analysis chapter will largely be provided by secondary studies exploring the link between poverty and violence (**Chapter 7. Macro Level Factors)**. The figure below (**Figure 2.2)** puts together the diverse theoretical insights that will be used throughout the thesis, constituting a first attempt to construct a more holistic model that will provide a preliminary guide for investigating the factors – at different levels – that shape organised crime in countries such as Mexico.

Figure 2.2 Theoretical framework and individual, micro and macro factors explaining delinquent behaviour
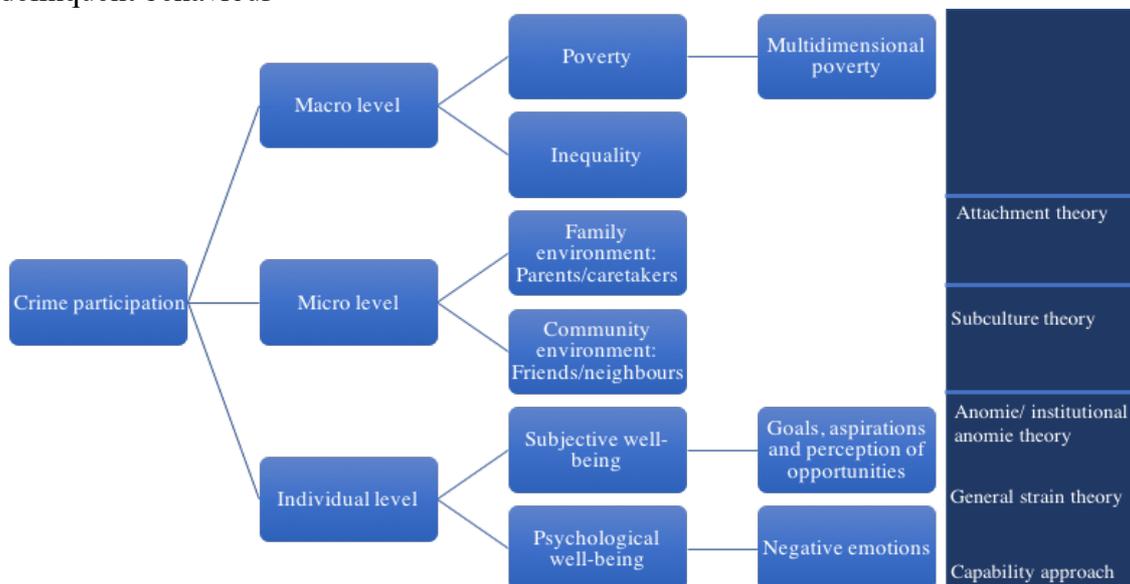
Source: Author's own elaboration

2.3 Anomie and General Strain Theory

Robert K. Merton proposed that certain characteristics of the social structure bring about circumstances in which the abandonment of social codes constitutes a "normal response"

(Merton, 1938: p. 672). The first element is the presence of common goals, usually expressed in monetary terms, that are culturally defined and accepted by all members of a society (1938: p.672). The second element is constituted by perceived opportunities for the attainment of the defined goals. In this context, the constant pressure exerted by the social structure upon all individuals to work towards the attainment of the common set of goals, whilst simultaneously eliminating access to legal methods of reaching these aspirations for a part of the population, can contribute to deviant behaviour among the disadvantaged group (1938: p.680). According to Merton,

> …it is only when the full configuration is considered, poverty, limited opportunity *and* a commonly shared system of success symbols, that we can explain the higher association between poverty and crime in our society than in others where rigidified class structure is coupled with differential class symbols of achievement [emphasis added] (1938: p. 681).

The author proposed that there are five types of reactions, or 'modes of adaptation', that result from the discrepancy between goals and the means to fulfil them. These are: 1) conformity, 2) innovation, 3) ritualism, 4) retreatism, and 5) rebellion (Merton, 1957). The first response, *conformity*, is the most common and widely diffused mode of adaptation, and involves acceptance of the *status quo* (1957). The second mode of adaptation, *innovation*, refers to the use of proscribed but efficient means of obtaining the desired goals. Merton explained that this behaviour ensues when the individual has internalized and accepted the desired set of goals without fully accepting the norms that define the legal avenues for the attainment of said goals (Merton, 1957).[20] For those individuals that have fully internalized values of legality, a different response is manifested, which takes the form of *ritualism*, involving the abandonment of the established goals to a point where aspirations can be realistically satisfied (1957).

Retreatism, on the other hand, takes place when both the cultural goals and the institutional practices have been accepted by the individual and highly valued by him/her, but accessible ways to success do not result in the desired outcome. The constant struggle and repeated failed attempts to reach the goals through a legitimate avenue coupled with the inability of the individual to take up an illegal route due to his/her own internal constraints, results in the abandonment of both goals and means. The outcome of this process is the 'asocialisation' of the individual (1957). The final mode of adaptation according to Merton is *rebellion*. Most often led by individuals from a rising class, this mode of adaptation opts for the construction of a different social structure with newly defined goals. Rebellion is only possible

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[20] This mode of adaptation is not uncommon in business, as it is often difficult to distinguish between "business-like strivings" that adhere to mores and "sharp practices" that extend beyond what is morally acceptable. See Merton (1957).

when an alternative structure is proposed, one which would not hamper the attainment of desired goals by individuals, (1957).

The mechanism that explains how limited opportunity leads to criminal behaviour are neatly summarised in General Strain Theory. This theory constitutes part of the criminology literature that links victimisation to future offending and criminal acts. According to Robert Agnew (2001; 2002), victimisation of the individual is an important predictor of crime because it produces negative feelings, the most important of which is anger. The manifestation of negative emotions increases the chances that young individuals will turn to deviant acts to cope with the experienced strain. According to the theory, strain is a result of "any relationship or event in which the individual is not treated as he or she would like or experiences undesired outcomes" (Hay & Evans, 2006: p.262), including any event in which valued goals cannot be reached, or when there is a threat of the removal of positive stimuli (Agnew, 1992). The effect of the latter produces anger, and this emotion increases the likelihood of delinquency by increasing the level of perceived injury, which in turn creates a desire for retaliation (1992).

Specific types of strains that have been empirically verified to be associated to crime include "the failure to achieve monetary, autonomy, and 'masculinity' goals" (Agnew, 2001: p. 326). Agnew explains that strain leads to delinquent behaviour when: 1) it is considered unjust, 2) when it is seen as being high in magnitude, 3) when associated with social control, and 4) when it creates incentives to engage in a form of adaptation through criminal means (Agnew, 2001).[21] In sum, Agnew's theory sheds light on the mechanisms that explain how frustrated aspirations can lead to criminal behaviour.

Although extremely insightful, there are several important shortcomings in both theoretical approaches. In the first case, the concepts that underlie Merton's theory are abstract and difficult to verify empirically. Merton proposed that further research on this subject matter should consider the collection of data on *goals* and *access to opportunity* in order to analyse if set goals and constrained opportunities occur with different frequencies in diverse social groups and whether these differences are associated with the rate of deviant behaviour across these groups (1957). This is attempted in the present chapter -albeit with some modifications, and will become apparent in the methodology section.

An additional shortcoming of Merton's theory is that only one single form of adaptation that he identified can describe –albeit not entirely – the particular behaviour of the individuals that this research will focus on. Merton (1957) explained that the individuals who retain the

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[21] Specific types of strains that have been empirically verified to be associated to crime include "the failure to achieve monetary, autonomy, and 'masculinity' goals," being victims of crime, parental abuse, neglect and rejection, as well as negative experiences at school. See Agnew (2001: p. 326).

success-aspiration framework and become frustrated will relinquish institutional means and respond through *innovation*. Through this mode of adaptation, the 'entrepreneur' will seek a creative – albeit not necessarily a legal avenue – to obtain wealth (1957). Although there are certainly elements of innovation in some forms of youth delinquency (especially in organised crime and the drug trade), the abandonment of institutional means extends beyond innovation. The range of crimes that youth participating in this study have carried out are not limited to entrepreneurial avenues that 'bend the rules slightly'.[22] Because their different functions do not necessarily fit into this response, Merton's framework therefore lacks a mode of adaptation that more adequately resembles the behaviour of the particular group of individuals that this research aims to understand. Critics of *anomie* theory also find problematic Merton's assumption that society has a common set of cultural goals. Some critics argue that there are divergent cultural systems for different social classes.[23] Without denying the diversity of individuals, there is a set of common aspirations, which Merton refers to as 'a frame of aspirational reference', that are relevant to individuals in general, some of which Merton explained "are related to the original drives of man" (Merton, 1938: p. 672).

The criticisms launched against Merton's theory have been useful in the development of a contemporary theory based on the main tenets of Merton's work, known as institutional anomie theory (IAT). According to Messner and Rosenfeld (2010), one of the major deficiencies of Merton's work is the lack of attention directed to a broader range of social structures to explain criminality; in particular, to social institutions. According to IAT, which was developed during the early 1990s to explain rising criminality in the U.S., crime ensues when social controls and social supports from the main institutions of society – namely, family, education, political system, and religion – are weak or when they directly promote crime. The emphasis of IAT on the role of a series of institutions in facilitating crime is what distinguishes the theory from Merton's work (Messner & Rosenfeld, 2010).

A central claim of IAT theory is that an institutional configuration that contributes to high levels of crime is one where the claims of the economy have the highest priority *vis-à-vis* other institutions. According to the authors, this is made obvious through three mechanisms:

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[22] For example, in cases of youth involvement in organised crime, their activities range from small drug distribution to activities of *halconeo,* and in some cases, there is even evidence they have served as *sicarios*. The primary role of an '*halcon*' is to warn leaders of organised crime of the whereabouts and activities of the military. '*Sicarios*' are paid assassins, usually tasked with rivals from other criminal groups. For a description of youths carrying out these activities in the context of Ciudad Juárez, one of the most violent cities in the world, see Grillo (2011: pp. 163-164).

[23] For example, Walter B. Miller, who studied lower class areas in Boston in the 1950s, found that there were six goals, labelled as "focal concerns", that were important to this population group. These were: 1) concern over trouble, 2) toughness, 3) smartness, 4) excitement, 5) fate, and 6) autonomy (being independent). See Hagan (2011: p. 171).

devaluation, whereby non-economic institutional roles are less valued when compared to economic roles; accommodation, where individuals are under pressure to give up other roles for economic roles when conflicts arise; and penetration, where the logic of the market seeps into other aspects of social life. In line with Merton's work, the theory also proposes that when and where monetary success is an overriding goal, but additionally, that when the economy is above other social institutions, individuals will select avenues for achieving their goals based on efficiency and effectiveness, rather than based on their normative status (Messner & Rosenfeld, 2010), i.e., whether they are morally correct or not. In sum, IAT proposes that a society has a greater likelihood of high levels of criminality where the institutional structure is dominated by the economy in comparison to non-economic institutions (for example, the family), where individuals assign priority to economic success in comparison to other goals and where no consideration is given to morality to select means to achieve desired goals. While the present work does not address religion, family and education are directly addressed in the analysis chapters of this thesis and complemented with other theories further addressed in this chapter to explain criminality in the Mexican context.

For strain theory, one of the most notorious criticisms is presented by Agnew himself. He argues that the conceptualization of strain is its greatest strength, but at the same time also its main weakness, as the different strains that can be identified across diverse studies raise concerns as to its operationalization, as the concept of strain is under constant expansion (Hay & Evans, 2006). According to Agnew, general strain theory is extremely broad, and therefore researchers who use it have little guidance as to the specific types of strain that can be analysed (Agnew, 2001). Other criticisms mention that the empirical research on the discrepancy between aspirations and expectations has not supported the theoretical assumptions of the theory (Agnew, 1985). According to the theory, delinquency would be greater in a setting where aspirations were high but expectations for their achievement were low. Empirical studies that have been carried out to support this assumption have instead discovered that delinquency is highest when *both* aspirations and expectations are low, and that delinquency is lowest when both aspirations and expectations are high (Elliot & Voss, 1974; Gold, 1963; Hirschi, 1969; Johnson, 1979).

A final shortcoming of strain theory to consider is related to the relationship between social class and delinquency. While strain theories predict that delinquency is found most often among members of the lower class (those individuals that are less likely to achieve economic success), empirical data has instead found that delinquency is more common in the middle class (Hindelang, Hirschi, & Weis, 1979; Johnson, 1979; Krohn, Akers, Radosevich, & Lanza-Kaduce, 1980; T. Thornberry & Farnworth, 1982; Tittle, Villemez, & Smith, 1978). Finally,

the theory has also been criticised for its omission of many variables associated to delinquency; for example, the quality of family relationships (Agnew, 1985), a subject that is addressed in the present research in **Chapter 6.** Having explained the theoretical approaches that will be used in **Chapter 5.** and its main criticisms, this research will look at whether there is a set of common aspirations amongst participants in both samples, whether the items that constitute part of a good life are shared across participants, and whether perceived opportunities for their access are associated with organised crime participation.

2.4 Aspirations and Lists of Values for a Good Life

Merton theorised that individuals in a society have a common aspirational framework, which implies that there is consensus as to what individuals' value. These valued elements are usually expressed in monetary terms, through wealth and status symbols. In societies where members share a common aspirational framework, there is a greater likelihood of delinquency if there are no legitimate avenues or opportunities to access those things considered valuable. Agnew also spoke of 'valued goals', and explained that a discrepancy between what is valued and expectations can lead to the development of strain (expressed through anger), explaining some forms of delinquency. Nevertheless, Agnew did not mention what these valued goals were. In Merton's case, the belief that common goals are exclusively (or almost entirely) pecuniary provides a limited and oversimplified account of what people's aspirations look like. Institutional anomie theory also fails to provide an adequate framework for a deeper understanding of aspirations and assumes that where monetary success is the principal goal, individuals will select avenues for its achievement regardless of moral constraints. In order to (better) understand what it is that people aspire to and what they understand is a good life, this section turns to the development literature.

An increasing number of authors have proposed frameworks for understanding a good life. According to Alkire (2002), there are a variety of 'lists' of well-being, universal values and human needs, but the values set forth by the authors have often been shaped by the "operational purpose for which their list has been developed" (p.59). In addition, despite using different analytical concepts, there are overlapping areas between the various lists of values, capabilities, and fundamental needs that each of the authors proposes (see Alkire, 2002; Clark, 2002). The present chapter cannot do justice to all such approaches,[24] therefore this section will focus on the capability approach, as the direction of Amartya Sen's work avoids the paternalism that is intrinsic to other approaches for conceptualizing and measuring human well-being. Other

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[24] See Clark (2014) for a brief comparison of approaches based on capabilities, rights and needs.

important contributions, such as the work of Manfred Max-Neef, who developed the matrix of fundamental needs, and Shalom Schwartz, who proposed a theory of human values are recognised.

Amartya Sen proposed that individuals should be endowed with a combination of capabilities and functionings that allow them to lead lives they have reason to value (1999). Although Sen's concepts and vision brought about an important paradigmatic change in the understanding of development, he has been criticized for failing to outline a definitive list of essential capabilities and functionings that make a life worth living (although he does recognize that certain elements such as being well nourished, for example, are essential) (Clark, 2005). While this has at times been considered the 'Achilles Heel' of Sen's proposed framework (Qizilbash, 1998), other authors have not shied away from setting forth their own lists of capabilities. For example, in *Creating Capabilities*, Martha Nussbaum (2013) endorses a list of ten essential capabilities for living a good life, which is built on empirical observations across countries, and takes into account a plurality of cultures.[25] Nussbaum argues that her list should be included in the legal framework of every nation.

Arguably, one of Sen's strengths is that he manages to avoid a paternalist attitude by providing individuals with the freedom to define their own sets of functionings. In doing so, Sen avoids establishing a list of 'objectively correct' capabilities (Clark, 2005) and his framework, Clark explains, 'can accommodate divergent views of the good life' (2005: p. 1346). However, Sen has shied away from considering less virtuous elements in his approach and does not address whether his framework can accommodate divergent views of a good life, if these forms are not what would traditionally be thought of as a good life. According to Clark, Sen has been 'silent about 'negative' (intrinsically bad) capabilities' (2016). He does not discuss the possibility that some achievements may reduce well-being; moreover, it is not entirely clear how the approach should deal with these harmful functionings (Clark, 2005). For example, it is not clear how Sen's approach would deal with beer or cigarettes, (or even drugs, I would emphasize), even though the consumption of these products is widespread, both among the poor as well as the wealthy (Clark, 2005). "Alcohol and tobacco play a particularly important role in terms of facilitating relaxation, providing pleasurable experiences and satisfying potentially frantic desires. The consumption of alcohol and tobacco also facilitate social interaction and assist with being 'cool' and fashionable" (Clark, 2005: p. 1356). Moreover, Clark (2016) explains that many philosophers would argue that even if an individual values a negative

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[25] The essential capabilities listed are: 1) life, 2) bodily health, 3) bodily integrity, 4) senses, imagination and thought, 5) emotions, 6) practical reason, 7) affiliation, 8) other species, 9) play, and 10) control over one's environment.

capability, he or she would not have "a legitimate or sufficient reason to value it following reasonable discussion"; however, the danger of this approach is that it has the potential to bring paternalism to the fore, something that Sen certainly would not want to be a part of. Essentially, according to Clark (2016): "any realistic/practical account of the good [life] may need to include some less virtuous functionings and capabilities". The incorporation of these elements can have significant implications, as it could potentially *expand the reach of the capability approach to understand additional problems that are a primary concern in developing countries*, such as crime. The present study argues that the inclusion of less virtuous elements in a capability framework with a list of pre-defined items to understand a good life would be insightful in the study of insecurity and crime.

2.4.1 Empirical Evidence

Now that the theoretical frameworks from the fields of sociology and criminology have been discussed, the present section looks at empirical evidence based on these theoretical underpinnings. The first part of this section looks at what people consider part of a good life. This evidence - largely the field of development - is not exhaustive; rather, it is presented to illustrate how data on this subject has been collected, in addition to some of its key findings. The second part of the empirical literature looks at evidence linking crime and unfulfilled aspirations - work mostly concentrated in the fields of sociology and criminology - and concludes with the few existing empirical studies that have focused on understanding the aspirations of incarcerated populations.

The literature exploring what individuals consider constitutes a good life has seen ground-breaking research, beginning with the work of Clark (2002) and Narayan, Patel, Schafft, Rademacher, and Koch-Schulte (1999a). Clark is inspired by the capability approach to development and seeks to confront abstract lists of capabilities with the values, hopes and expectations of poor people themselves. His research looks at whether Sen and Nussbaum's intrinsically valuable capabilities correspond with what people directly consider to be a good life. According to Clark, a thorough literature review revealed no prior research that dealt specifically with how poor people perceive a good life (2002). His study therefore constitutes a pioneering effort in the field of development to better understand the conceptualisation of a good life through poor people's perspective. This study considered two communities in South Africa,[26] where Clark used a questionnaire asking participants to specify, in order of priority, the five most important aspects of a good life. He found that there was wide consensus as to the

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[26] Murraysburg and Wallacedene, a rural village and urban township, respectively.

important aspects of a good life and found that amongst his participants, the five most valuable aspects were: 1) jobs, 2) good housing, 3) education, 4) income, and 5) family. Access to jobs and good housing were mentioned by over half of participants and more than two fifths recognised the importance of an education (Clark, 2002: p.104). Most importantly, he finds that the first two of the top four items are not included in Nussbaum or Sen's list of intrinsically valuable capabilities, which represents a striking omission (2002).

In a study including populations from 50 countries, Narayan et al. (1999a) explored how poor people understood and defined poverty and wellbeing. The authors used participatory poverty assessments, a research process that seeks to understand poverty from the perspective of a variety of actors and to involve them in planning measures for poverty alleviation. The authors used "open-ended methods, such as unstructured interviews, discussion groups, and a variety of visual methods" to carry out their study (1999a: p.16). They found that the poorest participants cited basic characteristics in their understanding of poverty, such as hunger, insufficient quantity of food, poor living conditions and health complications. This was followed by the inability to provide for children and to maintain social traditions that were once enjoyable (1999a). Wellbeing on the other hand was understood by the poor as having freedom of choice and action, security, good social relations, enough for a good life, and physical well-being (Narayan et al., 1999b).

The literature addressed suggests that what people consider as part of a good life and their goals are not exclusively nor mainly pecuniary, as Merton's theory and IAT would suggest. Instead, monetary wealth constitutes an avenue for the achievement of some of these goals, such as good housing and providing for families. Wealth itself does not directly seem to constitute an aspect of the good life. Despite these valuable findings, one important limitation of the development literature is that it has rarely used these concepts and frameworks to understand people's ideas of a good life and aspirations and to link them with crime and insecurity. Given that the latter constitute evident problems in the developing world, especially in the Latin American region (see **Figure 1.1**), and given that there is ample empirical evidence of an association between crime and unfulfilled aspirations, this omission is surprising. The next paragraphs will address the evidence from the field of criminology that have looked at unfulfilled aspirations and crime and the main limitations of this literature.

A large part of the criminology literature exploring this association has focused on specific aspects of the aspirational framework, usually economic in nature (for example, Farnworth & Leiber 1989; Agnew et al., 1996) and found some evidence of a positive association between expectations and delinquency. For example, the study by Farnworth and Leiber (1989), which looked at economic aspirations, found that the failure to achieve monetary

goals in combination with low educational expectations, was a significant predictor of delinquency.

For the most part, however, these studies have rarely sought to better understand people's aspirations and have largely excluded more serious forms of crime in their samples. Farnworth and Leiber's study (1989) was limited to young participants and used self-reported delinquency (participants are less likely to admit crimes that are more serious). In a study of post-secondary educational aspirations amongst Latino, gang-affiliated youth in San Francisco by van Dommelen-Gonzalez, Deardorff, Herd, and Minnis (2015) found that having close friends who plan to attend a 4-year college was associated with lower odds of risky behaviour, but considered only frequent marijuana and alcohol use. In a study by Agnew et al. (1996) examining the influence of economic dissatisfaction and frustration on criminal behaviour, the authors relied on self-reported measures of delinquency and only 30 percent of the participants of the study engaged in at least one of the offenses they considered; the most frequent of which were illegal gambling, the theft of small things at work, not reporting income on tax returns, amongst other things. While this study contributes valuable evidence to support strain theory, it does not offer insights as to whether economic dissatisfaction has the same effect on other, more serious forms of crime.

An additional shortcoming is that a large part of the literature reviewed, although insightful, was confined to developed countries –most notably the United States. A review of the literature revealed a few exceptions of interesting work in developing countries. For example, in a study of youth living in two slums in Nairobi, Kabiru, Mojola, Beguy, and Okigbo (2013) examined individuals' concerns, aspirations and expectations related to aspects such as education, career and residence. Their study revealed that the likelihood of delinquency increased when young people's aspirations exceeded their perceived expectations for achieving these goals. However, similarly to the literature on developed countries, it also focused on less serious forms of offending, limited in this case to carrying weapons, selling drugs or alcohol, and fighting with others.

A further limitation of the literature cited is that it has failed to incorporate institutionalised populations in its samples. In fact, there is a dearth of literature that seeks to understand the aspirations of former offenders, and most of the work with institutionalised populations available has been limited to the United States. In a study of offending populations, Inderbitzin (2007) starts from the idea that the aspirations of young offenders in the United States centre on the American Dream: wealth and status. Her study found that readjustment of aspirations –a process through which offenders are mentored by staff members of the detention centre to lower their aspirations or adjust them to be more realistic – prevented them from

committing crimes once they were released. Although this study represents one of the few attempts to study the aspirations of prison populations, it focuses more on how guiding these aspirations can reduce reoffending, rather than on understanding what these aspirations were, or whether perceived opportunity constraints played any role in their prior delinquent behaviour. In the case of Mexico specifically, *no work that has been carried out in penitentiary centres in the country focuses on the aspirations of inmates and whether these, in addition to the items considered to constitute a good life and perceived constraints to their access, have had any role in the development of criminal behaviour*. Part of the reason is the difficulty in the access to these populations, in addition to the risks of working with former offenders who still retain criminal connections. Another related issue is the inherent insecurity of prison environments and the pervasive corruption that exists at its centre, all issues that will be addressed further in **Chapter 4**.

As some of the literature reviewed suggests, some young people turn to delinquency to fulfil aspirations or to deal with the strain caused by a discrepancy between aspiration and perceived opportunities. Merton's (1938, 1957) seminal work on social structures and anomie, and Agnew's (1992) work on general strain theory, both mentioned in this chapter, provide a useful framework for understanding crime in environments characterized by limited means to achieve aspirations. However, multiple problems exist with the operationalization of the concept of strain in the literature, and as the review of the empirical evidence shows, the focus on very limited forms of strain such as educational expectations, to explain delinquency, fall short of predicting more serious types of crimes amongst young individuals. They are also limited in that they do not seek a deeper understanding of individual aspirations, as for the most part, they assume homogenous aspirations that are pecuniary in nature. It is precisely this gap that the development literature can help fill.

The capability approach and other approaches to measure human well-being, including lists of needs and rights (Clark, 2014) provide a rich framework to understand whether there are similarities in what individuals believe constitutes a good life, and whether there are grounds to claim that there is a common aspirational framework. The capability approach and the literature addressed in development, however, have largely excluded less 'virtuous' elements and have not considered perceived opportunity constraints to explain crime. In sum, the fields of development and the sociological approach to crime complement each other: the first provides a framework to better understand what people consider part of a good life and their aspirations, and the second incorporates the concept of expectations and opportunity constraints that can be used for understanding crime, a prime concern of developing countries.

2.5 Attachment Theory: Family Environment

Bonds formed with others are part of human nature and early patterns of family attachment can provide important insights as to the shape of future attachment patterns in relationships (Goldstein, 2001; Yoder, Brisson, & López, 2016). According to Bowlby (1988), the earliest proponent of attachment theory, a positive and secure attachment develops when parents are accessible, reliable, and respond to a child's needs. Individuals who develop a secure attachment to their parents are more likely to develop positive emotional and psychological responses.

On the other hand, when a parent is not responsive or unreliable to the needs of the child, a disorganised attachment may be the end result (1988). The lack of care dedicated to children by their parents is manifested through *physical separation* (during early childhood), *disruption of communication*, *emotional disengagement,* and *signals of rejection or abandonment* in later life (during late childhood and early adulthood), all of which produce feelings of anxiety, anger and sadness (Cassidy & Shaver, 2008). In an early study of institutionalised children who had been deprived of maternal care, Bowlby (1944) found that they developed into individuals who lacked feelings, had superficial relationships and showed signs of hostile or antisocial inclinations, including delinquent behaviour. Bowlby concluded that "the provision of mothering is as important to a child's development as proper diet and nutrition" (2008: "Maternal Deprivation and the Origins of Attachment Theory," para. 3).

Bowlby's theory suggested that the bond between parents and children was an irreplaceable factor in the emotional development of the child (Cassidy & Shaver, 2008). But Bowlby was not alone in highlighting the importance of family factors to explain the developmental outcome of children. According to Hirschi's general theory of crime, positive attachment in the family serves as a protective factor against involvement in delinquency. Hirschi (1969) explained that when the bond between parents and children is strong, children tend less to participate in delinquent behaviour .

Although both theories are old, current studies from the field of criminology exploring the link between family factors and delinquency are heavily based on the work of Bowlby and Hirschi. The theories referred to still constitute useful frameworks, confirming the importance of the relationship between parents and children. Attachment theory explains how dysfunctional relationships, where the emotional needs of the child are not met, can often result in the development of negative behaviours, including delinquent acts. For operationalisation and measurement of variables to evaluate the quality of relationships between parents and children we turn to the empirical literature, which is developed below.

2.5.1 Empirical Evidence: Family Environment

The family environment has been one of the most intensely studied areas in the criminology literature. Because the empirical evidence is vast, the present review cannot summarize each individual contribution, but will limit itself to highlighting the main factors in the family environment associated to youth delinquency.

One of the factors explored in the literature in the family looks at the effect of *growing up in single-parent households*. Most studies agree that growing up with a single parent can have negative effects on children (for example, Gove & Crutchfield, 1982; Wells & Rankin, 1991). An early study focused on how negative characteristics of the family were associated to juvenile delinquency in Chicago and found that living in a single parent-household was associated with delinquent behaviour amongst boys (Gove & Crutchfield, 1982). A meta-analysis by Wells and Rankin (1991), in which the authors considered 50 published studies exploring the association between 'broken homes' and delinquency, found that the rate of minor offences for children from single-parent homes or in step-families tended to be 10 to 15 percent higher than for children from traditional families.

One of the problems with the literature looking at this association is the implicit blame that it places on mothers, as most children growing up in single-parent households were raised by women. Evidence indicates that it is overwhelmingly more common for fathers to abandon the household.[27] In the case of Mexico, a review of the literature did not find any studies that use a similar research design to explore if and how family factors have an impact on participation in organised crime. However, a related study on the effects of socioeconomic variables and crime in Mexico (but not specifically organised crime), found that amongst other factors, 'births to single mothers' as a percentage of the population' was positively associated to the number of offenders brought to court for homicide (Widner, Reyes-Loya, and Enomoto, 2011). According to the authors, "more births to single mothers represent a larger number of unwed fathers who may be more involved in drugs and criminal activity" (2011: p.610). They concluded that the factor 'births to single mothers as a percentage of the population' was positively associated with the number of offenders brought to court for homicide (2011), providing some evidence of a positive association between single-motherhood and serious delinquent behaviour in the Mexican context.

Other studies, instead, have found that relational factors (and not structural factors) in the family are more important in explaining delinquency and crime. In fact, there are multiple

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[27] Although one-parent families vary by gender, race, income and other variables, most of these families are headed by women: no more than 4% of families –irrespective of race, are headed by men (Hall, Walker, & Acock, 1995).

social determinants of delinquency, but parent-child attachments have often been found to be "the most influential" (Farrington, Coid, & Murray, 2009; Laub & Sampson, 1988). Yoder et al. (2016) found that the presence of negative characteristics in the father-child relationship may predict the beginning of delinquency; nevertheless, as youth move into adulthood, it may be that other factors play a bigger part in the maintenance of delinquent behaviour. According to Lamb (2010), the quality of the relationship between father and child is a stronger predictor of delinquency than, for example, the time spent with fathers, because the quality of the relationships has been found to constitute a better indicator of connection and attachment.

Strong evidence has also been found for the link between *violence in the household* and delinquency.[28] According to Vázquez Gonzalez (2003), children who have suffered abuse in the household have a higher likelihood of offending because they lack internal controls over behaviours that are not socially accepted. In a very early study, Bowlby (1944) researched the home environments and parent-child relationships of 44 children who had been institutionalised for theft. He found that in almost all of these cases, the participants had experienced "highly deviant parenting marked by parental violence and emotional abuse" (Cassidy & Shaver, 2008: "Maternal Deprivation and the Origins of Attachment Theory," para. 2). Another study with a similar design to the one in this research compared a sample of individuals in prison in the state of Connecticut, United States, with a sample of non-delinquents, in order to find the influence of personal variables on delinquency. The study found that the most important factor that set the two groups apart was the *presence of violence and abuse in the delinquents' households* (Lewis, Pincus, Lovely, Spitzer, & Moy, 1987). While some psychiatric differences between the two samples were in fact observable, the most important finding was that "a history of physical abuse and family violence distinguished the delinquents from the non-delinquents, and that physical abuse distinguished the more aggressive subjects in each group from their less aggressive peers" (1987: p. 750).

In Mexico, no studies were found connecting this factor with organised crime participation. Nevertheless, there is evidence indicating that violence in the household was pervasive amongst adolescent offenders in Mexico City in a series of interviews carried out by the journalist Julio Scherer (2013). However, no generalisations can be made from this evidence as it does not include a comparison population, where this phenomenon could also be present. Other work with offending populations in Mexico has also found evidence of strained relations

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[28] For example, according to the National Institute of Women (INMUJERES), 38.4% of Mexican women have experienced psychological violence (2003). On the other hand, data from INEGI (2011), indicated that 63% of women aged 15 and above had suffered at least one incidence of violence on behalf of their partners or other male figures.

with parents amongst offenders (Azaola 2012; 2016), but likewise, no comparison sample is provided to draw conclusions for the wider population.

Parents who had spent time in jail or were *involved in delinquency* were likewise found to be strong predictors of crime. According to Farrington et al., there is no doubt that "offending runs in families", as "criminal parents tend to have criminal children" (2009: p. 109). In an early study conducted in Denmark, Mednick, Moffitt, and Stack (1987) found an increased likelihood that children of convicted parents will be convicted for criminal offences, even if these children are adopted and do not grow up in an environment with the biological parents. In a study of the intergenerational transmission of offending across three generations, Farrington et al. (2009) conducted a longitudinal survey amongst more than 400 males in London and found that there was significant intergenerational transmission of offending from the first generation males to second generation males. They found that 63% of males with convicted fathers were themselves convicted, in comparison to only 33% of those with fathers without conviction (2009). Farrington, Barnes, and Lambert (1996) likewise found that half of all convictions were concentrated in just 23 families out of 397 families considered in the study.

In Mexico, a study by Nevárez-Sida, Constantino-Casas, and Castro-Ríos (2012) explored whether socioeconomic factors could explain drug consumption in Mexico. They looked at whether marginalisation in the childhood home and the presence of a childhood home shared with an adult who consumed drugs explained the use of drugs amongst study participants. Their results pointed to a positive association between being raised in a household with adults who used illicit drugs and the probability of participants using drugs during adulthood (2012), suggesting that children living in households in which at least one of the household members was involved in criminal activity may be more likely to engage in crime as well. Although plausible, there is no systematic evidence in Mexico to support this conjecture so far.

Despite these important insights, one of the shortcomings of the studies addressed is that they have explored the association between family environments and less serious offenses, which means that more serious forms of crimes have been omitted.[29] In addition, most of the research cited has taken place in the context of developed countries. In Latin America, not enough work has been carried out to understand the association between family factors and delinquency, although some exceptions exist. A World Bank study exploring youth deviant

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[29] For example, in the study by Gove and Crutchfield (1982), the son/daughter was coded as a delinquent if the parent affirmed that the subject in question had either: a) gotten into trouble with school officials, b) gotten into severe arguments or fights outside the home, c) had run away from home, d) if anyone had complained about the subject's behaviour, e) had done things leading to serious trouble, and/or f) gotten into trouble with the law. This definition of delinquency does not consider more serious crimes.

behaviour in Latin America found that young individuals who were violent in some countries of the region[30] presented higher levels of physical, psychological, and sexual abuse in their households (Cunningham et al., 2008). Nevertheless, the study did not focus on organised crime participation and although the study is tremendously insightful, it only provides a snapshot of at risk youth in the region.

In sum, there is evidence that both structural and relational factors play a role in the development of delinquent behaviour. However, the factors considered in this review of empirical evidence -such as growing up in single parent household or the presence of violence in the household, have been confined largely to studies in developed country contexts and for the most part, have excluded serious forms of criminality. Studies in Latin America provide initial evidence that violence in the household and being raised in a single parent household are associated to some forms of crime, but not enough evidence exists so far to understand organised crime participation and the family factors associated to it.

2.6 Subculture Theory: Community Environment

Having outlined the theory and empirical evidence on the family environment factors, this section provides a brief overview of theories that have informed the community environment factors, focusing mainly on the work of Albert Cohen's Theory of Subcultures. It will then present relevant empirical evidence, discussing studies in the fields of criminology and sociology that have looked at how deviant behaviour develops as a consequence of spending time with delinquent peers and gangs.

According to Albert Cohen's Theory of Subcultures, belonging to a determined social group can lead to the development and acceptance of values and norms that encourage certain behaviours (Wolfgang & Ferracuti, 1967). In some groups, there is a sub culture of violence organised around a particular life style values, socialization, processes, and relationships among individuals who share similar backgrounds and conditions (Ferracuti & Wolfgang, 1967: p.140). In these settings, violent behaviour is tolerated, has wide support, and is even encouraged (1967).

In *Contemporary Social Problems,* Albert Cohen and James Short propose that to understand motivations behind juvenile delinquency, it is important to consider first, that the behaviour of individuals is directed towards the "maintenance and enhancement of the self" (1963: p.98). This means that individuals select a mode of action depending on the option that is more likely to maintain or increase what the authors call a 'satisfactory self-judgment' (p.98).

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[30] These results are relevant to youth in Brazil, Chile and Honduras.

The self is often defined in terms of roles, and whether the set of standards that the individual adopts to fulfil the role is positive or negative depends on the *reference group* that is important to the individual.

Because a person does not value judgments from all sources equally, the reference group is constituted by those individuals whose opinion most matters to the person in question. This person's behaviour seeks to elicit favourable judgments from the reference group (p.102), and these groups are especially important when the person is 'morally ambiguous' (p.101). For example, if a young individual's reference group is constituted by the members of a gang, the self-judgment and the role that the person will fulfil is influenced by the standards set out by the gang. The individual will act to please the reference group because his/her self-judgment is partly – or largely – determined by acceptance of this particular group.

An analysis of working versus middle-class children carried out by Cohen revealed that working class-children are more likely to consider their peers as a reference group. Cohen argues that:

> …the working-class child is more dependent emotionally and for the satisfaction of many practical needs upon his relationships to his *peer* groups. He engages in more activities and spends more time in their company. [Furthermore]…satisfactory emotional relationships with his peers are likely to be more important, their claims to be more imperious, and the rewards they offer to compete more effectively with parental expectations [emphasis added] (1955: p.101).

Cohen explains that working and middle-class children are both measured against a set of standards emanating from the middle classes, such as the pursuit of ambition, possession of certain skills, subordination of immediate satisfactions for future rewards, among others. However, due to the differences in advantages between the two groups, the road for the development of these skills and values is more difficult for the children of the working-class families. The difficulty to meet middle-class standards among the latter group is often reflected in poor school performance, as children from this group tend to show comparatively worse academic results (Cohen, 1955: p.115). According to Troyer (1949), within this setting, the self-worth of children is extinguished, they develop feelings of insecurity, and lose confidence in their ability to learn, leading them eventually to drop out and spend time with individuals who have had similar experiences. According to Cohen, this group rebels against the imposed normative standards, leading to the formation of a subculture where middle-class values are 'turned upside down' (1955: p.129).

According to the theory of differential opportunity developed by Richard Cloward and Lloyd Ohlin, working-class youths will select a type of gang as an adjustment to the situation of *anomie*, or normlessness, depending on the availability of illegitimate opportunity structures in their neighbourhood (as cited in Hagan, 2011). Cloward and Ohlin view the pressure to join

delinquent subcultures as a consequence of the discrepancy between culturally defined aspirations and access to the latter through legal avenues, but they also stress the importance of the availability of illegitimate opportunities. They propose that in neighbourhoods with organised gangs, there is a higher possibility for moving upward in the 'illegal opportunity structure' (Hagan, 2011).

According to Decker and Van Winkle (1996), the reason for higher criminal activity in groups like gangs is that gang membership decreases the involvement of the individual in normal activities as well as contact with individuals that have little or no experience in criminality. This leads to a situation in which both individuals and institutions who can restrain criminal behaviour lose their influence. Along with increased contact with criminal peers, the result is increased criminality (1996). Recognizing that location and the opportunities present are important factors to consider, a location with a high presence of illegitimate opportunities has been purposefully selected for the fieldwork of this study[31] (more details are available in **Chapter 4**).

2.6.1 Empirical Evidence: Community Environment

Extensive work has been carried out (especially in the fields of sociology and criminology), to understand how the community environment drives individuals to embark on a delinquent path. One area of the literature has explored whether social capital and crime are associated. Using Robert Putnam's definition of social capital, of which trust and social participation constitute its most general forms, Rosenfeld, Baumer and Messner (2001) examine the relationship of social capital with homicide rates in the United States, finding that depleted social capital contributes to high levels of homicide. In a later study, Messner, Rosenfeld and Baumer (2004) model the relationships between several dimensions of social capital and homicide rates in the United States and find that of the components of social capital considered in their study, social trust and social activism have significant associations with homicide rates (negative and positive, respectively). According to Putnam, the connection that explains why the lack of social capital and crime are associated is partly that social networks allow for "the reinforcement of positive standards for youth" by providing them with access to positive role models (2000: p. 312). Where social capital is depleted, young individuals are left to fend for themselves, which increases the likelihood that they will act on "self-destructive impulses" (p.312). Moreover, Putnam explains, destructive social capital, which is the case of

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[31] Ciudad Juárez is a strategic location for drug trafficking due to its proximity to the United States border. The city is located a few miles from El Paso, Texas.

youth gangs, may be a response to the depletion of other forms of bonding and bridging social capital. As Messner et al. (2004), point out, the implications for crime are then clear, as young people commit crime not only because they are deprived, but also due to the breakdown of adult networks and institutions.

Ethnographic studies that have explored gang dynamics in depth have been particularly useful to understanding how participation in gangs can lead to serious forms of crime. There is incontrovertible evidence stemming from studies in the United States that have found that gang membership increases the likelihood of criminal participation. In fact, one of the defining characteristics of gangs according to researchers in the Eurogang network[32] is the presence of illegal activity, defined as law-violating, delinquent or criminal behaviour (Klein & Maxson, 2006).[33] According to Klein and Maxson (1989), in order to be defined as a gang, the group must be involved in illegal activity. The severity of offenses and the frequency with which they are committed in a gang varies; but most empirical studies in the United States agree that there is a higher involvement of gang members in violent acts in comparison to non-gang youths (Decker & Pyrooz, 2010: p. 135). According to Esbensen and Huizinga,

> ...one point of consensus in the voluminous gang literature is the high rate of criminal activity among gang members. Regardless of methodology and design, the consensus is that gang members commit all kinds of crimes [including violent crime] at a greater rate than do non-gang members (1993: p. 566-567).

A study by Esbensen and Huizinga (1993) revealed that 85% of male gang members reported involvement in street offenses (defined as serious crimes that take place on the street); for non-gang members, only 18% reported involvement in crimes of this nature. The authors also found that gang members were more likely to be involved in street offenses in the year in which they were part of gang, and correspondingly, they had lower levels of involvement before and after leaving the gang. This led them to conclude that "youths who have been gang members at some point in time, have higher prevalence rates for street offending than do youths who have never belonged to a gang" (Esbensen & Huizinga, 1993: p.577).

In a study of gang members in Rochester, Thornberry et al. (2003) also found that gang members had significantly higher rates of participation in delinquent acts than those who were not members, confirming results from earlier studies. According to the authors: "because gangs clearly connote groups that have a deviant or criminal orientation, a strong relationship between gang membership and high rates of involvement in delinquency and drug use is hardly

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[32] Eurogang network is constituted by American and European researchers who work on the subject of youth gangs and other violent groups. The network has developed a definition of 'gang' that is acceptable to all members as well as a common framework for comparative research that is based on standardised methodological instruments (surveys) and a common research design (University of Missouri, 2016).
[33] Hagedorn & Macon (1988) and Moore (1991) both argue that it is tautological to include involvement in crime in the definition of a gang, as crime is one the variables of study that is constant in gang analysis.

surprising" (2003: p. 96). The study by Thornberry et al. (2003) revealed that not only is gang membership important in explaining criminal behaviour, it is one of the most important factors in explaining it, even after controlling for variables such as family poverty level, parental supervision, commitment to school and association with delinquent peers, as well as prior general delinquency.[34]

In addition, there is some evidence in the Western literature on gangs that cooperation or direct involvement with organised crime is pervasive. Most of this information is derived from studies conducted in the United States, which find that the types of crimes linked to gang membership are in the form of drug sales and distribution. A study by Fagan (1989) found that gangs are disproportionately involved in drug distribution; and Taylor (1990) even suggested that youth gangs of the 90s established a national network to distribute drugs that is in some ways similar to the distribution of alcohol during Prohibition by the mafia. Esbensen and Huizinga (1993) found that gang members in Denver were involved more in all types of delinquency, *including drug sales*, than those who did not belong to a gang. Nevertheless, the study found no evidence that the sale of drugs was organised, in the sense that it involved all gang members; rather it was an individual activity.

A study of a Puerto Rican youth gang in Chicago conducted by Padilla (1992) also found that drug dealing was the main activity of the gang, and that numerous gang members referred to this activity as 'work', in the same way they referred to formal and legitimate jobs. In a study conducted by Thornberry et al. (2003), the authors found additional evidence to support greater involvement in the sale of drugs amongst individuals that belong to gangs, concluding that "it is extremely rare for gang members to become involved in drug sales prior to joining a gang" (p.111). They found that drug sales increase markedly during the first year of gang membership and that active gang members exhibit rates of drug sales that are higher than those who do not belong to a gang.

Outside of the United States, other studies have found evidence of links between gangs and organised crime. Pitts (2011) establishes that globalisation has changed the business model of how organised crime operates in cities like London, and youth gangs have been incorporated into their model, producing a blurring of lines in the boundaries between gangs and organised crime (Densley, 2013). Gangs evolve through several stages,[35] and once they achieve their 'highest stage of development', the danger is that "they come to resemble not just 'crime that is organised' but something altogether more sinister and difficult to deter: 'organised crime' "

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[34] According to Thornberry et al. (2003), these last two are the strongest predictors of delinquent behaviour.
[35] The stages are recreation, crime, enterprise and governance (Densley, 2013).

(Densley, 2013: p.66).

According to Pitts (2011), drug dealing is the major occupation of gangs in London, and for Aldridge and Medina (2008), a great proportion of gang members in London were involved in dealing drugs. According to a freedom of information request to the Metropolitan Police Service (2012), around 80% of London's 250 gangs participate in drug dealing, and individuals with ties to gangs are estimated to be responsible for around 16% of London's drug supply. Although illustrative, the knowledge we have on gangs and the types of delinquent behaviours that are engaged in them have been informed by an almost exclusively Western perspective. Our understanding, and consequently, the policies that have been enacted to deal with gangs are unsuited and fall short in the Latin American context. In Mexico, for example, less is known about gangs and the extent to which they participate in violent crimes and in organised crime through the sale of drugs.

According to Decker and Pyrooz (2010), it is a well-known fact that many countries in the Latin American region have a problem with gang violence and high rates of violent crime (especially homicide), but the specific proportion of violence that can be blamed on gangs is not well understood. For example, the only two countries in the Latin American region where public opinion considers gangs a widespread problem are Guatemala and El Salvador (Balcázar Villarreal, Cunjama López, Rendón Cárdenas & Iñiguez Ramos, 2012). For Mexico, only 0.1% of participants of the Latin American Public Opinion Poll (LAPOP) survey identified gangs as the main problem contributing to public insecurity (Americas Barometer, 2012). A report by Decker and Pyrooz indicates that gang problems in Mexico can be attributed more to the drug and weapons trade than to the imitation of gangs from the United States (2010),[36] and in contrast to youth gangs in London, gangs and organised crime in Mexico are separate phenomena.

According to the sociologist Francisco Gomezjara (1983), there are four historical moments in the development of gangs in Mexico; and during the first three, these groups were *not* linked to extreme violence or to high impact criminality. According to Balcázar Villarreal et al. (2012), extreme violence has historically *been avoided* in Mexican gangs, and despite international influence, several cultural components of Mexican gangs have prevailed over traditional practices that characterise gangs in other countries, especially those prohibiting the use of extreme violence as an organizational resource. For this reason, gangs in Mexico have never constituted a real threat to the stability of the country (like in Central America) or to public security (as in the United States throughout the 90s) (2012).

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[36] This has been observed in El Salvador, where gangs that have taken root there are constituted by Salvadorians who are former offenders deported from the United States, and who have brought with them a gang culture that they have spread in their country of origin.

It is only in the fourth historical moment, beginning in the early 90s and continuing to the present day, that the social dynamics of gangs have left behind their traditional logic, and some have transformed themselves into high impact criminal groups (Balcázar Villarreal et al., 2012). Instances of cooperation between gangs and organised crime – although not the norm – occur mainly in locations at the border with the United States (2012), such as the case of Ciudad Juárez, where gangs like *Los Mexicles*, *Artistas Asesinos* and *Los Aztecas*,[37] have established networks of cooperation with criminal organisations, participating in activities that include human, drug, and arms trafficking (Balcázar Villarreal et al., 2012). According to the National Drug Threat Assessment (United States Department of Justice, 2011), these gangs have served as the main link between drug trafficking organisations in Mexico and the United States. In addition, these groups have been used by organised crime to execute a series of crimes including extortion, kidnapping, car theft, and homicide (2012).[38] Nevertheless, these cases are exceptional, as most gangs in Mexico do not cooperate with organised crime. Cunjama López explains that most gangs in Mexico are often the result of young people who spend time together without any clear objective "beyond forming a group that reinforces identities and bonds of affection" (2014: p.17). He explains that these individuals get together because they live in close proximity to one another. This does not mean that young people in gangs have not committed crimes at all; but this in "no way resembles maintaining an organisation that systematically uses violence as a way of living and as a way of group survival" (2014: p.26).

Despite this initial (and somewhat mixed) evidence, not enough work has been conducted on gangs in Mexico to understand how gang dynamics contribute to the development of a deviant identity, the nature of gang activities, and how many are involved with organised crime,[39] nor how deep their involvement is. According to Cunjama López, the lack of knowledge on the dynamic of gangs in Mexico is due in large part to the lack of official data,[40]

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[37] According to this report, one of the first links between organised crime and gangs in Mexico was between Barrio Azteca and the Juárez organisation (Balcázar Villarreal, Cunjama López, Rendón Cárdenas, & Iñiguez Ramos, 2012). Barrio Azteca was born as a unified response from Mexicans who needed protection against other violent gangs that were operating in prison in El Paso, Texas (2012). According to the National Drug Threat Assessment, the Juárez organisation uses the Barrio Azteca gang to transport and distribute cocaine and methamphetamines in the United States, as well as to traffic arms (United States Department of Justice, 2011). According to Balcázar Villarreal et al. (2012) there are between 300 and 500 gangs operating in Ciudad Juárez. Of these, *Artistas Asesinos*, *Los Aztecas* and *Mexicles* are the gangs with most members. According to this report, *Los Aztecas* cooperate with the Juárez organisation, and *Mexicles* work with the Sinaloa organisation.

[38] A document obtained from a government source found that although there are presumably 36 delinquent cells in the country that cooperate with organised crime, only four of these are classified as gangs. All four operate in the state of Chihuahua, where Ciudad Juárez is located.

[39] According to Balcázar Villarreal et al. (2012), no statistical data is available to indicate how many young people involved in delinquent acts belong to a gang.

[40] According to Cunjama López (2014), there is no institutional data on the number of gangs in the country, the number of participants, their dynamic and their relation to violence.

and overall, to the absence of serious studies on this subject matter (2014). Although there is fragmentary evidence of cooperation between a handful of gangs and organised criminal groups, the necessary empirical evidence to indicate the scope of cooperation with organised crime is lacking. Part of the reason for the dearth of information relies in the difficulty of conducting field research with active gang members, but also in the indifference of Mexican authorities to provide resources that will allow a deeper exploration of this subject. As a result, the connections between these two groups are not yet well documented or understood and further work is pressing, especially if it is found that incursion into a gang constitutes a possible gateway into formal participation with organised crime. So far, our understanding of gangs has been shaped by the knowledge produced in the United States, when initial evidence points to important differences. As Densley points out gang life as we understand it currently was born in America, but "so too is our knowledge about it" (Densley, 2013: p.3).

In sum, there is incontrovertible evidence that gang members are involved in criminal acts and cooperate or are directly involved with organised criminal groups in developed country settings, mainly in the United Kingdom and the United States. However, gangs and the extent of their cooperation with organised criminal groups is far from being properly understood in the Mexican context. Although some evidence exists of increasing cooperation between these two, gangs have historically not been associated with violent criminality.

2.7 Poverty, Inequality and Crime

A review of the literature shows that there is an abundance of work that has addressed the link between poverty and crime, but the findings signal that the effects on crime are mixed. A handful of studies have found, for example, that inequality is a better explanatory factor for crime than poverty. An early study in the United States tested variations in rates of urban criminal violence with reference to racial inequality, and found that the differences in criminality could be attributed to inequality and poverty. Blau and Blau found that income inequality, measured with the Gini index, substantially increased the metropolitan area's rate of criminal violence, but that once inequality was controlled for, the relationship between poverty and violence disappeared (1982). According to the authors, relative deprivation (which is a product of high inequality), rather than absolute deprivation (which is a product of high poverty), provides 'the most fertile soil for criminal violence' (Blau & Blau, 1982: p. 122).

According to a study on Mexico, inequality has played an important role in the rise of violence in the country (Enamorado, López-Calva, Rodríguez-Castelán, & Winkler, 2014). Enamorado et al. (2014) show that an increase of one unit in the Gini coefficient translated into

more than four additional deaths in the population per 100,000 individuals in Mexico. Their study also found that if the focus was solely on drug-related crimes, an increase in one unit in the Gini coefficient would translate into an increase of more than 10 drug-related homicides per 100,000 of the population in the period spanning from 2006 to 2010 (Enamorado et al., 2014). In a study including 41 countries from South and Central America and OECD members, Nandovsky and Cunha-Cruz (2009) evaluated the contribution of income inequality (measured through the Gini index) and impunity (measured through imprisonment) on homicide rates, finding that both low inequality and low impunity (meaning a high imprisonment of criminals) were related to low homicide rates (2009).

On the other hand, in a cross-national study including 46 countries, which tested the association between poverty and homicide controlling for several covariates (including inequality), Pridemore found a "positive and significant association between a nation's level of poverty and homicide rate" (Pridemore, 2008: p. 133). However, the author also found that the inequality-homicide association practically disappeared when including poverty in the explanatory model for violence. Pridemore concluded that it may be necessary to revaluate the strong conclusion of a strong association between inequality and homicide (Pridemore, 2008).

In sum, not all the findings considering poverty and inequality agree unanimously on their effects on violent crime, with some studies suggesting the effect of poverty and others suggesting inequality as a better explanatory factor. However, these studies have either focused exclusively on inequality and failed to consider poverty (Enamorado et al., 2014), or have relied on a very narrow definition of the concept of poverty, often conflating poverty with income. For example, Blau and Blau (1982) considered income poverty by taking into account family size and farm-nonfarm residence in their study, and Pridemore (2008) used the rate of infant mortality as a proxy for poverty. In a comparative analysis of several Latin American countries and changes in trends of violence over the twenty-first century, Briceño de León (2012) found that poverty and inequality influence homicide rates. Poverty in this study was measured as the percentage of the population living under the poverty line. In sum, none of the reviewed studies were using a multidimensional definition of poverty, and the existing studies yield conflicting, sometimes even contradictory results, calling for research that uses more refined tools in the measurement of poverty.

2.7.1 Poverty and Incarceration in Mexico

In Mexico, not enough attention has been attributed to exploring the association between crime and the different indicators of multidimensional poverty. This can partly be attributed to

the fact that the adoption of a national multidimensional poverty index, the M-MPI (Mexico-Multidimensional Poverty Index), is fairly recent, and there are flaws in the coverage of the data. Although indicators for the construction of M-MPI are obtained through census data, the census traditionally excludes institutionalised populations, which means that our understanding of multidimensional poverty of incarcerated populations is practically non-existent. Furthermore, a direct assessment of the dimensions of poverty experienced by perpetrators of crime has not accompanied any of the studies investigating poverty, inequality and crime, partly because access to incarcerated populations is restricted, and where it has been achieved, the focus has been on standard socioeconomic indicators, such as educational achievement and prior employment.

In a study covering eight federal detention centres[41] in Mexico, Azaola and Pérez Correa (2012) found that almost three quarters of the sample of inmates in the federal detention centres analysed in the study had a secondary school education or less and only 2.5% of the sample had completed a bachelor's degree. In terms of employment, the highest percentage were self-employed (possibly in the informal sector), followed by taxi drivers and traders (*comerciante*). The weekly income prior to incarceration for three quarters of males serving time in these federal detention centres working in these and other jobs was between MXN $60.00 and $3,000.00 (GBP £2.38 and £119.00) (2012).

In an additional study of the prison population in the state of Quintana Roo, located in the Southern border of Mexico, Maribel Cortes (2014) found similar results. The author found that roughly 50% of the prison population in the penitentiary centre of Chetumal had a primary school education. In terms of the parents' occupation (another variable to evaluate the socio-economic standing of the offenders), the majority mentioned that they either worked in the fields or in construction. The participants usually also came from large families, an important indicator illustrating the degree of deprivation, as families with a better socio-economic standing tend to have lower fertility rates (Cortes, 2014).

A review of the literature on prison populations found that although this work has been illustrative in providing an overview of the socio-economic background of inmates in several areas of the country, these efforts have been scarce, and their main objective has not been to link poverty with crime rather, they have pointed out that incarceration affects the poor disproportionately. In addition, the study by Azaola and Pérez Correa (2012) covered eight federal penitentiary centres, but was not representative of local penitentiary centres, which

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[41] In Mexico, there are three types of prisons: federal, state and municipal. Federal prisons are fewer in number and house inmates being processed or sentenced for federal offenses.

concentrate the largest percentage of prison population in the country.[42] This means that generalisations of incarcerated populations at the national level cannot be sustained. Moreover, although the information collected through the two studies cited is an important contribution, it does not consider other dimensions of poverty used in the national M-MPI.

Having reviewed the theories that frame this thesis and the relevant empirical evidence exploring the contribution of individual, micro and macro level factors to criminality, the next chapter will provide a brief historical overview of organised crime in Mexico to familiarise the reader with the Mexican context before presenting the methods of the study and the findings.

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[42] In 2012, there were 420 penitentiary centres, of which 15 were federal, and 405 were local (Mexico Evalúa, 2013).

Chapter 3. A Brief Historical Overview of Organised Crime in Mexico

La policía te está extorsionando (dinero),
Pero ellos viven de lo que tú estás pagando.
Y si te tratan como un delincuente (ladrón),
No es tu culpa, dale gracias al regente.

Hay que arrancar el problema de raíz,
Y cambiar al gobierno de nuestro país.
A la gente que está en la burocracia,
A esa gente que le gustan las migajas.

Yo por eso me quejo y me quejo.
Porque aquí es donde vivo,
Yo ya no soy un pendejo,
Que no guacha los puestos de gobierno,
Hay personas, que se están enriqueciendo.

-Lyrics by Molotov (1997), "Gimme tha Power"

3.1 Introduction

Two main factors explain the development and expansion of organised criminal groups involved in the drug trade and other high impact crimes in Mexico. The first, is the country's complicated relationship with the United States and the fact that its population accounts for the largest demand for illegal drugs in comparison to any other country (UNODC, 2014).[43] The second is the direct involvement of the Mexican government in the expansion of the drug trade and the consequent proliferation of these groups. Using secondary sources, this chapter will first provide a brief description of the organised criminal groups operating in the country. This will be followed by a brief historical overview with evidence of cooperation between government officials and organised criminal groups in Mexico managing the drug trade throughout the twentieth century to the present day. The specific case of Juárez will be briefly addressed. Its purpose is for readers to gain an understanding of the broader context of organised crime in Mexico.

3.2 Conceptual Considerations

Academics in Mexico refuse to use the term 'cartel' to refer to the groups involved in drug trafficking in the country. For Luis Astorga (2005), a sociologist who has worked extensively on the drug trade in Mexico, a cartel is defined as the horizontal concentration of corporations of the same nature, which carry out common activities and which usually develop into a monopoly. What is witnessed in Mexico instead, is the existence of approximately seven rival organised criminal groups (discussed further on in this chapter) that operate in the

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[43] In 2014, the annual prevalence of cocaine use (as a % of the population aged 15-64) in the United States was 2.1%; it was only exceeded that year (based on available data) by the United Kingdom, which had a prevalence of cocaine use amongst 2.4% of its population (UNODC, 2014).

distribution of drugs and a host of other crimes in certain territories, which are often disputed and where authority is rarely wielded in an absolute or permanent manner (Astorga, 2005).[44]

Multiple sources prefer instead to use the term drug trafficking organisations (DTOs) to refer to these groups.[45] According to Astorga (2005), the term *narcotraficante*, or narco-trafficker, appeared in the 1950s and became widespread from the 1970s. The term includes the diverse social agents related to the cultivation, processing, consumption and trafficking of prohibited pharmaceuticals (2005). However, because drug trafficking organisations have expanded the array of criminal activities they are engaged in, they will be referred to as *organised criminal groups,* or *organised crime*. Specific 'cartels' will be referred to as *organisations* (for example, the term 'Sinaloa cartel' will *not* be used; instead, it will be referred to as the Sinaloa organisation).

The term *government officials* will refer to public servants serving in any fashion. Although government officials tend to be perceived by the public as a monolithic entity, they are not. There are important distinctions to be made in terms of attributions and responsibilities, and certainly not all public servants have been complicit in the drug trade. Although these differences are acknowledged and recognised, different (and many) government entities have been involved in drug trafficking, as will be discussed throughout this chapter. The use of the term 'government officials' when *unspecified,* will refer to public servants in general, and could include police officers,[46] agency officials related to the enforcement of security and justice,[47] and politicians.

Lastly, in every book, news story or article on organised crime in Mexico that has been reviewed, no author has refrained from using the characteristic nicknames that participants of organised crime participants operate with. It is interesting that while we don't let organised criminal organisations get away with calling themselves 'cartels' due to conceptual issues (i.e. a mismatch between the definition of what a cartel is and the role played out by these groups in reality in Mexico), they are allowed to use nicknames that authors, journalists, and even academics, are not shy to repeat. This trend serves to solidify myths of the men who participate in the drug trade, myths that have become dangerous amongst young children who are already

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[44] In an interview for Time magazine, Gilberto Orejuela, a former leader of the Cali cartel in Colombia (one of the most well-known organised criminal groups operating in the 1980s and 1990s), made the shrewd observation that cartels don't exist (Astorga, 2016). The Cali cartel is not real, explained Orejuela, but merely an invention of the United States Drug Enforcement Agency (DEA), and although the drug agency knows it, "it is easier to come up with a monolithic enemy" (2016: loc.146).

[45] See for example, Jones (2016).

[46] Mexico has three main types of police: municipal, state, and federal.

[47] Including the Federal Secretariat of Security (DFS), which no longer exists, the National Centre of Research and Security (CISEN), the Secretariat of Public Security (SSP), now renamed as the National Security Commission (CNS), and the Federal Agency of Investigation (AFI), to name a few.

declaring that they aspire to be *narcos,* or narcotics-traffickers, when they grow up (Castillo-Castro, forthcoming). How have we allowed their influence and power to reach the level of dominating the very language that we use to refer to them? As the use of their nicknames contributes to the glorification and consolidation of the individual criminal, their use throughout this thesis will be avoided (e.g. Joaquín Guzmán will not be referred to as *El Chapo*, or 'Shorty' as he is informally known).

3.3 Organised Criminal Groups Operating in Mexico

The birthplace of contemporary organised crime was the state of Sinaloa. However, the first generation of large scale traffickers were known as the Guadalajara group because traffickers were operationally based in this city, in the state of Jalisco (Hernández, 2013). This group included notorious names such as Juan José Esparragoza, Ernesto Fonseca Carrillo (godfather of Amado Carrillo Fuentes, who later became the head of the Juárez organisation), Manuel Salcido, and Miguel Ángel Félix Gallardo. The second generation of traffickers is composed by the main organised criminal groups operating in the country today. They wield control over specific strategic territories to various degrees, as some of these groups have suffered divisions and internal fissures that have reduced their former influence. Currently, there are approximately seven organisations that have gained strongholds in different areas of the country. They will be briefly discussed below and are illustrated in **Figure 3.2**.

The **_Sinaloa organisation_** is perhaps the most well-known name in the contemporary literature on drug trafficking in Latin America. According to Astorga (2005), the group from Sinaloa has occupied a hegemonic position in drug trafficking since World War II, but more visibly since the 1970s. Although the state of Sinaloa does not share a border with the United States, traffickers from the state have managed to "control the most number of production areas, routes and border sites to transport drugs to the United States through their own organisations, and to charge commissions to traffickers from other parts of Mexico and South America" (Astorga, 2016: loc. 158). Their superior position *vis-à-vis* other trafficking organisations has only been contested during the Carlos Salinas de Gortari administration (1988-1994) (2005), where the group from Tamaulipas, now known as the Gulf organisation, wielded the most power.

The current leader of the Sinaloa organisation, *Joaquín Guzmán*, gained notoriety when he was arrested in 1993 and charged with the murder of the archbishop of Guadalajara, Juan Jesús Posadas Ocampo. Guzmán was sent to Puente Grande prison in Mexico City, where he, along with Hector Palma and Arturo Martínez Herrera (also notorious drug traffickers), wielded

absolute control over the prison. Guzmán continued to run drug operations from within the prison with the help of his distant cousins, the Beltrán Leyva brothers, until Guzmán's escape in 2001, which according to official versions, took place in a laundry cart (I guess Salvador Dali was right when he said that Mexico is the most surreal place on Earth). In *Narco Land,* the investigative journalist Anabel Hernández presents compelling evidence on how it was impossible for these events to have taken place, as the Puente Grande prison is surrounded with heat sensors, reason for which Guzmán's presence inside a laundry basket would have set off alarms. According to Hernández (2013), Guzmán's escape can only be explained by full complicity and support from the authorities (but more on that later).

Guzmán's *first* escape from prison in January 2001 (because he escaped on more than one occasion) occurred when the first National Action Party (PAN) candidate for president, Vicente Fox, began his administration.[48] After his first escape, one of Guzman's first actions was to bring together the Juárez and Sinaloa organisations. To increase his influence and destroy his competitors, he sought to eliminate the Tijuana organisation,[49] which was operating in the north-west border of Mexico with the United States, followed by the Gulf organisation, which operated in the north-east of Mexico. These tasks were to be carried out under a grandiose umbrella group uniting the Juárez and Sinaloa organisations and baptised by the DEA of the United States as *La Federación*, or the Federation (Hernández, 2013).

The ***Juárez organisation***, allied to the Sinaloa organisation under *La Federación*, was second in influence in drug trafficking due to its strategic location on the United States-Mexico border. It was once headed by *Amado Carrillo Fuentes*, 'Lord of the Skies', a nickname that he earned due to the fleet of Cessna airplanes at his disposal to traffic drugs across the border into the United States. Amado died in a botched plastic surgery operation in 1997, leaving his brother, Vicente Carrillo Fuentes in charge of the group's operations. Even though the Sinaloa and Juárez groups wielded unparalleled control over the most strategic routes of trafficking in Mexico, and although trafficking operations were unified in sixteen Mexican states representing more than half of the country (Hernández, 2013)*, La Federación* was very short lived.

The breakup of *La Federación* meant that two groups that were formerly cooperating in the drug trade turned into fierce rivals. Two large blocks of drug traffickers therefore emerged in Mexico: The Sinaloa organisation, headed by Joaquín Guzman, and the ***Beltrán Leyva organisation***, which was united with the Juárez and Gulf organisations. The *Beltrán Leyva*

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[48] Previously, Mexico had been ruled for seventy years by a single party, the Institutional Revolutionary Party (PRI).

[49] This organisation was largely decimated due to clashes between the Arellano Felix Organisation (AFO) and the criminal ring run by 'El Teo'. For this reason, the Tijuana organisation has not been considered in this section as one of the main organisations operating in the country.

brothers heading the organisation had had close ties to Joaquín Guzmán of the Sinaloa organisation, but had split from cooperating with the drug kingpin due to a power struggle. The carnage that was experienced in cities like Ciudad Juárez is explained by the rivalry between these groups (Sinaloa on one side, and Juárez with Beltrán Leyva on the other), who were fighting for control of strategic locations on the United States border, in particular, Ciudad Juárez. Although the Sinaloa organisation is the group with the largest swathes of territory under its control (Watt & Zepeda, 2012: p.217), its influence is limited largely to the western coastal states of Mexico[50] (Hernández, 2013) and does not reach the border states of Mexico (including the state of Chihuahua, where Ciudad Juárez is located), where most drug trafficking routes are located (see map below, **Figure 3.1**).

Figure 3.1 Map of Mexico

Source: Royalty free image from Free World Maps (2017)

Other groups, such as the ***Gulf organisation***, operate and control the states on the eastern part of Mexico. This group, led previously by *Osiel Cárdenas Guillén*, has in recent years fought with the Sinaloa organisation over influence in the central and northern-eastern states of the country. But the rivalry between the two groups is not the only threat faced by the Gulf organisation. ***Los Zetas***, the Gulf organisation's personal bodyguards and later fully constituted armed wing, were originally tasked with fighting off the attacks from *La Federaci*ón (Hernández, 2013). They separated from the Gulf organisation roughly in 2010 after 'internecine fighting' (Rayman, 2013), and are currently embroiled in an embittered battle against the Gulf and Sinaloa organisations.

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[50] Including the states of Durango, Jalisco, Nayarit, and Sinaloa.

Los Zetas were originally constituted by members of the Mexican army, some from the Special Forces Corps (GAFE) set up at the end of the 1990s to combat the drug trade (Hernández, 2013). These former soldiers, originally trained by special forces including Israeli and American forces, defected from the army and after falling out with the Gulf organisation, formed their own group. They are now in control of the southern state of Quintana Roo, have operations in Guatemala, and are fighting for control of the north-eastern states of Mexico. *Heriberto Lazcano*, leader of the group, belonged to the GAFE and was trained to carry out special and covert operations. Los Zetas became such a threat and their tactics have been so brutal that the Sinaloa and Gulf organisations, formerly rivals, signed a truce and set as their joint purpose the elimination of Los Zetas (Hernández, 2013). This has led to increases in violence in cities like Nuevo Laredo, which like Juárez, is also located on the border with the United States.

The last group worth mentioning is the ***Familia Michoacana organisation***, which controls the states of Michoacán, Mexico and Morelos. Although originally allied with the Gulf organisation, they split with the group in 2006. The group, notorious for its religious cult-like character, has also suffered from internal divisions. With the death of its leader, Nazario Moreno González, in 2014, the arrest of another leader, and the creation of a new group – ***Los Caballeros Templarios*** – the authority of the Familia Michoacana has waned (Pérez, 2015). Having summarised the main organised criminal groups operating in Mexico, the next section will provide a brief overview of the historical ties between organised criminal groups and government officials that allowed their flourishing.

Figure 3.2 Organised criminal groups and main figures

1st tier of the Guadalajara Group

2nd tier of the Guadalajara Group
*Juárez and Sinaloa later became the short-lived *La Federación*

Guadalajara Group

Juan José Esparragoza
Ernesto Fonseca Carrillo
Manuel Salcido
Miguel Angel Félix Gallardo

Gulf Organization
Juárez Organization
Sinaloa Organization

Los Zetas — Heriberto Lazcano — Miguel Angel Treviño
Juan García Abrego — Osiel Cárdenas Guillén — Arturo Guzmán Decena
Familia Michoacana — Nazario Moreno González — Caballeros Templarios

Rodolfo Carrillo Fuentes
Amado Carrillo Fuentes
Vicente Carrillo Fuentes

Joaquín Guzmán
Beltrán Leyva Brothers — Arturo Beltrán — Edgar Valdéz
Héctor Beltrán

Source: Author's elaboration.

3.4 Historical Overview

3.4.1 Twentieth Century

In *El siglo de las drogas*, Luis Astorga (2005) describes how cooperation of the Mexican state with drug trafficking has been visible since the beginning of the twentieth century. According to Astorga, who traces the history of the drug trade in the state of Sinaloa and Mexico City throughout the twentieth century, the use of drugs like opium (used mostly in the form of laudanum),[51] were quite common in the period between 1880 and 1910. Marijuana cigarettes and '*vinos con coca'*, or wines with coke, were also being produced and their use was widespread in Mexico City during this period (Astorga, 2005). As Astorga describes, it was common for these to be sold in *'boticas'*, or local pharmacies, and to be used for the treatment of ailments (2005). Because *boticas* sold drugs just like any other medicine, there were '*boticarios'*, those who worked in the pharmacies, who almost entirely focused on making a profit from their sale. According to an article in the security section of the newspaper *El Universal Gráfico*: "there were those, who in order to make their success more complete, got involved in politics" (Mancera, 1937, as cited in Astorga, 2016: loc. 35). Astorga describes that drug trafficking in this period was not born nor did it grow as a parallel or autonomous influence, rather it was structurally tied to politics, predominantly through the practice of

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[51] Laudanum was historically used to treat different ailments, but was mainly used as an analgesic and cough suppressant. It contains morphine and codeine and approximately 10% of powdered opium ("Laudanum," 2017).

compadrazgo, a very powerful form of kinship that is present in Latin America.[52] During these years, the complicity of public servants and police with drug traffickers, as well as accusations of protection of traffickers from the authorities themselves, were part of the scenery (2005).

By 1909, the Shanghai Conference had changed the discourse on drug use, calling for its regulation. In Mexico, Plutarco Elías Calles, president from 1924 to 1928, issued a decree establishing new regulations for the importation of opium, morphine, cocaine and other drugs (Watt & Zepeda, 2012). The decree prohibited importing opium prepared for smoking, marijuana in any of its forms, and heroin (Astorga, 2005). According to Mancera (1937), it is in the post-World War I period and the start of the Prohibition in the United States that the international drug mafia was born (as cited in Astorga, 2005), and Mexico became an important supplier of illegal goods to the avid consumers north of the country's border (Astorga, 2005; Osorno, 2010).

After World War II and the triumph of the Allied powers, the Federal Secretariat of Security (DFS) was created in Mexico. The DFS was an intelligence agency tasked with stopping the drug trade and preserving Mexico's stability against subversive acts, in particular, those associated to communism. Partially a creation of the Central Intelligence Agency (CIA) of the United States (Scott, 2000), the DFS allowed the drug trade to flourish in the years of its creation in return for aiding the United States government in its crusade against communism in Latin America (Hernández, 2013; Watt & Zepeda, 2012). The DFS during this period cracked down on peasant and student movements opposing political elites in Mexico, but also became widely known for its corruption and involvement in the drug trade. According to Watt and Zepeda: "The DFS and the CIA shared information on suspected subversives, and anti-narcotic operations were frequently used as a device for quelling social movements and justifying the repression of political adversaries" (2012: loc. 586). In addition, they mention that: "So long as the DFS acted as an enforcer of anti-left wing repression, minor issues like its control of the flow of narcotics into the United States were tolerated" (2012: loc. 608). Because the amounts of heroin and morphine in the United States were waning at the time due to the introduction of a government ban in Turkey, which was stopping the flow of opium to the United States (Watt & Zepeda, 2012), Mexico became the chief provider of these drugs for the American market (Astorga, 2005).

During this period, there is evidence of flourishing cooperation of the government with drug traffickers. For example, in 1954, Victor Hoyos, a young man belonging to a prominent

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[52] Defined as: "The reciprocal relationship or the social institution of such relationship existing between a godparent or godparents and the godchild and its parents in the Spanish-speaking world" (Merriam Webster, 2017a).

family in Ensenada, Baja California, a state in the North of Mexico, was captured by the Federal Bureau of Investigation (FBI) of the United States. He declared that the majority of pilots and almost all airplanes of the Mexican Air Force in the city were being used for drug trafficking within Mexican territory and for the United States. (Astorga, 2005). According to O'Neil (2009), the relationship between drug traffickers and the governing party, the Institutional Revolutionary Party (PRI), which had ruled Mexico from the end of the Revolution (and until the end of the twentieth century), had grown by the end of WWII. Their connection was organised by the Mexican Ministry of the Interior and the Federal Judicial Police (PJF), "reinforcing existing, government-established, patron-client relationships with drug traffickers" (Watt & Zepeda, 2012: loc. 1208).

By the 1970s, the Mexican government almost entirely controlled drug cultivation and transport, and hardly a consignment got through without the authorization of government bodies, including the Mexican army, the DFS, and the PJF (Hernández, 2013). According to an informant interviewed by Hernández, the highest levels of different government bodies in Mexico were well aware of what was happening. According to her informant, the Secretary of the Interior, the Secretary of Defence, the Attorney General, and even the President knew of these operations (2013). In fact, the activities of the drug trade were divided amongst the upper tiers of the state: The Mexican army was tasked with watching over plantations, the PJF was responsible for transporting the merchandise, and the DFS was in charge of keeping the traffickers in check. In exchange, the drug traffickers provided the federal government with a kind of 'tax', estimated at USD $60.00 (GBP £46.20) per kilogram, of which twenty were destined to the military leaders, twenty to the federal police chiefs, and the last twenty to the DFS (Hernández, 2013). The DFS also seized on opportunities provided by the uncovering of remote warehouses used to store narcotics to "run its own protection racket and take a substantial cut of the drug-trafficking profits" (Watt & Zepeda, 2012: loc. 843).

The decade of the 1980s brought about a new order in Mexico which had two important elements: 'moral renovation' and neoliberal reforms. The newly 'elected'[53] president Miguel de la Madrid, who governed from 1982 to 1988, called for an end to the import substitution industrialisation (ISI) model and began to pave the way for what can only be described as neoliberal shock therapy, *á la* Chicago Boys.[54] In the midst of the moral renovation, whereby the government would supposedly order a crackdown on corruption and abuse of power, the

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[53] The word 'elected' is used with scepticism because it is widely known that presidents in Mexico would hand pick their successors directly through a practice known as '*dedazo*', a term used to illustrate an election process in which the standing president would signal his successor by pointing a finger at him.
[54] Name used to describe orthodox economists that were brought in to 'save' the Chilean economy after general Augusto Pinochet ousted the Left wing president Salvador Allende.

old arrangements of 'paying taxes' between drug cartels and government officials were no longer in vogue: According to Hernández, this configuration led to "hefty bribes, enough to make the fortunes of politicians and businessmen overnight" (2013: loc. 1634). Reports about the connections between the DFS, the Secretariat of the Interior, and drug traffickers emerged, exposed by the investigative journalist, Manuel Buendía (Watt & Zepeda, 2012: p.84).[55] According to Astorga (2005), by the 1980s, the trafficking of illicit drugs was so large and so visible that it was practically impossible for large social groups not to be aware of the indivisible relation between the 'police corporations' and traffickers.

One of Hernández's sources explained that in this period "drug trafficking without government protection and government without the support of the drug traffickers wouldn't be able to do anything, they couldn't work. Both had to work together" (2013: loc. 2063). Throughout the administration of Carlos Salinas de Gortari (1988 to 1994), the president's own brother was in charge of drug trafficking: Raul Salinas de Gortari was paid for the right to work a territory and served as the intermediary between the government and organised crime (Hernández, 2013). The era of 'moral renovation' was therefore nothing more than a great irony, as cooperation between government and drug trafficking organisations became blatantly clear. The decade also witnessed a fraud in the 1988 elections,[56] and a significant financial crisis occurred at the end of the Salinas de Gortari administration in 1994. With disappointment amongst the general population and a freshly baked bailout fashioned by the International Monetary Fund (IMF) to respond to the so-called 'tequila crisis', a new PRI president was elected, but the party's hegemonic rule was close to its end.

3.4.2 'Democratic Transition': Fox and Calderón Eras

With the arrival of a new millennium, came Mexico's 'democratic transition'. For more than seventy years, the PRI had ruled the country practically uncontested. In the 2000 election, the candidate from the PAN, Vicente Fox, was declared victorious in the polls. People cheered and were jubilant following the news. Mexico was finally on the democratic path. But, was it? Given the financial crisis of the mid-1990s and the subsequent USD $50 billion bailout granted

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[55] Buendía was not the only one investigating these matters; in fact, the United States Drug Enforcement Agency (DEA) agent Enrique Camarena, was also busy compiling evidence to expose the links between organised crime and the political elite. This is perhaps what sealed his fate when he was kidnapped and murdered by people working for Miguel Ángel Felix Gallardo, one of the most renowned drug bosses of the time. Camarena's murder in 1985 placed an important strain on the relationship with the United States.

[56] This was the first time that a computer-assisted system was used to count ballots and it seemed that the PRI had a good chance of losing the presidential elections. The contesting candidate, Cuauhtémoc Cardenas, of Revolutionary Democratic Party (PRD) was about to win the election and finally, it seemed, displace the PRI from power. With the famous phrase 'se cayó el sistema' or 'the system shut down', the PRI candidate – Carlos Salinas de Gortari – was declared victorious after a supposed electronic malfunctioning of the system for counting votes.

to the Mexican government by the IMF (Vásquez, 2002), it is difficult to view the 'democratic' transition without a hint of scepticism. Was it not the case that in addition to deregulation, privatisation, fiscal reform and capital investment, one of the pillars of the Washington Consensus imposed by the IMF and the World Bank was democratic rule? It would seem coincidental that democratic change came about precisely in a period when the government had been granted a hefty amount by these international organisations to climb out of the crisis. Whether the transition was genuine or externally enforced, for everyday Mexicans, not much changed, and if it did, it did not exactly change for the better. In 2000, the year of the elections that oversaw the first PAN victory, 53% of the population in Mexico was still considered income poor (CONEVAL, 2014b).

According to Hernández (2013), the victory of the opposing party was thought to represent an end to the corrupt regime that was witnessed during the PRI years and it was expected that the grip of illegal drug trafficking organisations on the government would cease. But this was not the case. During Fox's term (2000 to 2006), it became evident that the old PRI structures were still in place and that collaboration between organised crime and the political elite continued. According to the United States anti-drug agency cited by Hernández, Fox had "received a bribe worth 40 million USD, in exchange for providing political protection for El Chapo's [Joaquin Guzmán's] escape," which took place in January 2001, when Fox was practically beginning his presidential term (2013: loc. 2822). Hernández continues:

> But Fox's alleged involvement didn't stop there. The DEA had direct reports from its informants infiltrated with Nacho Coronel [a notorious drug dealer working for the Sinaloa organisation], which stated that the Fox presidency had provided protection to Guzmán and the Sinaloa Cartel for the six years that he was in office (Hernández, 2013: loc. 2824).

The 'democratic transition' was far from the panacea that it promised to be,[57] and in 2006, year of elections, it seemed likely that the victory would go to the candidate of the centre-left Revolutionary Democratic Party (PRD), Andrés Manuel López Obrador (AMLO). Surprisingly, after the elections the candidate from the PAN, Felipe Calderón, was declared victorious at the polls by a very small margin (0.5 percent). AMLO supporters demanded a recount of votes (this election reeked of the fraud that had taken place in 1988), but the Federal Electoral Tribunal refused to meet their demands. In the midst of what was perceived to be a very questionable election (Osorno, 2010; Watt & Zepeda, 2012), Calderón needed to legitimise his government, and he did so by avidly and openly declaring the 'war on drugs'.

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[57] According to the Americas Barometer (2004), nearing the end of Fox's administration, 30% of Mexicans would justify a military coup if unemployment was high and 50% would justify a military coup when crime was high.

While it was assumed that the Calderón era would exterminate deeply entrenched corrupt practices, it primarily caused a spike in violent crime detonated by conflicts between rival criminal organisations fighting for control of strategic territory for drug smuggling as well as conflict between these groups and the Mexican Army, which had been officially tasked with their elimination. Despite a war that claimed more than 164,000 lives in the period from 2007 to 2014[58] (INEGI, 2017), there are hints at a continued policy of cooperation despite official government rhetoric against organised criminal groups.

One piece of evidence is that the PAN administration led by Calderón placed Genaro García Luna, a man so corrupt that he actually won a spot on Forbes' list of most corrupt Mexicans in 2013 (Estevez, 2013), as the head of the nation's Secretariat of Public Security (SSP). In a statement to a United States Court, Guillermo Ramírez Peyro, a key lieutenant associated to the Juárez criminal organisation, who was working undercover as a United States government informant for the Immigration and Customs Enforcement (ICE), (Conroy, 2015; Hernández, 2013), made it clear that all levels of Mexican police had ties to drug trafficking organisations, but of all the police forces, he signalled out the Federal Agency of Investigation (AFI) of Mexico as the most corrupt (Hernández, 2013). García Luna had headed the AFI for many years, an agency that was well known for covering the operations of drug traffickers. Specifically, there is evidence that *La Federación*, the umbrella organisation created by the Joaquin Guzman, which united the two most powerful organised criminal groups in Mexico (Sinaloa and Juárez), actually used the AFI to eliminate one of its principal rivals, the Gulf organisation. According to Hernández:

> From 2005, there is documentary evidence that the AFI began to operate fully as El Chapo's [Joaquín Guzman's] army. They were his official armed wing, his group of hired kidnappers and killers. The agency not only arrested El Chapo's enemies to order, while he was protected; they also formed death squads to capture, torture, and execute the Federation's adversaries (2013: loc. 3783).

One has to speculate on the reasons that García Luna was placed at the head of the SSP during Calderón's term, but what is known for sure is that García Luna left public office and is currently living comfortably in Miami. The proceeds of the drug trade obviously *do pay*, and after all, Miami is the perfect haven for retired drug traffickers and/or former politicians, although the title doesn't really matter in Mexico, as they have historically appeared to be one and the same.

According to Astorga (2016), for those who support the thesis that drug trafficking organizations in Mexico constitute a sort of 'parallel' power to the state, they would have to

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[58] This figure is a very rough estimate, partly because the Peña Nieto government no longer reports drug trafficking related executions (Watt & Zepeda, 2012).

explain how in a country characterized by its political centralism and a notorious presidential system, such an important area has escaped their control: when did this occur, or on the other hand, was this always the case? Astorga notes that all of the historical elements described in Mexico point to a fundamental and structural interdependence between institutions, social agents and drug traffickers (2016). Furthermore, he establishes that:

> From north to south, from border to border, from the beginning to the end of the century and the years of the new millennium, from governors to the presidential family; what has remained is the constant signs pointing to the relationship between political power, police authority or both, with the drug trade. On the basis of historical research, drug trafficking appears, from the beginning, as one of the many business opportunities that are possible due to political influence, but also subordinate to it (2016: loc. 172).

It is said to admit but perhaps Hernández is right when she writes that: "In Mexico, the world of traffickers and the police are quite similar. Maybe that's why they understand each other so well" (Hernández, 2010: loc. 263).

3.5 Organised Crime in Ciudad Juárez

Having summarised the historical development and the presence of organised criminal groups in Mexico, this section will briefly address organised crime in Ciudad Juárez. Juárez, perhaps more than other city in Mexico, has been profoundly affected by its proximity to, and its ambivalent relationship with, the United States. Specifically, the fortunes of Juárez have been affected by the events of its northern neighbour (Nash, 1979). For example, during the era of Prohibition, Juárez was a centre for the production and consumption of liquor, but also for other illegal activities such as gambling and prostitution (Martínez, 1978). After the legalisation of liquor in the United States and the onset of the Great Depression, economic ruin for the city ensued (1978). Following the post-war period, the Mexican government made its first attempt to integrate the city into the national economy by establishing an industrial base to remove the city's reliance on illicit activities. However, efforts to improve the city through building modern industry and infrastructure, mostly visible in the construction of *maquilas*, or assembly plants, left Juárez in a position of increasing dependency with the United States, as capital from this country exploited, and continues to exploit, the cheap labour provided by Mexican workers in the city (Schmidt, 1979).

Alongside the assembly plants, a pervasive environment of lawlessness in the city, a high concentration of unemployed youth who have historically organised themselves into gangs (see **Chapter 6**), and organised criminal activity under the auspices of the Juárez organisation has thrived. The Juárez organisation has relied on its ability to co-opt local and state law enforcement (as in other states of Mexico, as illustrated in the previous section), especially judicial and ministerial police, as well as the municipal police (InSight Crime, 2015), for

carrying out its criminal operations which are conducted in cooperation with local gangs operating on both sides of the United States-Mexico border. One of these gangs, *La Linea*, controls the transport of drugs from Mexico to the United States border and carries out street-level enforcement, while the gang *Los Aztecas,* manages operations on the side of the United States, in the cities of El Paso, Dallas and Austin (2015).

In the years of the Calderón administration (2006-2012), Juárez became the epicentre of organised criminal activity, and was considered the most dangerous city in the world in 2009. The fierce fighting with its principal rival – the Sinaloa organisation – explains the high levels of violence that the city has experienced. According to Sierra (2015), the social violence witnessed in Juárez is the result of the different expressions of organised crime which involve high impact crimes, such as extortion and kidnapping, but also homicide. As such, "Ciudad Juárez [today] has constituted itself as an empty space of legitimate law, as a [black] hole of justice" (Sierra, 2015: p.10).

Chapter 4. Research Methods

This chapter will describe the location and sampling method used in the study, consisting of a delinquent and a non-delinquent sample. It will begin by describing the location selection for the delinquent sample, followed by an explanation of why this research focused solely on a specific demographic group. This section will then discuss the sampling method used. For the non-delinquent sample, the location selected, along with some of its key demographic and social variables, will first be described. A justification for the choice of location will be provided, followed by the sampling method. Ethical considerations of the study will also be addressed in this chapter.

4.1 Delinquent Sample Selection

This study was carried out in Chihuahua, a state in the north of Mexico which has gained notoriety in past years for the violence that has particularly characterised one of its municipalities: Ciudad Juárez. The municipality is located on the United States-Mexico border and became a disputed territory between rival organised criminal groups fighting for prime locations for drug smuggling (see **Figure 3.1** and **Figure 4.1**).[59] In 2009, at the height of the 'war on drugs' declared by former president Felipe Calderón, it became the city with the highest homicide rate in the world, with 2,658 homicides in that year alone and with a rate of 191 homicides per 100,000 of the population (Ortega, 2010).

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[59] Ciudad Juárez is located 5 miles from the border city of El Paso, Texas.

Figure 4.1 Map of the United States-Mexico border

Source: Brown University, *Forgotten Histories of the U.S.-Mexico Border*, 2015

For the purposes of this research, two samples were gathered. Using a *purposive sampling method* (Coolican, 2004) the first sample consisted of administering surveys to 180 young, delinquent men in the age group 12 to 29. These were followed by twenty in-depth semi-structured interviews (addressed in detail in section 3.1.1). This study uses the definition for youth established by the Mexican Youth Institute (IMJUVE). Although the definitions of youth vary by organisation (for example, the UN considers youth those aged between 15 and 24), a decision was made to follow the IMJUVE definition, as this study was confined to Mexico. In addition, IMJUVE carries out periodic surveys to young individuals in this age group, which would make the data produced by this research comparable. Survey participants for this sample were serving a prison sentence at the time of the fieldwork (October 2014) for transgressions associated to organised crime. Under the guidance of my supervisor, it was suggested that 150 participants would be the minimum sample size required. The research team and I however, managed to obtain a sample size of 180 participants within the time granted for access to the correctional facilities. The crimes considered in the study were:

1) Crimes against public health, including:

    1.1) transport and possession of drugs,

    1.2) distribution,

    1.3) consumption and/or

    1.4) cultivation, among others; but also

2) Crimes related to arms-trafficking;

3) Organised delinquency;

4) Theft;

5) Kidnapping;

6) Extortion; and

7) Homicide

The rationale behind focusing on this demographic group, consisting of males between the ages of 12 and 29 in the state of Chihuahua, was to include the population most relevant in the study of organised crime. As was previously mentioned, the state of Chihuahua, and the city of Ciudad Juárez specifically, became the epicentre of organised criminal activity in Mexico throughout the Calderón administration (see **Chapter 3**). In addition, it is already well known that young males are largely responsible for an important share of crime across most countries, and Mexico is no exception to this pattern. For example, in terms of gender, 95.2% of the population serving time in penitentiaries at the national level was male, and only 4.8% was female (SEGOB, 2013).[60] The gender distribution in the penitentiaries of the state of Chihuahua was similar, with a male population of 93% in the same year (2013).

Because the population of women in prison in the selected study location is so small, females were purposefully excluded from the study as not enough women would have been captured in the sample to make a meaningful comparison. Moreover, while the study of women in organised crime is fascinating in its own right, focus was centred on the population that constitutes the core of this problem. Evidence from previous studies in developed countries confirms that the prevalence of male delinquency is much higher, finding that "females have not been involved in violent offenses to the same extent as males, and female delinquency has not been considered as threatening as male delinquency" (Shoemaker, 1990: p.115).

Unfortunately, the search for data on additional characteristics of the inmate population in Mexico –such as the age distribution and other socio-demographic variables– in both governmental (such as the National Security Commission, CNS) as well as non-governmental sources (OAS, UNODC) did not generate results. Informal conversations with researchers in Mexico who have carried out studies in prisons throughout the country in the past years confirmed that the authorities do not release this information to the public.[61] In order to justify the selection of study participants aged 12 to 29, data from victimisation surveys was considered. The National Survey on Victimisation and Perception of Public Security

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[60] Percentages calculated by author based on SEGOB (2013). There is a discrepancy in the official statistics between the total number of inmates (242,754), and the total number of men (231,111) and women (11,641). The sum of these two is equal to 242,752, which is two less than the official statistic. The percentages however, are unaltered.

[61] Efforts were made to obtain more information about the characteristics of the population in the penitentiary centres of Nuevo León. A formal request was made to Gral. Alfredo Flores Gomez of the Secretary of Public Security of the state of Nuevo Léon as well as Fernando Domínguez Jaramillo, Director of the Penitentiary Administration of the state of Nuevo León in which the objectives of the study were explained, accompanied by a request for further information. The documents containing the proposal were sent on February 27, 2014 to the first person and on March 31, 2014 to the second. There was no response on behalf of the authorities.

(ENVIPE)[62] for Mexico in 2013 indicated that 58% of crimes[63] in 2012 were attributable to persons in the age group 18 to 35 (INEGI, 2013a).[64] According to this source, almost one-third of crimes (27%) for 2012 were attributable to individuals in the age group 18 to 25 (INEGI, 2013a) (see **Figure 4.3**). Although underage individuals (12 to 17) are shown to be responsible for only 3% of crime for 2012 (INEGI, 2013a), there is evidence to suggest that this age group is at particular risk, because it is in this period of adolescent life where criminal activity begins. Results from this research indicates that the greatest proportion (11.1%) of delinquents began criminal activity at the age of 15.[65]

Figure 4.3 Age distribution of delinquents of crime in Mexico, 2012
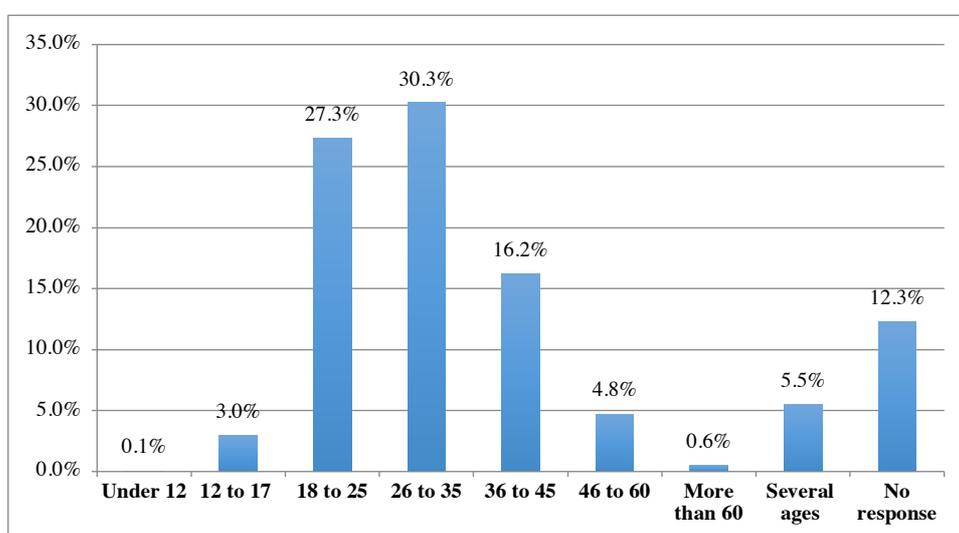
Source: Author's own elaboration based on data derived from victimisation and perception of public security (ENVIPE) surveys for 2013. See INEGI (2013a).

It is important to point out however, that the source of this information is not from the authorities of the penitentiary system, but instead originates from victimisation surveys. This means that they are based solely on the perceptions of victims and the characteristics they can recall of their aggressors. Some of the perpetrators of these crimes are not serving a sentence

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[62] ENVIPE 2013 is the third round of the surveys on victimisation and perception of public security; its results reflect victimisation for 2012.

[63] The crimes considered in the victimisation survey consist of: offenses against the household (theft of car, car parts and objects in the household), offenses against the individual (theft through assault on the street or in public transportation, bank fraud, and consumer fraud). Also includes offenses against physical liberty and/or life (kidnapping, forced disappearance and homicide), sex offenses (harassment, exhibitionism, attempt of rape and rape), offenses against individual security, privacy and confidentiality of the individual (extortion, verbal threats, injuries, etc.). Previous rounds of ENVIPE did not include results for crimes like homicide, organised crime, narcotics and arms trafficking, or trafficking of undocumented persons. However, ENVIPE 2013 incorporated homicide, forced disappearance, and offenses against physical liberty to better reflect the current situation in Mexico.

[64] Data processed by author based on results of ENVIPE 2013. See INEGI (2013a).

[65] The survey instrument includes a question for the delinquent sample that is phrased as follows: "At what age did you begin to get involved in delinquent activity?"

for their crime, as impunity rates in Mexico hover around 95% according to the latest estimates from 2016 (Universidad de las Américas, 2016), therefore these numbers *cannot be assumed to exactly mirror the characteristics of the inmate population*. For example, the data from this survey indicates that in 2012, according to the victims, almost one third of aggressors were between the ages of 18 and 25. This does not mean that one third of the inmates will correspond to this age group, but this is the best estimate possible based on the data that is publicly available on the characteristics of perpetrators. The crucial point to take away from this data is the evidence that it provides that males –and more specifically, young males, are disproportionately more frequently involved in crime.[66]

The sample for the study was drawn from three different locations, including two social rehabilitation centres - the term used for prisons in Mexico. These are referred to as Location A, B and C. Location A only housed adults aged 18 and above; therefore, it was necessary to find an additional location for drawing out a sample of underage study participants between the ages of 12 and 17. Permission was granted to access Location C and a sample of 34 minors in the desired age group was obtained. An additional sample of 10 underage study participants was also obtained from Location B. These minors were all being processed for the same crimes as the adult group; however, they were not currently serving time in a social rehabilitation centre, instead they were either under domiciliary arrest or on parole (see **Table 4.2** for a summary of delinquent sample selection).

Table 4.2 Delinquent sample selection, number and location

City	Location	Age Group	Number (n)	Sampling
Ciudad Juárez	Location A	18-29	136	Random
	Location B	12-17	10	Selected by authorities based on criteria of the research*
Chihuahua	Location C	12-17	34	Selected by authorities based on criteria of the research*
TOTAL			180	

Source: Author

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[66] Taking caution to avoid an accusatory tone, and to prevent further stigmatisation of youth, it is also important to highlight that they are also the population most affected by crime. Data from the ENVIPE survey indicates that of the approximately 21 million victims of crime in Mexico in 2012, the age group that registered the most victims was 20 to 29 (28%) (INEGI, 2013b).

*Sample was confined to young men, aged 12 to 29, sentenced or under process for the crimes previously listed

For Location A, a list containing the names of the inmates and offences for which they were serving time was obtained. The first day I visited the correctional facility, I met with the director of Location A and gave him a brief introduction of the study's aims. I asked whether I could have a list with the names of the inmates that fit the characteristics required for study purposes so that we could draw a random sample. I thought it highly unlikely, as individual data on offenders is not publicly available in Mexico. He agreed to send this list that same weekend and gave me a guided 'tour' through the penitentiary institution. At the time, it was undergoing heavy construction work for meeting security standards laid out by the American Correctional Association, a privately managed U.S.-based agency that provides a set of guidelines, safety measures, and operative procedures which institutions must follow to obtain accreditation.

The information provided allowed for a random sample to be drawn from this list for survey administration. Every fifth person on this list was selected to participate in the survey. A final list with the names selected from the random sampling was provided to the authorities on the days we visited the detention centre. Unfortunately, no such list was provided for Location C, and the researcher was asked not to request the names of the minors participating in the survey. After explaining to the authorities what characteristics of participants were required for survey purposes (age, gender, and a list of crimes), they selected adolescents that fit the description provided. For Location B, a description of individuals was also provided to the person in the prosecutor's office in charge of coordinating sentences and judicial measures for adolescents.[67] She provided access to a small sample of minors that had been processed for the crimes mentioned above.

All surveys were administered face to face in locations A, B and C by a team of three research assistants and myself. The research team received prior training to familiarise them with the contents of the survey. Participants of the study sat across from each of us, we asked the questions of the survey and marked the answers that they indicated. Although administering the surveys to the inmates and having them respond to these questions themselves would have made this study less challenging in terms of security and logistics, there are several problems with this approach. First, there is no way to ensure that the inmates with the characteristics required would be answering the surveys. Second, they could have shared their answers with other inmates, which has the potential to affect and bias their responses. Third, those with

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[67] Elizabeth Delgado Rodríguez, coordinator of the department for the enforcement of sentences and judicial measures for adolescents, North area.

greatest disadvantage (for example, those who are illiterate) would have automatically been excluded from the survey, something that I wanted to avoid at all costs. Lastly, having personal contact with potential candidates for follow up in-depth interviews was necessary for the selection process.

Access for work in Location A was only granted for a period of two weeks (already considered to be a huge achievement, as researchers often cannot visit the prison for more than a week without constituting a significant inconvenience for security officials, especially prison wardens bringing groups of inmates for survey administration). To complete the sample, the team of three research assistants and I would work eight hour shifts, each surveying one respondent at a time for approximately 22 to 25 minutes, completing all surveys in a week. This meant that approximately four participants were surveyed every half an hour, although this varied depending on the wardens who were on shift (some were quicker to gather the sample of inmates needed, others took longer). Efforts were made to prevent the wardens in charge of security from eavesdropping throughout survey administration in order to ensure, to the best of our abilities, that the inmates felt comfortable and their responses were not compromised. Surveys with minors in Location B were completed in two days and no authorities were present during the interviews. For Location C, I administered all surveys to participants under the age of 18 and no authorities were directly present in survey administration.

4.1.1 In-Depth Interviews

Following the implementation of surveys to participants in the delinquent sample, twenty inmates were selected for in-depth, semi-structured interviews. The purpose of the interviews was to expand on the information derived from the survey responses. When surveys were administered in Location A, the research team had been instructed to select candidates for the in-depth interviews based on their survey experiences. A week later, I personally conducted all twenty in-depth interviews with participants from Location A.

The first step in choosing participants for the in-depth interviews was to ask for consent. The original survey contained an item asking participants whether they would be willing to be interviewed in-depth at a later stage. This aided in the selection process and narrowed the number of candidates (those who responded 'no' were not considered). The second criterion for interview selection was participants' degree of openness during the original survey (for example, if a significant amount of their questions contained "does not know/does not respond" answers, they were discarded). Third, the three research assistants who participated in survey implementation during the first week were asked to flag the participants that they deemed suitable candidates for the interviews conducted the week after survey implementation. For the

in-depth interviews, participants were asked whether they consented for the interview to be recorded; they were also reminded that they could request the recorder be turned off at any point in time during the interview. No subjects of a sensitive nature relating to their criminal history were discussed, unless it was brought up by participants themselves. This was decided both for protection of participants but also for the researcher. Efforts were made to ensure the anonymity of interview participants, and all chapters containing information derived from the interviews use pseudonyms.

The list of questions provided in the annex of this thesis served as a guide for the interview, however, following open-ended interview type methodology, I did not adhere strictly to this list. When important information was being discussed that required further scrutiny (and that participants were willing to discuss), additional questions that were not necessarily in the questionnaire were discussed (hence why a semi-structured approach was selected). This allowed a more natural conversation flow and facilitated the interaction.[68]

In regards to the material discussed throughout the interview, participants were asked to elaborate on their aspirations when they were growing up, and later to describe what they would use the proceeds of crime for (individual level factors). They were then asked to talk about their lives as they were growing up, focusing on relations with parents, peers, as well as friends and neighbours, in order to better understand their pathway into criminality (micro level factors). They were also asked about their school experiences, and special emphasis was made on understanding the reasons they dropped out - if this was the case. Further details regarding their experiences of poverty were also addressed. They were then asked to elaborate on their political opinions and how they viewed political institutions in the country. Lastly, they were asked to provide public policy recommendations to steer young people away from criminality (for further information on the nature of questions raised during the interview see **Chapter 4 Annex: A.4.1**).[69]

4.2 Non-Delinquent Sample Selection

A sample of 180 non-delinquent young men between the ages of 12 and 29 were also surveyed. The questions of the survey instrument were modified slightly in phrasing, to reflect that the participants were not incarcerated, but the content of the questions was the same (see example in footnote and **Chapter 4 Annex: A.4.4** for a list of questions that were modified for

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[68] Several incidents of riots had broken out in this prison, with the latest one resulting in the death of 17 inmates in 2011 (García Amaro, 2013).
[69] Issues and questions that spontaneously arose in the interview are not included, the questions outlined merely served as a guide for the interviews.

the non-delinquent sample).[70] The aim of this sample was to create a counterfactual to the delinquent sample; therefore, this sample included young men from the same social background as the delinquents, but they had no criminal record. Including only a delinquent sample would have meant relevant results for the delinquent population *exclusively*; making it difficult to argue generalisable results on why young men in Ciudad Juarez participated in organised crime. In the few studies on prison populations in Mexico, no evidence exists to compare the offending population to a sample of the general population. For example, several studies have cited violence in the household as a pervasive characteristic of offenders in Mexico, but no conclusions can be drawn to determine if this is an explanatory factor of crime as no comparison group with the general population exists in these studies.

The characteristic that respondents in the non-delinquent sample shared with delinquents to make the data between both groups comparable (as far as possible) was based on the area of the city where delinquents resided prior to incarceration. The non-delinquent sample was therefore drawn from an area of Ciudad Juárez several participants in the delinquent sample resided prior to their incarceration (details in the next section). Given similar socioeconomic backgrounds across both groups, including the non-delinquent sample in the study allowed for control of socioeconomic variables, making an exploration of the contrasting factors between the two groups possible. This in turn generated evidence of what factors influenced the first population to move into organised crime despite both groups suffering similar deprivations. The limitations of sampling participants from only one area of the city are acknowledged; but due to safety and logistical concerns addressed elsewhere in this chapter, this was considered the best approach.

The non-delinquent sample was drawn from the area of Felipe Ángeles (see **Figure 4.4**), located in the north-western part of Ciudad Juárez. There are several social characteristics of Felipe Ángeles that confirm its degree of marginalisation. The most significant problems include: 1) problems with infrastructure and urban development; 2) lack of coverage in education and school desertion; and 3) a high crime index (USAID et al., 2012).

Figure 4.4 Map showing the area corresponding to Felipe Ángeles

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[70] For example, in the poverty assessment, participants in the delinquent sample were asked whether they had access to basic services in the household where they resided prior to incarceration; participants in the non-delinquent sample were asked if they currently had access to basic services in their household.

Source: Google Maps, 2017

In regards to the second problem, Felipe Ángeles has one of the highest illiteracy rates in Ciudad Juárez. Furthermore, there is a high incidence of adolescents who abandon school due to a shortage of secondary and high school institutions in the area, and the percentage of the population in school in the age group 3 to 24 in Felipe Ángeles is lower than the corresponding average for Ciudad Juárez.[71] Felipe Ángeles is also one of the areas of the city with the highest rate of offenses committed by adolescents under the age of 18. Furthermore, the rate of persons detained is higher in this area when compared to the rest of the city according to data from the citizen observatory of Ciudad Juárez.[72] A report of violence prevention for the area also found that youth in Felipe Ángeles were disproportionately involved in crime.[73]

The selection of Felipe Ángeles as the location for the non-delinquent sample was further supported with data derived from the survey implemented to the delinquent group. One of the survey items asked delinquent participants in which area of the city they resided in prior to their arrest (see **Chapter 4 Annex: A.4.3**, items RES and RES1). Analysis of data for this

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[71] For example, in Felipe Ángeles only 58.9% of individuals in the age group 15 to 17 are in school, while in Juárez the figure is 70%. For those in the age group 18 to 24, the proportion of individuals in school is only 16.8%; while for Juárez the corresponding figure is 29.1% (INEGI, 2010a).

[72] In the period from January to March 2012, the rate of detention for Ciudad Juárez was 8 individuals per 10,000 people; for Felipe Ángeles the corresponding figure was 18 per 10,000 (USAID et al., 2012).

[73] In 2010, a total of 2,456 minors were serving a sentence in the correctional facility for minors 'Escuela de Mejoramiento Social para Menores México'. The report signals that the crimes committed in these cases took place in 323 areas of Ciudad Juárez, but three areas stand out in terms of the concentration of crimes committed by adolescents. One of these areas is the north-western part of Juárez, which includes the area of Anapra, but also Felipe Ángeles, as well as Ampliación Fronteriza, Plutarco Elías Calles and Chaveña (COLEF, 2010).

question concluded that the area of Anapra came up frequently amongst delinquent participants. After speaking to Arturo Morales, a social anthropologist and professor at the Autonomous University of Ciudad Juárez (UACJ) who worked in high-risk areas of the city, Morales confirmed that Anapra was an area that was well-known for its marginalisation and high crime rate. An exploratory visit to this location showed, however, that access to Anapra was very difficult, as the area was not only unsafe, there was a lack of infrastructure (paved roads) that made moving around in a car difficult. Walking around the area for study purposes was ruled out as an option, as it increased the vulnerability of the research team. Although Anapra would have been the ideal location to gather the non-delinquent sample, the risks were too high and the neighbouring Felipe Ángeles (see **Figure 4.4**), which shared many of Anapra's features, but was more accessible, was selected for survey administration. An additional team of assistants from Ciudad Juárez who worked with me had access to the population of Felipe Ángeles, and one of the assistants selected was a resident in this area. She had the local knowledge that was essential to getting access to this population. Locals knew and trusted her, and she had access to individuals in the demographic group that was necessary for gathering the sample required. Her partner was the coach of a football team in the area of Felipe Ángeles; he personally knew and coached young men in the age group required for sample selection.

The sample used in the study was drawn from three main locations in the area of Felipe Ángeles: a football field, the area's community centre, and the local library. In the first location, where one of the assistants personally knew some of the players (**Figure 4.6**), a snowball sampling method was used. Those individuals that personally knew the person administering the survey would be asked to participate in the study. Verbal consent was again used with study participants. The aims of the research and the rights of participants were explained prior to consent and once these were discussed, potential participants were asked if they would be willing to be surveyed. If the participant agreed, he would be surveyed and later would be asked to introduce us to another volunteer who might be willing to participate. Participants were advised they could withdraw and their identities were protected. The process for consent was repeated for all participants. For minors, parental consent was not possible, as parents were not usually present in the football field and asking them to indicate where they lived in order to obtain consent would have raised unnecessary suspicions. Moreover, it would severely hamper the process of the survey, as it would require travel to another area -without knowing whether the parent would be home- and then coming back to the football field and carrying out the survey. It was decided that adult consent was therefore acceptable if granted by the football coach himself (mentioned above), who was an adult.

The second location that was selected was the community centre of Felipe Ángeles (**Figure 4.7**), where there was an additional (smaller) football field and where young men would congregate to watch the games that were carried out during the weekend. The best time to find suitable candidates was during the weekends, as during the weekdays most men (especially adults), were working. In the third location, the library, a social worker was collaborating with disadvantaged youth at risk from this area of the city. She served as a connection with this group of young individuals and she allowed us to survey some of the young men she was working with (see **Table 4.5** for a summary of non-delinquent sample selection).[74]

Table 4.5 Non-delinquent sample selection, number and location

City	Area	Location	Age Group	Number (n)	Sampling
Ciudad Juárez	Felipe Ángeles	Football field	12-29	90	Snowball
		Community centre	12-29	75	Snowball
		Local library	18-21	15	Snowball
TOTAL				180	

Source: Author

Figure 4.6 Football field in Felipe Ángeles

Source: Author

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[74] For the second and third location, the same verbal consent was sought and the same ethical guidelines were applied.

Figure 4.7 Community centre "El Retiro"
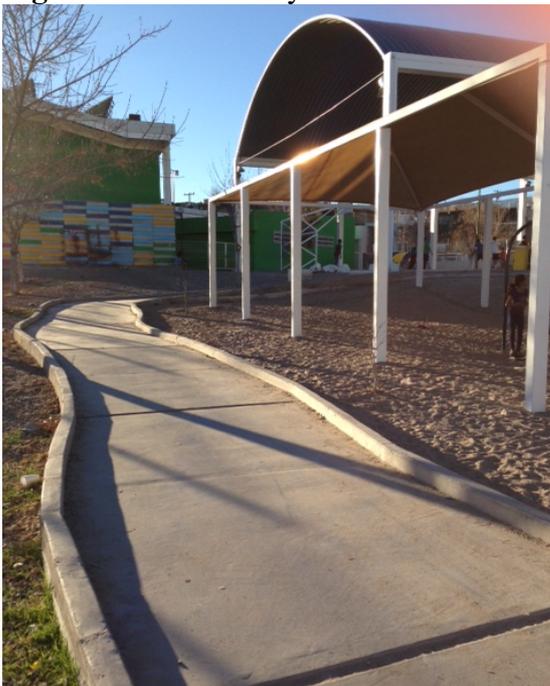
Source: Author

4.3 Ethical Considerations

Conducting ethical research should involve the construction of mutually beneficial relationships with people in the field (Banks & Scheyvens 2014). I do not know whether this research will be able to achieve as much as I hoped. I set out with the intention "to do good", only to realise that participants of this study contributed disproportionately more to this research than I did to them. This is not surprising, as it has long been recognized that researchers typically gain more from fieldwork than those who participate in it (Patai, 1991; Wolf, 1996). This considered, the ethical implications of this research concentrate around three main areas: security, informed consent, anonymity, and mental health of study participants.

Security. One of the most significant implications of this research was ensuring security of the participants of the study, the research team, and myself. It is a well-known fact that those serving time in prisons in Mexico have communication and ties to those who work with them outside, and at times command a certain degree of operational freedom within the confines of the prison, although this varies depending on the degree of state control over the penitentiary institution. To reduce security risks in the fieldwork carried out in prison, two main measures were taken: hiring an experienced team of research assistants who had experience conducting surveys in prison and avoiding discussions concerning the criminal histories of the study participants.

While it would have been less costly to hire students from the local university to help in the process of survey administration, their lack of knowledge with the prison system as well as their inexperience in working with offenders was deemed a high risk. A group of research assistants based in Mexico City who had over a decade of experience conducting interviews in prison were hired for administering surveys. Their expertise, knowledge of the prison, and particularly, their skill at negotiating with wardens was integral to the success of survey administration during the first week of fieldwork. Research assistants were asked to avoid discussion of sensitive material, including the criminal history of study participants. These issues were discussed only if participants themselves brought up this subject, but efforts were made to steer conversations back in the direction of the research. In the interviews with select study participants, when details on criminal histories were brought up, I tried to strike a balance that would allow participants to feel they could communicate freely without being constrained, but at the same time tried to steer the conversation to the questions I considered relevant for the study's aims. In the work with the non-delinquent sample, it was decided that randomly selecting households in Felipe Angeles would be unsafe and impractical. My research team and I only worked when there was daylight and we would always survey in pairs in a public location.

Informed consent. An essential aspect of ethical research is ensuring that individuals are made aware of their right not to participate in the study. All survey participants were therefore asked for informed consent prior to survey implementation. They were reminded that their participation was voluntary and that they could withdraw from the study at any point in time, with no consequences (other than any information provided being removed from the pool of collected data). They were also reminded at several points throughout the survey that they could decline to answer a question if they so desired.

Verbal consent was used before survey administration, as it was decided that it might be intimidating to ask participants to sign a document. According to Banks & Scheyvens (2014), there are contexts where it is more advisable for the researcher to sit down with potential participants and have an informal introduction, followed by an explanation of the research aims (see **Chapter 4 Annex: A.4.2** for a list of items, including rights of participants, that were discussed prior to survey administration). The authors also mention that "most ethics committees or boards now recognise that where culturally inappropriate or where there are good reasons not to record a person's consent in writing, consent can be given verbally" (2014: p.

167).[75] Mexico, and especially prison, is one such context where inmates might be wary of signing anything, as some have been forced to sign confessions for crimes they did not commit.

In order to obtain consent for the sample of in-depth interviews with twenty offenders who had participated in the surveys, an item was presented in the survey in which all study participants were asked whether they would be willing to be interviewed at a later stage of the research. Only those who indicated 'yes' would be considered for the follow-up interviews. The interviews were recorded and all participants were asked for verbal permission to record the material discussed. They were informed that they could ask for the recorder to be turned off at any point in time throughout the interview and were also reminded that they could pause or end the interview at any point in time.

Although informed consent on behalf of study participants typically contains an information sheet with the contact details of the researcher, it was deemed a cautionary measure not to provide this or any personal information other than an institutional e-mail address.[76] There is widespread evidence that inmates in Mexico have an established network outside of the prison (and often conduct their business from there), but also that in as many as 60% of municipalities throughout Mexico the authorities themselves are colluded with organised crime (Ballinas & Becerril, 2009), explaining the decision not to disclose personal information of the researcher.

Mental health. The sensitive nature of the survey questions and interviews – where details on participants' personal lives were discussed – could have had an effect on the participants themselves. Reflecting on prior life conditions and recalling negative past experiences could have an impact on participants' mental health in the aftermath of the research. I did not conduct follow-up surveys, as this was not a longitudinal study, so there is no way to conclusively know if this was the case. However, there are a few indications that the surveys and interviews had a positive impact on some of the participants. In one case, when one of the research assistants administered a survey module asking participants to recall emotions experienced (anger, frustration, happiness, amongst others), one person expressed confusion: "You want to know about my feelings? No one had ever asked me that before". In the twenty interviews I carried out, I asked all participants how they felt after the interview. All expressed

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[75] In general, considerations of the study comply with the ethical regulations of the university; specifically, with this document:
http://www.polis.cam.ac.uk/Research/university-policy-on-ethics-research.
[76] When a pilot visit was conducted in the state of Nuevo León prior to this study, the researcher was advised by a colleague to leave an identification card (a requirement for access to prison) with no details other than her name (she suggested that the ID card present no addresses in Mexico or any other information that could be used by either the prison staff or by the inmates).

feeling well in general (some were more expressive than others in communicating their feelings), but one in particular commented that he felt temporarily relieved discussing his life experiences, as he felt that there was no one in the prison that he could openly talk to without fear of reprisal.

Anonymity. Pseudonyms were used for all the interview material discussed in the thesis, database identifies participants with a unique ID number. A log file with their names will be destroyed after the thesis is submitted in bounded form.

4.4 Research Limitations

As with all research, the limitations in the methods and the data derived from this study are acknowledged. First, most of the data collected in both the surveys and semi-structured interviews is retrospective and involves recall. One of the problems with retrospective accounts is that they rely on memory, which is of course, selective and fades with the passing of time (Sudman & Bradburn, 1973). However, the richness of the details provided in the interviews leads the researcher to conclude that despite its limitations, there is valuable information and important insights to inform and better understand how youth are embarking on a delinquent path. In addition, it is not practical to run a longitudinal survey due to the time window of the PhD.

Another limitation of the data in the delinquent sample was the presence of participants who claimed they were innocent in the survey implementation phase. Although this research avoided discussions on the nature of the crimes participants were involved in for a host of reasons,

including security[77] and avoiding a sensationalist tone in the research,[78] there was one item in the survey that directly addressed participants' criminal involvement: the item asking, "at what age did you commit your first crime?" (see **Chapter 4 Annex: A.4.3,** item EDAD1). In response to this item, several participants (n=32) indicated that they were innocent; however, it

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[77] This research avoided asking questions about the nature of the crimes participants had committed. Even though participants were in prison, they were in close communications with their colleagues outside, which meant that if any of the members of the research team or the researcher had access to sensitive or compromising information, our security could be compromised outside the prison environment.

[78] The nature of the crimes committed by participants was not the focus of the research. The study strongly distanced itself from most work with populations that have participated in organised crime, as some of this literature highlights gruesome details of crimes in a sensationalist manner, something that the researcher wanted to avoid. The reason is simply that this has already been done and has been a central focus of those working on organised crime in Mexico. For example, see *Las chicas Kalashnikov* (Almazán, 2013), *El Sicario: Autobiography of a Mexican assassin* (Molloy & Bowden, 2011), and *El Narco: The bloody rise of Mexican drug cartels* (Grillo, 2011).

is difficult to know to what extent this might be true.[79] Although the quantitative output in the analysis chapters includes the entire sample (including those who self-proclaimed innocence), the annex of the thesis for the analysis chapters also contain results excluding the population that claimed innocence. *The output from the regressions performed did not change significantly when this sub-group was excluded*. Most of the variables that were found significant in the first analysis were also found significant in the second.

Lastly, in the non-delinquent sample, one of the limitations of the data was the reliance on self-reporting, as we had to trust survey participants when they indicated that that they did not have a criminal record and that they had not committed any crime.[80] Research assistants and I explained to potential candidates that it was imperative for the purposes of this study for them to decline participation if they had either committed a crime (excluding minor offenses such as having parking tickets) or had '*antecedentes penales*'[81] or a criminal record, before survey implementation took place. The importance of this aspect for data collection purposes was highlighted, and candidates were also reminded that no consequences would come from them abstaining to participate (several candidates *did* decline participation in the study when asked about their record). While self-reporting is a common and effective approach in the field of criminology, it could be the case that one or more participants chose not to disclose their criminal background before completing the survey. For this reason, a snowball sampling approach was used in the selection of participants for this sample. Despite its limitations, according to Petersen and Valdéz (2005), this is common in the study of gangs and other 'hidden populations' (Heckathorn, 1997). According to Decker and Van Winkle (1996), the 'vouching' that is intrinsic to snowball sampling enables participants themselves to verify the legitimacy of other survey participants (p. 41). In the particular case of this study, it facilitated their identification as non-delinquents and therefore confirmed their eligibility for inclusion in this study. The problems associated with having a delinquent sample that was randomly selected and a non-delinquent sample that was selected with this method are acknowledged and recognized. Ideally, an experimental approach would have two random samples; however, in

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[79] There is evidence that the Mexican justice system imposes penal punishment on innocent civilians; which means that in some cases (it is impossible to know which ones), their self-proclaimed innocence may be true. The other side of the coin is that if participants perceived that the researcher could be of help to their case, they may have been tempted to claim that they were innocent (several of the participants did ask for legal advice). Measures were taken to explain that this was not the case, but it led to the conclusion that amongst those who claimed innocence, there may have been participants who were in fact, guilty.

[80] It was specified that having parking tickets was not a problem for survey participation.

[81] *Antecedentes penales* is defined as registered documentation illustrating the criminal history of an individual when she/he has been processed for criminal activity before any justice tribunal.

this particular case it was not possible to survey participants in the non-delinquent sample randomly, as it would have compromised the security of the research team.

4.5 Method of Analysis

The present thesis uses a mixed methods approach. The arguments for including a qualitative component abound.[82] According to Miles and Huberman:

> Qualitative analysis, with its close-up look, can identify mechanisms, going beyond sheer association. It is unrelentingly local, and deals well with the complex network of events and processes in a situation. It can sort out the temporal dimension, showing clearly what preceded what, either through direct observation or retrospection. It is well equipped to cycle back and forth between variables and processes – showing that 'stories' are not capricious, but include underlying variables, and that variables are not disembodied but have connections over time (1994: p.147).

The general course of analysis that is used in chapters 5 to 7 is discussed in this section. Each analysis chapter, considering factors at the individual, micro and macro levels, will have a quantitative and a qualitative component. Descriptive statistics of the population studied will first be provided, followed by logistic regressions run on STATA. Material from the twenty semi-structured in-depth interviews will be analysed and incorporated into the discussion section in each of the analysis chapters, which brings together the quantitative and qualitative findings. Although the research relies on a mixed methods approach, the models and statistical analysis to identify significant factors explaining organised crime participation complement the descriptive data and the findings from the interviews. As such, the descriptive data and the qualitative interviews constitute the core analysis of the thesis, while the regressions give strength and empirical validity to these findings.

For the qualitative analysis, I entirely transcribed all the material from the in-depth interviews. The analysis relied on inductive coding, for which the transcripts were reviewed twice in their entirety to identify relevant themes. A coding scheme was then developed. For example, 'violence in the household' was identified as a common and consistent theme throughout the interviews. This was designated as a code and placed in a matrix with several headings, including 'code', 'definition', 'interview number', 'observations of the researcher', and 'excerpts from interview' (see **Table 4.8**). The interviews were transcribed entirely in their original language (Spanish). The interviews were not translated in their entirety, except for the material that was used in the thesis. In order to ensure reliability of the coding, the transcripts were revised in their entirety at least twice to ensure code-recode reliability.

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[82] Kanbur & Shaffer (2007) provide examples of the value added of using both methods for the study of poverty. For example, qualitative data has helped to improve household survey design, interpret counterintuitive findings or explain the reason behind observed outcomes, amongst others.

Table 4.8 Example of coding from in-depth interviews

Code	Definition*	Interview number	Observation	Excerpts from interview**
Violence in the household	Physical, sexual, psychological forms of violence produced in the family, which include, but are not limited to battering, sexual abuse, exploitation, and other traditional practices that are detrimental to women and other vulnerable members of the family.	7	Mentioned that when his parents divorced, he went to live with his mother, but the mother would often be violent.	CC: And he was the one that... P: Well, no, honestly he never wanted me to tag along with him [father]. I was always the one there with him. Since I was a kid, I don't know...the moment my parents separated, I did not want to go with either one of them. I went with my mother, [only] because she was my mother, but to tell you the truth, she did not treat me well. And well no, I did not want to spend time with her because of what she used to do to me and well, I decided to distance myself and instead spend time with my brother. CC: How did your mom treat you? P: She used to hit me, scold me, mm...I don't know. Well, I tried to be on good terms with her, to help her around the house, and yeah...to be a good student at school and everything. But I don't know, she had a lot of problems with my father, and we were the ones that ended up paying for that, so we decided to leave...always spending time on the streets...until my brother was killed.

* Definition based on the UN Declaration on the Elimination of Violence against Women (UNGA, 1993)
**For illustrative purposes, this part of the interview has been translated from Spanish. With the exception of the material used in this thesis, the transcripts were not translated into English in their entirety. CC indicates the initials of the researcher, P indicates interview participant.

4.6 Demographic Characteristics and Summary Statistics of Samples

Before presenting the analysis chapter, the present section will provide demographic data for both populations that were sampled. A total of 360 individuals made up the sample: 180 were delinquents, the other 180 constituted a group of non-delinquents. **Table 4.9** presents the age distribution of both samples.[83] Data for education indicates that a higher percentage of individuals in both samples who attended primary and secondary school were enrolled in a public institution as opposed to a private institution. In the delinquent case, 82.8% of the sample attended a public school; the corresponding figure for the non-delinquent sample was 96.1%. In terms of educational achievement, participants were asked to indicate the last grade that was fully complete. Differences and similarities can be observed across the two groups sampled. Significantly, the data shows that while 10% of the delinquent population had no schooling at all, the corresponding percentage for the non-delinquent sample was practically non-existent, or 0.6%. However, 80.6% of the delinquent sample reached either primary or secondary education; the corresponding figure for the non-delinquent sample was 73.4%. In addition, it is important to highlight that the percentage of population with tertiary education is practically non-existent in both samples. For income, the data indicates that the largest share of the

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[83] Individuals over 30 were purposefully excluded from our sample, as the original intent of the study was to survey males between the ages of 12 and 29. In the delinquent sample, the authorities provided a slightly outdated list of inmates and their ages. As a result, some of those individuals who appeared to be 29 and under on the list were actually 30 years of age or older. Those older than 30 were not considered in the sample.

population in both samples made a monthly income between MXN $2,332.00 and $5,244.00 (GBP £96.18 and £215.46)[84]. However, the shares in both the lowest and the highest categories of income levels were higher in the delinquent case.

The data for age group shows that for the delinquent sample, the number of participants in each of the age groups was not equally distributed as a result of random sampling. The age group 24 to 29 concentrates almost half of the participants in this sample. The same is true of the non-delinquent sample, where the age group 18 to 23 constitutes over half of the study participants. Snowball sampling was used which means that study participants who shared similar characteristics (including age) were overrepresented in the surveys. This however, does not invalidate the analysis by age groups in chapters 5 to 7, as the sample of participants in the two samples was large enough for statistical analysis.

Table 4.9 Demographic characteristics of survey sample

Age Group	Delinquent Sample (%)	Number	Non-Delinquent Sample (%)	Number
12 to 17	24.4	44	21.1	38
18 to 23	25.6	46	53.3	96
24 to 29	45.5	82	25.6	46
30	4.5	8	0	0
Total		180		180
Education: Proportion who studied primary and secondary school**				
Public institution	82.8	77	96.1	147
Private institution	15.1	14	4.0	6
Mixed-public and private	2.2	2	0	0
Total		93		153
Education: Highest level of education achieved				
No education	10	18	0.6	1
Primary	37.8	68	21.7	39
Secondary	42.8	77	51.7	93
Technical career with secondary school degree	1.67	3	0	0
High school	6.11	11	22.2	40
Technical career with high school degree	1.11	2	1.7	3
Teachers' college	0	0	0.6	1
Bachelor's degree	0.6	1	1.7	3
Graduate degree (Master's or PhD)	0	0	0	0
Total		180		180

Monthly Income	Delinquent Sample (%)	Number	Non-Delinquent Sample (%)	Number

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[84] The exchange rates mentioned throughout the thesis correspond to the exchange rate between the Mexican Peso (MXN) and the British Pound (GBP) at the time of the writing, which spanned from 2014 to 2017. Throughout this period, the exchange rate has fluctuated between a low of MXN $22.92= GBP £1.00 and a high of MXN $25.2= GBP £1.00.

Less than MXN $2,332.00	11.1	20	6.11	11
Between MXN $2,332.00 and $5,244.00	22.8	41	38.9	70
Between MXN $5,244.00 and $ 7,971.00	18.9	34	18.3	33
Between MXN $7,971.00 and $11,856.00	14.4	26	9.4	17
Between MXN $11,856.00 and $20,337.00	12.2	22	6.7	12
Between MXN $20,337 and $44,334.00	7.8	14	1.1	2
Above MXN $44,334.00	2.2	4	0	34
Does not know/Does not respond	10.6	19	19.5	1
		180		180

** Only considers those who studied both primary and secondary, although a proportion of those who studied secondary school dropped out: 93 out of 180 participants for the delinquent sample indicated that they attended secondary school. For the non-delinquent sample, the figure is 153 out of 180 participants.

Chapter 5. Individual Level Factors: Aspirations, a Good Life, and Crime

En las calles, aprendí a vivir, no me digas que entiendes lo que es sufrir, (en las calles), donde tengo mi familia, nos miran pasar y nos llaman pandilla, (en las calles) crecí sin mi padre, conocí la violencia, el derrame de sangre (en las calles), sólo miran el mal, *no nos quieren aceptar en la alta sociedad.*
-Introductory song to the documentary Carteland (Heineman, 2015)

The development literature has increasingly emphasised the value of understanding people's aspirations as well as their ideas of what constiutes a good life. The sociological approach to crime on the other hand, recognizes the importance that unfulfilled aspirations can have on criminal participation. The present chapter aims to bring together these two literatures in order to gain a better understanding of engagement in crime in a developing country context. Given that public (in)security is perhaps the single most understated developmental challenge, and in the case of Mexico, the prime concern amongst citizens (Americas Barometer, 2014), it is surprising that little effort has been devoted to using these frameworks in the study of crime.

The present chapter will attempt first to understand the *aspirations* and *concepts of a good life* of the young men surveyed in this study. *Aspirations* are defined as what individuals want to achieve in life, and the concept of a *good life* is defined by participants themselves through a specific list of items. This chapter will first look at whether individuals across the two samples considered in the study (delinquent and non-delinquent) have similar aspirations and second, whether there is a difference in the items participants believe constitute part of a good life. The chapter will then look at opportunities to access items considered part of a good life as well as satisfaction in different areas, in order to evaluate whether differences in perceived opportunities and satisfaction contribute to delinquency. The chapter will begin by describing the survey items that are relevant for the content of this chapter. This will be followed by the analysis of original data gathered through surveys, first presenting descriptive statistics, then the regression results for a series of models. The chapter will end with a discussion that puts together the quantitative findings together with the qualitative findings derived from interviews, as well as conclusions.

5.1 Survey Description: Modules for Aspirations, A Good Life and Perceived Opportunities

This study seeks to put together the development and criminology literature to understand first, whether there is a common aspirational framework amongst two groups of study participants (one delinquent, another non-delinquent), and to test whether there is a list of common items that participants across both samples consider part of a good life. For the first part, the capability approach and the empirical studies that were addressed in **Chapter 2** were used to guide the development of the survey items. The survey began with an open-ended

question asking participants to list five aspirations, or five things that they wanted to achieve in their lives. The survey then presented a series of items and participants were asked whether they considered each of these individual items part of a good life (indicating 'yes' or 'no'). As the need to incorporate less 'virtuous' elements was highlighted in the theoretical framework chapter, items that would normally not be considered in the concept of a good life were included in this part of the survey (for ex. having access to drugs). The study then looked at whether unfulfilled aspirations played any role in criminal participation. The concept of opportunity constraints taken from the criminological literature was incorporated into the survey to analyse possible disjunctions between what is found to constitute part of a good life and perceived opportunities. For this purpose, participants from the delinquent sample were asked about those items that they considered part of a good life (those that were marked 'yes'), and whether they perceived they had opportunities for access, i.e., whether it was feasible for them to have access to these things prior to their involvement in crime. The non-delinquent sample was asked whether they perceived they had opportunities to access what they indicated was part of a good life at the time the survey was administered. Lastly, the study sought to determine whether different forms of strain – specifically dissatisfaction with the family's standard of living, dissatisfaction with employment opportunities and dissatisfaction with income, contributed to explaining organised crime participation. Study participants from the delinquent sample were asked to recall their satisfaction prior to participation in crime and the non-delinquent sample was asked to evaluate their current satisfaction. This study predicts that there will be common aspirations across participants in both samples (h1), that concepts of a good life will be similar across both groups (h2), and that opportunity constraints to access valued items will predict criminal participation (h3). Lastly, lower satisfaction in the areas considered is also expected to predict criminal participation (h4).

The analysis of data will be presented as follows: the first part will provide descriptive data regarding people's aspirations using the results of the open-ended question, for which it was necessary to fit responses into categories that reflect the data as far as possible. The second section, based on the closed survey questions, will present the descriptive results for the items that individuals in the delinquent and non-delinquent samples considered part of a good life. Results will also be presented by age group and educational achievement. This will be followed with the results for perceived opportunities to access what is considered to be part of a good life across both samples. The third section will present descriptive data for dissatisfaction with employment opportunities, family's standard of living, and income. Results will also be presented considering age groups and educational achievement. Several regression models will be carried out to determine which factors contribute to explaining organised crime participation,

which will be coded as a dummy variable, where 1 is assigned for the sample of 180 inmates and 0 for the 180 young males that self-reported no criminal record (1=delinquent, 0=non-delinquent). Dissatisfaction along three aspects will be measured using a scale of 1 to 5, where 1 is "Very Satisfied" to 5 is "Very Dissatisfied. The independent variables considered are summarised in **Table 5.1** below.

Table 5.1 Summary of independent variables

Factors	Survey items
Satisfaction with family's standard of living	Non-delinquent participants were asked: using a scale of 1 to 5, how satisfied would you say that you are with your family's standard of living? Participants from delinquent sample are asked to reflect on their circumstances prior to involvement in delinquent activity.
Satisfaction with job opportunities	Non-delinquent participants were asked: using a scale of 1 to 5, how satisfied would you say that you are with the job opportunities that are available? Participants from delinquent sample are asked to reflect on their circumstances prior to involvement in delinquent activity.
Satisfaction with income earned	Non-delinquent participants were asked: using a scale of 1 to 5, how satisfied would you say you were with the income you received from your last legal job? Participants from delinquent sample are asked to reflect on their circumstances prior to involvement in delinquent activity.
Items for a good life	Participants from the delinquent sample indicated (yes/no) whether they believed a host of items listed were valuable for a good life prior to criminal participation. Participants from the non-delinquent group indicated whether they believed these were valuable for a good life at the time of the fieldwork. For a full list of items considered see full questionnaire in the **Chapter 4 Annex: A.4.3.**
Perceived opportunities	Participants from delinquent sample indicated (yes/no) whether they believed they had opportunities to obtain what they indicated was part of a good life prior to criminal participation. Participants from the non-delinquent sample were asked to indicate whether they believed they had opportunities to obtain what they indicated as part of a good life.

5.2 Analysis

5.2.1 Descriptive Statistics: Aspirations

An open question asking participants to enlist five aspirations, or things that they wanted to achieve in their lives was raised at the beginning of the survey (delinquent sample participants were asked to reflect on their aspirations prior to criminal participation). In order to code the answers provided by participants in both samples, several categories were created. In total, the participants provided more than 130 distinct answers, which were grouped into 13

different categories, consisting of: 1) Employment, 2) family, 3) education, 4) career or profession, 5) supporting the family financially, 6) access to privileges, 7) self-improvement, 8) material belongings, 9) owning a business, 10) sports, 11) altruism, 12) addictions, and 13) others. In the category of education, many participants mentioned aspirations such as "to study", or "to have opportunities to study", while others mentioned "having a professional career" or referred to very specific professions, such as wanting to be a pilot or an engineer. A distinction was therefore made between wanting to pursue education in general and a desire to have a professional career. **Table 5.2** provides an overview of how aspirations were categorised, but a complete list of participants' aspirations and their categories can be found in the **Chapter 5 Annex: A.5.1**. Analysis of the data shows that across both samples (n=360), the aspirations most frequently cited were related first to 1) education (31.4%, n=113), followed by 2) professional career (15.8%, n=57), and 3) family (10%, n=36).

Table 5.2 Categories for item on respondent's aspirations, select examples

Category	Respondent's aspiration
Education	To study To have opportunities to study To start school To continue studying[85] To return to school To graduate / finish studies
Professional career	To be an artist (musician, singer, painter, etc.) To be the best composer To be a pilot To be an engineer To obtain a degree in various fields (education, criminology, veterinarian, nurse, lawyer, graphic design, chef [86] To be an architect
Family	To have a family / to get married and have children To have children Health for his children To be a good father To be a good son To set a good example for siblings

When comparing the delinquent and non-delinquent groups, the analysis found that a high proportion of both groups mentioned aspirations related to education (see **Figure 5.3**). Nevertheless, there was a discrepancy in aspirations related to career and profession, with the

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[85] 'Continue studying' might not necessarily imply that they have left school. It could reflect a desire to continue on a path that they are already on. This is different to returning to school, which indicates that they have dropped out and have a desire to go back.

[86] In Mexico, there is a difference in the degree obtained depending on the field of undergraduate studies. The main distinctions in title are between '*ingenierías*' and '*licenciaturas*'. *Ingeniera/o* is the title assigned to those who graduate from fields like electronics, mechanics, civil engineering, biotechnology, amongst others. Those who graduate from social sciences in fields like politics, international relations, communications and other related disciplines obtain the title *licenciada/o*. Architects and doctors are independent and cannot be ascribed to either of these two titles.

delinquent sample bringing up professional aspirations far more than the non-delinquent sample. While 23.9% mentioned aspirations related to career or profession, the corresponding figure in the non-delinquent sample was only 7.8%. For example, at least 10 participants in the delinquent sample out of the 180 that were surveyed indicated that they had wanted to be soldiers or policemen, and 16 participants wanted to earn a bachelor's degree. Four participants mentioned that they wanted to become engineers and six wanted to be artists. In addition, there was discrepancy in aspirations relating to the family, with the delinquent sample placing greater emphasis on aspirations in this category. While 16.7% mentioned aspirations related to the family, the figure for the non-delinquent sample was only 3.3%. In regards to specific aspirations regarding the family, the most common aspirations cited by participants in the delinquent sample included "having a family", mentioned by at least 17 participants.

Figure 5.3 Percentage of participants who mentioned aspirations in select categories
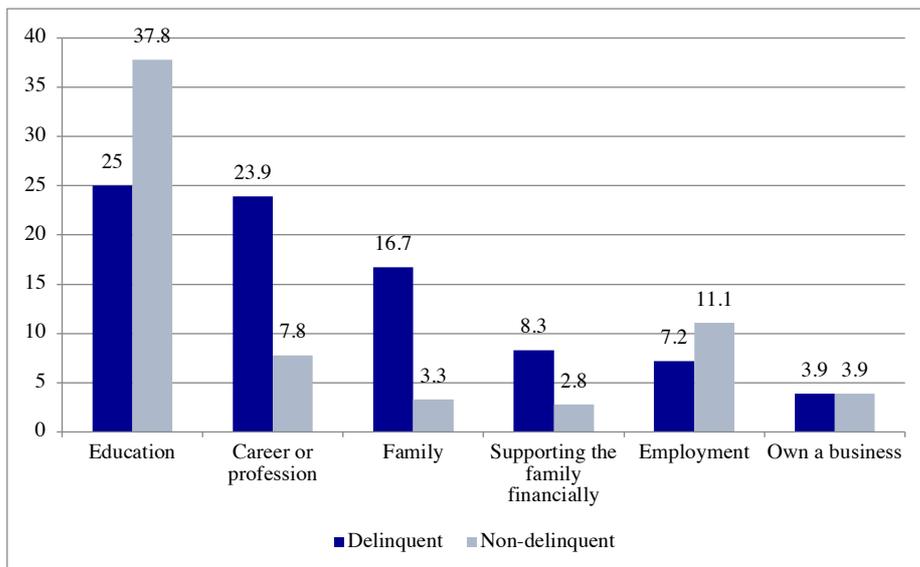
Source: Author's elaboration based on fieldwork data

These findings indicate that a higher proportion of participants in both groups have aspirations related to education. Nevertheless, differences are found in aspirations related to career/profession, as well as aspirations related to the family, with the delinquent sample conferring greater importance to aspirations in these categories. This leads to the conclusion that there is some evidence of a common aspirational framework. Although both groups differ in their aspirations, both agree on their first priority, stating that educational aspirations are the most important.

5.2.2 Descriptive Statistics: Items Constituting Part of a Good Life

The second section will present the descriptive results for items considered to be part of a good life. For a list of some of the items considered in the survey see **Table 5.4** below; the full list can be found in **Chapter 4 Annex: A.4.3** of this thesis. This section will first focus on the proportion of the population in the two samples who agree that material items are part of a good life. Disaggregated bata by age group and educational achievement will also be presented. The next section will be followed with the results for opportunities to access items considered part of a good life across both samples. Because participants were asked to indicate opportunities for access to only those items they considered part of a good life, it was not possible to disaggregate by age and educational achievement (i.e. the sample was not large enough to allow for this because not all items were considered part of a good life by all participants).

Table 5.4 Items considered to be part of a good life

	Item
Material items	To be wealthy
	To afford luxury goods
	To have a tablet
	To have a smartphone
	To have a laptop
	To have brand clothing
	To own a luxury car
	To dine in fancy restaurants
	To access posh nightclubs
	To buy jewellery
Material items: Harmful substances	To buy cigarettes
	To buy alcohol
	To buy drugs
Non-material items	To have a regular income
	To have a good education
	To have a formal job
	To have a family
	To be respected and accepted by others
	To have status and prestige in your community
	To have a happy and balanced life
	To have a professional career
	To help others
	To be a good Catholic, Christian (or follower of any religion to which you subscribe)
	To feel safe in your community
	To have a long and healthy life

The analysis indicates a difference in consensus across the delinquent and non-delinquent groups in terms of viewing material elements as constituting part of a good life: the delinquent group ascribed more importance to material items than the non-delinquent group. For 12 out of 13 material items (see **Table 5.4**), the delinquent group shows a higher percentage

of consensus, i.e. the proportion that agree that the material items constitute part of a good life, is higher for every item in the delinquent group (**Figure 5.5** shows a select number of material elements). The only exception is "to be wealthy", where the percentage who agree that this is part of a good life is higher in the non-delinquent group (31.8%) than in the delinquent group (27.2%).

Figure 5.5 Percentage (%) who agree that material elements constitute part of a good life: select items, delinquent and non-delinquent sample
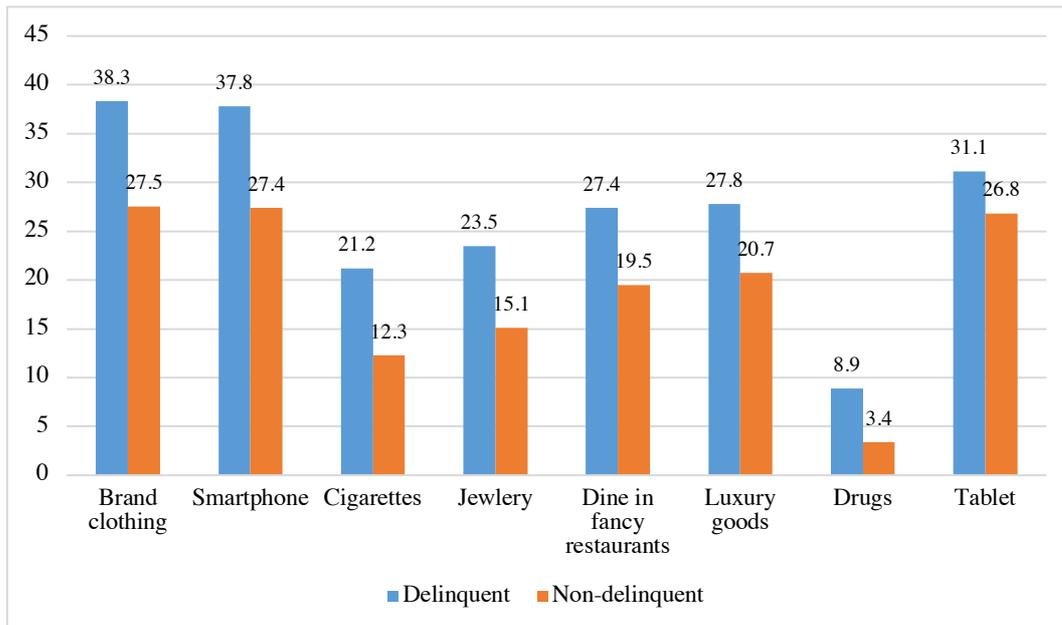
Source: Author's elaboration based on fieldwork data

Data for material items was then disaggregated by age group and educational achievement for the *delinquent sample*. The results indicate that there is greater consensus amongst the youngest age group (12 to 17) as to the importance of material elements in constituting part of a good life: For all the items included in the list, the percentage who agree that they constitute part of a good life is higher amongst the youngest age group (illustrated in **Figure 5.6**). The largest differences between the youngest and oldest age group is visible in the elements "to have brand clothing", "to be wealthy" and "to afford luxury goods". For example, for the first item, 63.6% of individuals in the youngest age group (12 to 17) agree that having brand clothing constitutes part of a good life, while in the oldest age group (24 to 29), only 26.8% believe the same. It is also interesting to note that amongst those items that are especially detrimental to health (access to cigarettes, alcohol and drugs), the highest proportion who agree that these items constitute part of a good life is found in the youngest age group.

Figure 5.6 Percentage (%) who agree that material elements constitute part of a good life: delinquent sample by age groups
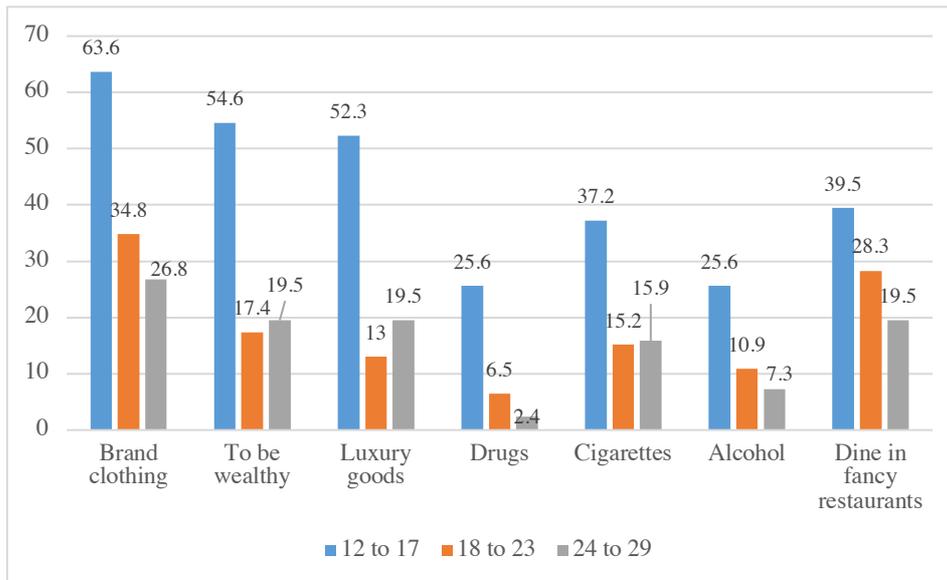
Source: Author's elaboration based on fieldwork data

For the *non-delinquent sample*, the data indicates that there is a higher proportion of participants who agree that material items are part of a good life in the youngest age group when compared to the participants in the oldest age group. However, this is not the case for all items considered. For example, in the use of harmful substances such as cigarettes, alcohol and drugs, more participants in the oldest age group when compared to the youngest age group agreed that these constitute part of a good life (see **Figure 5.7**). This is the opposite case in the delinquent sample, where more of the youngest participants in comparison to their elder counterparts agreed that these items were part of a good life.

Figure 5.7 Percentage (%) who agree that material elements constitute part of a good life: non-delinquent sample by age groups
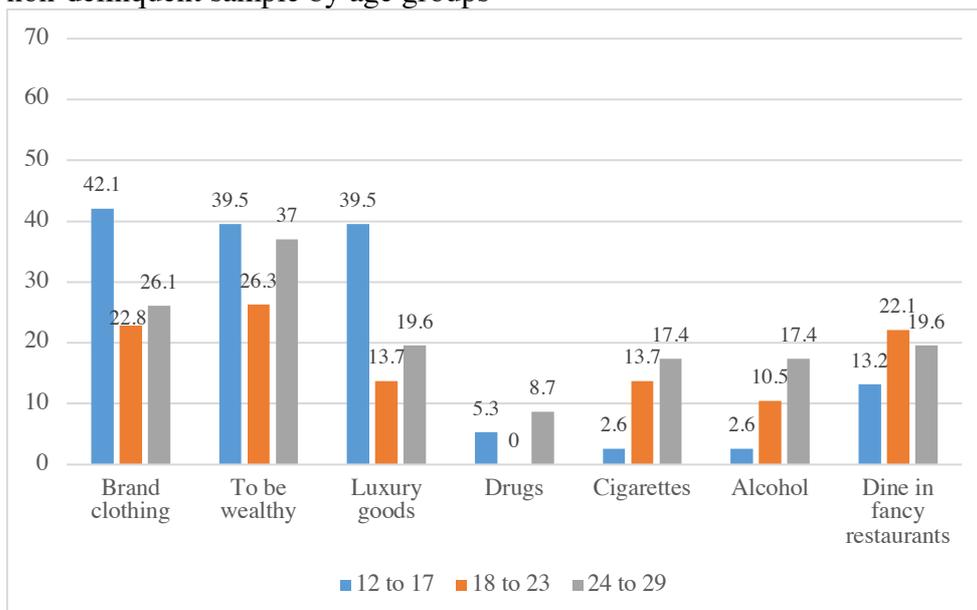
Source: Author's elaboration based on fieldwork data

When comparing age groups across both samples, one of the differences is that for a significant number of material items, a higher percentage of the youngest members (12 to 17) in the delinquent sample agreed that they were part of a good life when compared to their counterparts in the non-delinquent sample. An important difference is also found in the value conferred to harmful substances across the youngest members of the delinquent and non-delinquent groups. For example, while 37.2% of those in the youngest age group of the delinquent sample considered buying cigarettes part of a good life, only 2.6% of the same age group had the same opinion in the non-delinquent sample. The same is true for alcohol and drugs.

In terms of educational achievement, data for the *delinquent sample* shows that the proportion who consider material goods part of a good life, including brand clothing and a tablet, but also harmful substances, such as alcohol and cigarettes, is lower for those with more education in comparison to those with low educational achievement (see **Figure 5.8**). For example, for the item on brand clothing, 44.1% of the sample with only a primary education believe it is an important item for a good life while only 23.5% of those with above a secondary school level education believe the same. The graph shows that amongst the group with the highest level of education, there is less consensus on the value of material goods than amongst those with a lower educational level. This means that amongst individuals with higher educational achievement there is less agreement that material items are part of a good life. It is important to point out that within the delinquent sample it was very difficult to gain access to individuals with a higher level of education, as only a very small part of the sample had more than a secondary level education (only 17 participants out of the sample of 180, or 9.4%).

Figure 5.8 Percentage (%) who agree that select material elements constitute part of a good life by educational achievement: delinquent sample
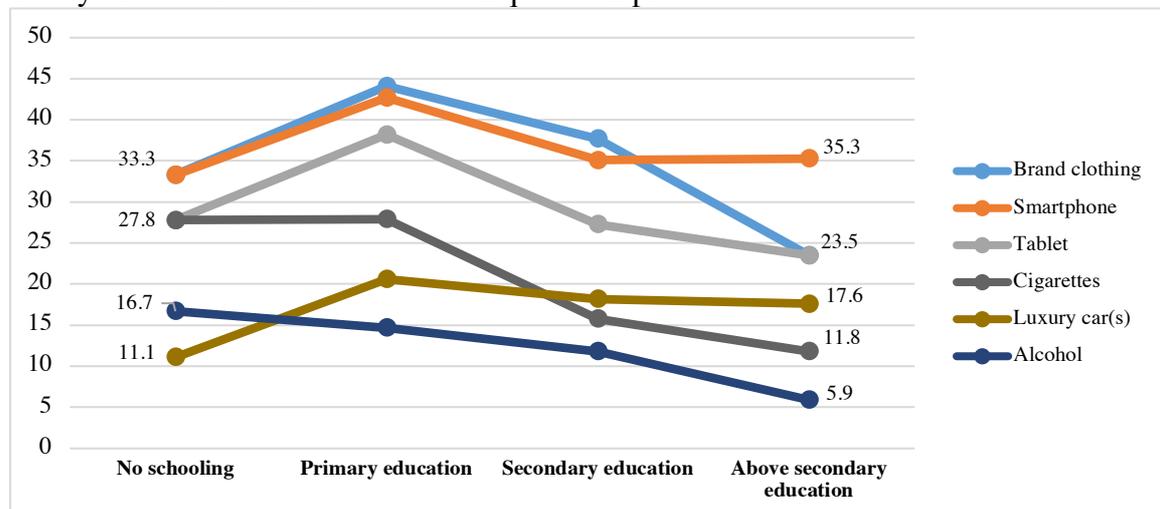
Source: Author's elaboration based on fieldwork data

In the *non-delinquent sample*, there was only one respondent with no schooling, so this category was removed from the analysis (see **Figure 5.9**). The data indicates that the proportion who agree that material items are part of a good life decreases with higher educational achievement. Nevertheless, this trend is clearer in the non-delinquent sample than in the delinquent sample. As **Figure 5.9** shows, for all items except cigarettes, the proportion of individuals who consider these material items as part of a good life is smaller amongst those with higher educational achievement (i.e. above secondary education).

Figure 5.9 Percentage (%) who agree that select material elements constitute part of a good life by educational achievement: non-delinquent sample
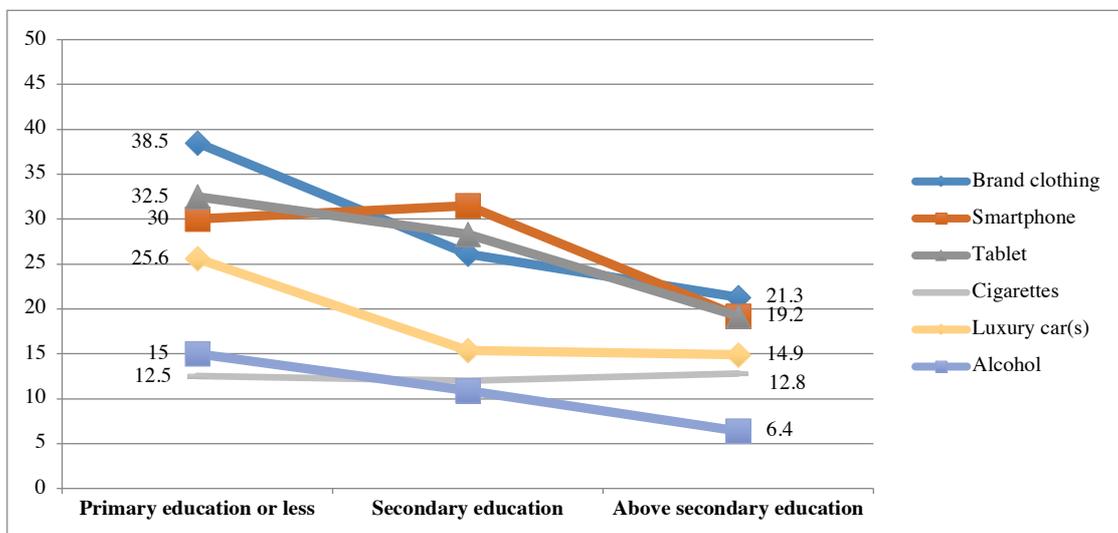
Source: Author's elaboration based on fieldwork data

When comparing educational achievement across both samples, the proportion of those who consider material items as part of a good life decreases with higher educational achievement; however, the trend is clearer in the non-delinquent sample. For all items included in **Figure 5.9**, there is a lower percentage of non-delinquent participants with above a secondary education who agree that material items are part of a good life in comparison to those with primary education or less. In the delinquent sample, instead, the proportion who consider material items as part of a good life is not significantly higher when compared to the group with above a secondary education. For example, for the item "luxury car", 11.1% of participants with no schooling in the delinquent sample agree that it is part of a good life; for those with above a secondary education, the corresponding figure is higher, 17.6%.

In summary, the information to take away from the descriptive data on material aspirations is summarized as follows:

- *Delinquent vs. non-delinquent*: There is a higher value attributed to material goods in the delinquent sample in comparison to the non-delinquent group.

- *Delinquent, by age group*: More participants in the youngest age group in comparison to other age groups consider material items as part of a good life.

- *Non-delinquent, by age group*: More participants in the youngest age group in comparison to other age groups also consider material items as part of a good life.

- *Delinquent vs. non-delinquent, by age group*: Youngest members across both samples agree that material items are part of a good life more than their older counterparts, but there is a lower proportion of participants in the youngest age group in the non-delinquent sample who agree that material items are part of a good life.

- *Delinquent, by educational achievement*: Consensus on the importance of material items is higher for those with primary school in comparison to those with no schooling. However, the proportion who agree that material items constitute part of a good life decreases when educational achievement is higher than primary.

- *Non-delinquent, by educational achievement*: Consensus on importance of material items decreases with educational achievement.

- *Delinquent vs. non-delinquent, by educational achievement*: In both cases, agreement that material items are part of a good life decreases with education, but the trend of education on material aspirations is clearer in the non-delinquent sample.

5.2.3 Descriptive Statistics: Perceived Opportunities

Participants were then asked to evaluate their perceived opportunities to access the items they considered part of a good life. For this section of the questionnaire, the focus was in three different areas: First, the research looked at the items where most opportunity constraints were perceived. Second, *differences* in perceived opportunities between the delinquent and non-delinquent samples were explored; in other words, the analysis looked at which items the delinquent group perceived there were more opportunity constraints in comparison to the non-delinquent group. And third, given that there was more consensus on the value of material elements in the delinquent group, the analysis looked at whether participants in this sample perceived they had opportunities for access to material items prior to their involvement in delinquent activities.

First, the data for the *delinquent sample* indicates that the elements where most opportunity constraints are perceived by participants are all material items compared to other items. The only item that is not material and where opportunities are perceived to be lacking is "having a professional career". For the *non-delinquent* group, the data also shows that there are less opportunities perceived to access material items (see **Table 5.10**), showing that both groups

agree that the access to material items are where more constraints in opportunities exist. A higher percentage of participants in both groups agreed high opportunity constraints existed in access to items such as "to have a luxury car", "to buy jewellery", and "to afford luxury goods". The significant difference identified between the delinquent and non-delinquent groups lies in the opportunity constraints to have a professional career amongst the members of the delinquent group. As is clear in **Table 5.10**, this item does not appear in the top five items of the highest opportunity constraints amongst non-delinquent sample participants.

Table 5.10 Items part of a good life where most opportunity constraints are perceived

Delinquent		Non-delinquent	
Element where less opportunities are perceived	% who agree opportunities are lacking	Element where less opportunities are perceived	% who agree opportunities are lacking
To have a luxury car(s)	45.5	To have a luxury car(s)	46.9
To afford luxury goods	44.7	To buy jewellery	46.2
To have a professional career	44.3	To afford luxury goods	40.5
To buy jewellery	40.5	To be wealthy	35
To be wealthy	34.8	To have a smartphone	22.5
To dine in fancy restaurants	34	To dine in fancy restaurants	20.4
To have a tablet	31.5	To have brand clothing	17.1

Second, differences in perceived opportunity constraints between the delinquent and non-delinquent samples were explored. The data from **Figure 5.11** indicates that the elements where there is a higher difference in perceived opportunity constraints between the delinquent and the non-delinquent groups are "to have a professional career", "to go out to posh nightclubs", "to have a tablet", "to dine in fancy restaurants", "to have a laptop", and "to have a good education". For example, in the first item, 44.3% of the delinquent sample believes that constraints on opportunities exist "to have a professional career". The corresponding percentage in the non-delinquent sample is only 20.4%, so there is a difference of 23.9 percentage points in perceived opportunities when comparing the two samples (see **Figure 5.11**). While almost half of the delinquent sample believed that they had no opportunities to have a professional career, only one fifth of the non-delinquent sample seemed to have this perception. In the case of "to go out to posh nightclubs", 25% in the delinquent sample perceived they had no opportunities, whereas the corresponding percentage for the non-delinquent group was 4.2%. The difference in perceived opportunities when comparing both samples amounts to 20.8

percentage points. In sum, for several of the material items, there is a higher perception of opportunity constraints amongst participants in the delinquent group.

Figure 5.11 Difference in perception of opportunity between delinquent and non-delinquent groups* in percentage points (delinquent group is base)
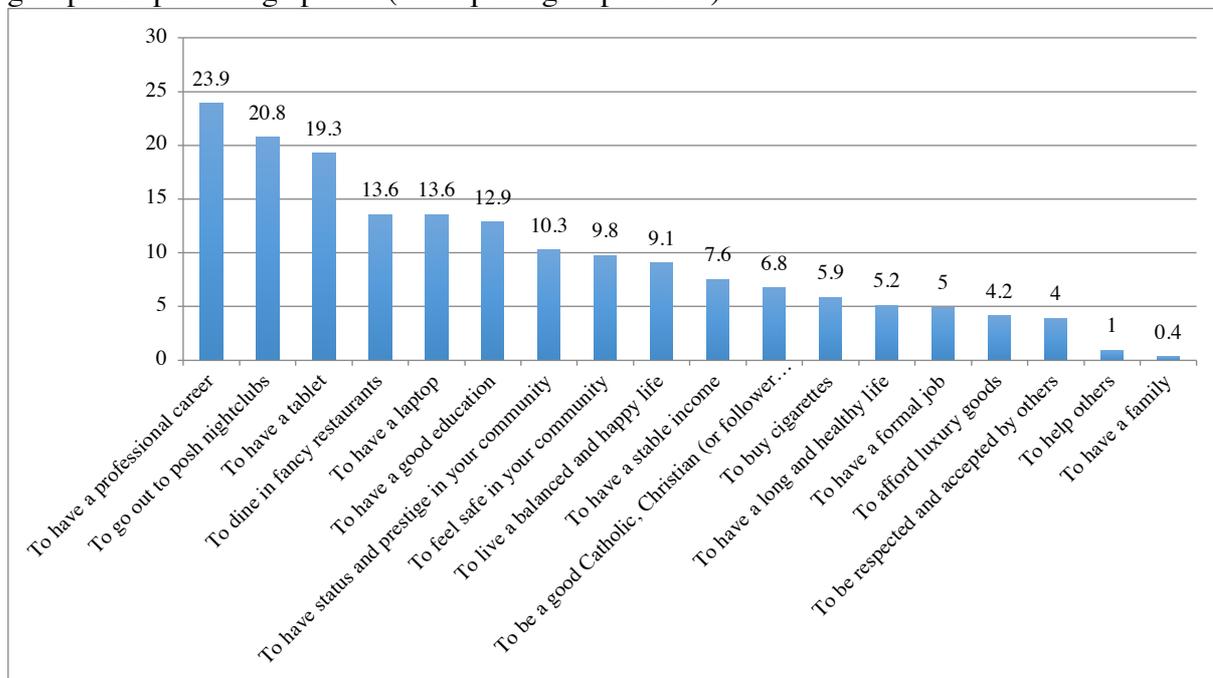
*Only 18 items out of 25 items (see **Table 5.4**) are considered; these are the items where there was a positive difference across the delinquent and non-delinquent samples.
Source: Author's elaboration based on fieldwork data

It was previously established that a higher proportion of participants in the delinquent group considered material items as part of a good life in comparison to the non-delinquent group (see **Figure 5.5**). For this reason, it was important to observe whether the participants from the delinquent group perceived they had opportunities for their access before involvement in delinquent activities. The data indicates interesting yet mixed results. **Figure 5.12** indicates that for six out of the thirteen material items considered, a higher percentage from the delinquent group perceive that there were no opportunities to access these items prior to participation in organised crime. This is the case for the items "to afford luxury goods", "to dine in fancy restaurants", "to have a tablet", "to have a laptop", "to go out to posh nightclubs" and "to buy cigarettes". The largest difference is evident in "to go out to posh nightclubs", where one quarter of the delinquent participants (25%) agreed that they had no opportunities, whereas less than one-fifth (4.2%)s of participants from the non-delinquent group had the same perception.

Figure 5.12 Percentage of participants who perceive there are no opportunities to access material items, delinquent vs. non-delinquent
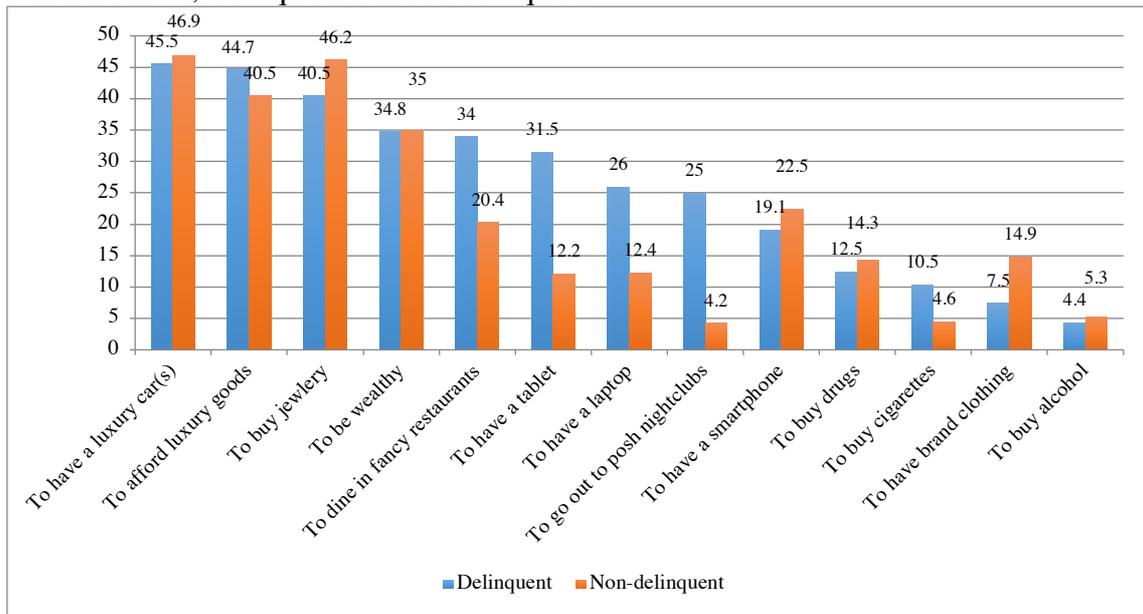
Source: Author's elaboration based on fieldwork data

The following points summarise the main ideas that should be taken away from this part of the analysis.

- *Items with highest perceived constraints on opportunities*: Highest percentage of agreement that opportunity constraints are present in the access to material items is found in both groups.

- *Differences in perceived opportunity constraints*: Highest difference in perceived opportunity constraints between the two samples is in the item "to have a professional career", where a higher proportion of delinquent sample participants perceive opportunity constraints in comparison to non-delinquent sample participants. Differences across the two samples in perceived opportunity constraints are also visible along several material items, such as "to go out to posh nightclubs", "to have a tablet", "to dine in fancy restaurants", "to have a laptop" and, "to have a good education".

- *Differences in perceived opportunity constraints to access material items:* For roughly half of the material items considered, a higher percentage from the delinquent group thought that there were no opportunities to access these items.

5.2.4 Descriptive Statistics: Satisfaction

The third section of the analysis of data will present descriptive data for satisfaction with employment opportunities, family's standard of living, and income. For the delinquent sample, the period of reference is prior to their involvement in criminal activities. Results will also be presented considering age groups and educational achievement.

Table 5.13 Distribution of satisfaction (%): delinquent and non-delinquent

Delinquent sample	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied	Does not know	Does not respond
Satisfaction with family's standard of living	32.2	51.1	9.4	3.9	2.2	1.1	0
Satisfaction with job opportunities	23.9	43.4	18.2	9.4	3.8	1.3	0
Satisfaction with income earned	26.9	45.4	11.4	10.6	5.7	0	0
Non-delinquent sample	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied	Does not know	Does not respond
Satisfaction with family's standard of living	15.6	60	16.1	7.2	1.1	0	0
Satisfaction with job opportunities	8.2	48.3	17.7	21.1	4.1	0.7	0
Satisfaction with income earned	13.3	44.5	17.2	19.5	5.5	0	0

Source: Author's elaboration based on fieldwork data

The data in the table shows that the percentage of participants that are dissatisfied in the three aspects considered is higher in the non-delinquent group (see **Figure 5.14**). The differences are most marked in satisfaction with job opportunities where over a quarter of the non-delinquent sample, 25.2%, indicated being dissatisfied or very dissatisfied in comparison to 13.2% in the delinquent sample.

Figure 5.14 Percentage (%) of participants who are "dissatisfied" and "very dissatisfied"
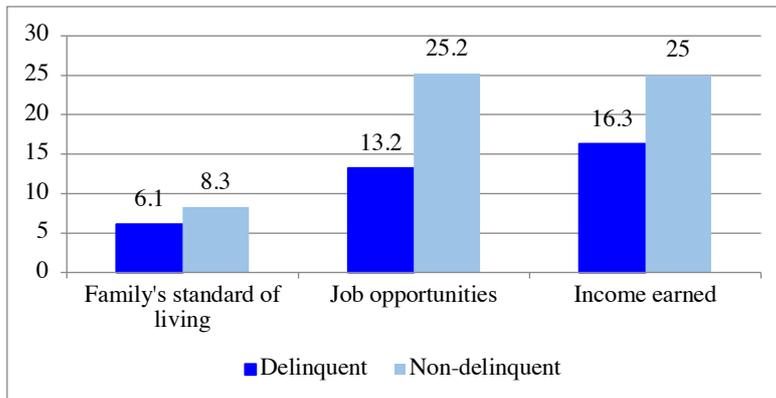
Source: Author's elaboration based on fieldwork data

In terms of age differences for the *delinquent sample*, the data indicates that the greatest dissatisfaction with the family's standard of living is visible in the youngest age group. **Table 5.15** shows that while 9.1% of those in the youngest age group were dissatisfied and very dissatisfied with their family's standard of living, the corresponding figure for the age group 18 to 23 was 0%. For job opportunities and income, there is greater dissatisfaction in the age group 18 to 23, where 14.6% and 18.9%, respectively indicated that they were either dissatisfied or very dissatisfied. For the *non-delinquent sample*, the age group 18 to 23 shows the most

dissatisfaction with the family's standard of living and with job opportunities. However, in terms satisfaction with income earned, in contrast to the delinquent sample, the largest percentage of participants that are dissatisfied is found in the oldest age group. No trends are largely visible across age groups, except that to some degree it is the oldest participants who are less satisfied along these aspects.

Table 5.15 Percentage (%) who are "dissatisfied" and "very dissatisfied" by age group: delinquent and non-delinquent

	Delinquent			Non-delinquent		
Age groups	12-17	18-23	24-29	12-17	18-23	24-29
Family's standard of living	9.1	0	7.8	5.3	9.4	8.7
Job opportunities	9.4	14.6	14	25	25.6	24.4
Income earned	12.5	18.9	16.3	16.7	22	32.6

Source: Author's elaboration based on fieldwork data

Data on educational achievement indicates that in the *delinquent sample*, those with no education had a significantly higher percentage of dissatisfaction in terms of the family's standard of living. **Table 5.16** shows that while 22.2% of the sample with no schooling indicated that they were dissatisfied or very dissatisfied with their family's standard of living, 0% indicated the same amongst participants with more than a secondary level education. For job opportunities, dissatisfaction was highest amongst those with the highest educational achievement, i.e. above a secondary school education. Lastly, regarding income, the highest percentage of dissatisfaction is visible in the group that only obtained a primary level education. For the *non-delinquent group*, data on educational achievement indicates that the highest level of dissatisfaction with the family's standard of living is visible amongst those who had a secondary education, which contrasts with the findings of the delinquent sample. For job opportunities, as in the delinquent sample, there is greater dissatisfaction amongst those with the highest educational achievement. In terms of income earned, the greatest dissatisfaction is visible amongst participants who only completed a secondary education. The visible trend is that participants in the high education category were most dissatisfied with job opportunities.

Table 5.16 Percentage (%) who are "dissatisfied" and "very dissatisfied" by educational achievement: delinquent and non-delinquent

	Delinquent				Non-delinquent*		
Highest level of education achieved	No schooling	Primary education	Secondary education	Above secondary education	Primary education	Secondary education	Above secondary education
Family's standard of living	22.2	7.4	2.6	0	5.1	11.8	4.3
Job opportunities	11.8	14	11.4	20	15.4	26.9	28.6

Income earned							
	12.5	21.3	15.9	6.7	21.7	31.4	15.8

*Note: Only one respondent with no schooling in the non-delinquent sample, so category was omitted.
Source: Author's elaboration with data from fieldwork

Thus far, the descriptive data have first indicated that participants across both samples agree that aspirations related to education are a first priority, providing initial evidence of a common aspirational framework. However, differences in aspirations related to pursuing a professional career and in regards to the family are also visible, with the delinquent sample participants showing greater inclination towards aspirations in these categories. Secondly, there is a higher consensus amongst delinquent participants that material items constitute part of a good life, this is especially prevalent amongst the youngest participants and those with lower levels of education in both samples. Third, although participants across both samples agree that access to material items are where most constraints on opportunities exist, for half of these items a higher percentage from the delinquent group indicated perceiving constraints on opportunities. Lastly, data indicates that dissatisfaction in terms of family's standard of living, job opportunities and income is higher amongst non-delinquent sample participants. This is surprising but could be explained by an upward satisfaction bias that delinquent participants are showing when reflecting on their life prior to incarceration (this is addressed further in depth in the discussion section). The next section will present a series of analysis that aim to explore which variables are significant in explaining delinquency in the form of organised crime participation.

5.2.5 Models and Regressions

Before presenting the results of logistic regressions exploring the effects of the independent variables (items considered part of a good life, opportunity constraints, and satisfaction) on the dependent variable (delinquency in the form of organised crime participation), the model will be briefly explained. As indicated in the methodology section, the dependent variable, organised crime participation, is binary. Variables concerning satisfaction are Likert scale items, and therefore are coded between 1 and 5. For items of a good life and perceived opportunity constraints there are two versions that specify the variable differently. These are addressed in **Table 5.17** below:

Table 5.17 Variables, codes and construction

Dependent Variable	Survey Code	Construction
Participation in organised crime	*delinquent*	Binary variable, coded as 1 for the sample of 180 inmates (1=delinquent, 0=non-delinquent), for the 180

		young males that self-reported no delinquent behaviour.
Independent Variables		
Dissatisfaction with family's standard of living	*ec1a*	Participants are asked: using a scale of 1 to 5, how satisfied would you say that you are with your family's standard of living? Possible answers are coded on a scale of 1 to 5 (1 "Very Satisfied" to 5 "Very Dissatisfied). Participants from the delinquent sample are asked to reflect on their circumstances before involvement in delinquent activity; non-delinquent sample participants are asked about their current circumstances.
Dissatisfaction with employment opportunities	*ec2a*	Participants are asked: using a scale of 1 to 5, how satisfied would you say that you are with the job opportunities available? Possible answers are coded on a scale of 1 to 5 (1 "Very Satisfied" to 5 "Very Dissatisfied). Participants from delinquent sample are asked to reflect on their circumstances before involvement in delinquent activity; non-delinquent sample participants are asked about their current circumstances.
Dissatisfaction with income earned	*ec3a*	Participants are asked: using a scale of 1 to 5, how satisfied would you say you were with the income your received from your last legal job? Possible answers are measured on a scale of 1 to 5 (1 "Very Satisfied" to 5 "Very Dissatisfied). Participants from delinquent sample are asked to reflect on their circumstances before involvement in delinquent activity; non-delinquent sample participants are asked about their current circumstances.
Material items part of a good life	*matasp1*	Participants are asked to indicate what items are part of a good life. There are 13 material items in the list, and the responses are binary (yes/no). Individual participants are assigned a code that varies from 1 to 4, depending on the number of material items they indicate are part of a good life. 1=non-materialistic aspirations: if participants indicate that none of the material items are part of a good life 2=mildly materialistic aspirations: if participants indicate that 1 to 5 material items are part of a good life 3=materialistic aspirations: if participants indicate that

		6 to 10 of material items are part of a good life 4=highly materialistic: more than 10 of material items are part of a good life
Material items part of a good life	*matasp2*	Participants are assigned values between 0 and 13, where 0 indicates that none of the material items are considered part of a good life and 13 is that all material items are considered part of a good life (For example, if a respondent indicated that seven of the 13 material items were part of a good life, he was assigned a value of 7).
Opportunity constraints	*oport1*	Score 0 (no constraints) to 10 (many constraints). Number of times participants indicated perceiving no opportunities to access material items, divided by the number of material items they indicated constituted part of a good life. Fraction was multiplied by 10 and rounded to a whole number.
Opportunity constraints	*oport2*	Considers the number of times individuals indicated perceiving no opportunities to access the 15 items (material and non-material) most highly ranked as constituting part of a good life,* divided by the number of items (15). Score 0 (no constraints) to 10 (many constraints). Fraction was multiplied by 10 and rounded to a whole number.

*Items most highly ranked by delinquent sample participants.

Based on the variables outlined above, four models were created to explore whether any of the independent variables were significant in explaining the dependent variable, organised crime participation. An analysis of the models indicates that the third model, which considers opportunity constraints of the most valued items for a good life (*oport2*) is the most adequate, as output from the analysis reveals that model 3 has the lowest Akaike Information Criterion (AIC) score (see **Table 5.18**). AIC is a useful way to compare different models that contain different combinations of predictors, or independent variables (Field, 2009). A low value of AIC signals a good fit, and therefore, the model with a lower value of the AIC fits the data better than the models that have a higher value (2009).

Table 5.18 AIC scores for models

Model	Variables	Log likelihood	AIC
1	delinquent ec1a ec2a ec3a matasp1 oport1	-171.5514	355.1028
2	delinquent ec1a ec2a ec3a matasp2 oport1	-171.6161	355.3321

| 3 | delinquent ec1a ec2a ec3a matasp1 oport2 | -158.3698 | 328.7397 |
| 4 | delinquent ec1a ec2a ec3a matasp2 oport2 | -158.3731 | 328.7462 |

Although model 3 (like the rest of the models), contains both ordinal and continuous variables, all variables will be treated as continuous. Treating ordinal variables as continuous is often acceptable (Williams, 2016), and it is rare for an ordinal variable to be significant and for it not to be important when treated as continuous (Pasta, 2009). In other words, there is evidence that treating all variables as continuous will not fundamentally alter the results of the regressions performed.

The analysis in this section uses a logistic regression with the five explanatory variables on the dependent variable, organised crime participation. Because the dependent variables is binary (an individual participated in organised crime or did not), I performed a binary logistic regression. I began first by performing a logistic regression using the backward stepwise method, which begins with all the predictors, or independent variables included in the model, and then tests whether any of these predictors can be removed from the model without increasing the information criterion, or the AIC (a larger AIC value penalizes the model for including more predictors) (Field, Miles, & Field, 2012). The results of the regression indicate that the predictors, or independent variables that should be included in the model to explain crime participation are *ec2a*, *ec3a* and *oport2*, as these have significant p-values. The output for this part of the analysis is provided in the **Appendix** of this chapter.

As some experts believe that stepwise methods have no value for theory testing (Field et al., 2012), nested model specifications were used to test the significance of these variables. With this approach, model 1 considered only the effect of the variable *ec1a*, or dissatisfaction with the family's standard of living, on the dependent variable, organised crime participation. Model 2 considered the variable *ec1a* and added the variable *ec2a*, to test the effect of these two variables on the dependent variable, organised crime participation. Model 3 considered the aforementioned variables and added *ec3a*, concerning dissatisfaction with income earned. This approach continued until we had a full model including all independent variables. Model 6 introduced control variables for age and education. The coefficients reported below in **Table 5.19** are specified as average marginal effects.

Table 5.19 Marginal effects of satisfaction and aspirations on organised crime participation

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
ec1a. Dissatisfaction with family's standard of living	-0.12*** (0.03)	-0.10** (0.03)	-0.09* (0.03)	-0.09* (0.03)	-0.06 (0.03)	-0.06* (0.03)
ec2a. Dissatisfaction with employment opportunities		-0.06* (0.02)	-0.05 (0.03)	-0.05 (0.03)	-0.08** (0.02)	-0.06* (0.02)
ec3a. Dissatisfaction with income earned			-0.02 (0.02)	-0.02 (0.02)	-0.05 (0.02)	-0.05 (0.02)
matasp1. Material aspirations				-0.00 (0.04)	-0.01 (0.03)	0.00 (0.03)
oport2.Opportunity constraints					0.14*** (0.02)	0.10*** (0.02)
Age						0.03*** (0.00)
Secondary education						-0.21*** (0.06)
Above secondary education						-0.39*** (0.07)
Pseudo R-squared	0.03	0.04	0.04	0.04	0.12	0.25
Number of observations	261	261	261	261	261	261

*Denotes significant values (p<0.05)
** Denotes significant values (p<0.01)
***Denotes significant values (p<0.001)

The results for model 1 show that the predicted probability of organised crime participation decreases by 12 percentage points when individuals score one unit higher in dissatisfaction with the family's standard of living. This variable, *ec1a*, is found to be significant across all models, with the exception of model 5. However in this model, *ec1a* almost reaches significance (p=0.10). Model 2 indicates that both dissatisfaction with family standard of living as well as dissatisfaction with employment opportunities have a negative effect on organised crime participation, indicating that participants who have higher levels of dissatisfaction have a lower probability of organised crime participation. The significance of *ec2a* holds out in model 5 and model 6, which indicates an association to organised crime participation, although these results are not robust across all models (*ec2a* does not appear to be significant in models 3 and 4). It is important to highlight that the direction of the relationship is counterintuitive, as a positive association would have been expected: those with higher dissatisfaction would have been more likely to participate in organised crime. These counterintuitive results will be addressed further in the discussion section.

The introduction of the variable on opportunity constraints, *oport2*, in model 5 shows a significant association, indicating that the predicted probability of crime participation increases by 14 percentage points with an increase of one unit in opportunity constraints. This confirms our original hypothesis, that perceived opportunity constraints are associated with delinquent behaviour in this form. **Figure 5.20** shows the confidence intervals of the effects of dissatisfaction and opportunity constraints on organised crime participation from model 5.

Lastly, when introducing the control variables of age and education in model 6, the significance of the variable *oport2* remains. Dissatisfaction with the family's standard of living, *ec1a*, and with employment opportunities, *ec2a*, also appear to be significant. Interestingly, the introduction of the control variable education indicates that the probability of participation in organised crime is 21 percentage points lower for those with a secondary education and 39 percentage points lower for those with schooling above secondary education. For age, the positive association indicates that the predicted probability of criminal participation increases by 3 percentage points with a one unit increase in the age of participants. The models confirm the association between opportunity constraints and organised crime participation. However, doubts remain regarding the negative association between dissatisfaction and the dependent variable, organised crime participation. The results suggest that *ec1a* and *ec2a* have a negative and significant association to the dependent variable, indicating that higher dissatisfaction with the family's standard of living and with employment opportunities predicts a lower probability of organised crime participation.

Additional models with different specifications (see **Chapter 5 Annex: A.5.2**), where dissatisfaction and opportunity constraints are separated into blocks and nested regressions are performed, confirm the significance of the variables *ec1a*, *ec2a*, and *oport2*. The variable *oport2* appears significant across all models where it is considered, and is even robust to the inclusion of control variables of age and education. Variables *ec1a* and *ec2a* are significant in three out of the four models considered, suggesting an association between them and the dependent variable. The discussion section will explain the implications of these findings.

Figure 5.20 Coefficients (log odds) from model 5 (95% CI)
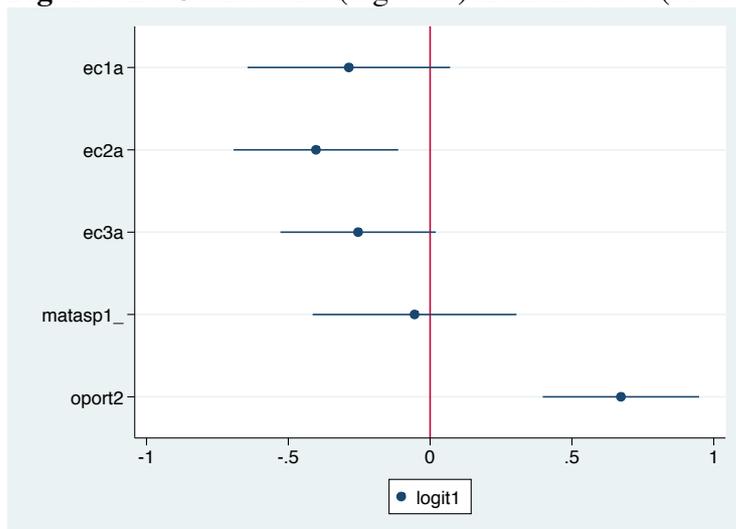
5.3 Discussion

Data from the open question asking participants to list five aspirations found that the largest proportion across both samples listed education as a first priority. This provides some evidence for the first hypothesis (h1), that there are common aspirations across participants in both samples. However, the results are not straight-forward, as differences were also identified: compared to non-delinquent sample respondents, delinquents conferred greater importance to aspirations in the category of career/profession (education and career/profession are grouped into separate categories, see **Chapter 5 Annex: A.5.1**).[87] In fact, 23.9% of the delinquent group participants had professional aspirations as a first priority, while in the non-delinquent sample the corresponding figure was only 7.8%. Several delinquent participants mentioned specific professions that they had once aspired to such as becoming engineers, lawyers, doctors, teachers, graphic designers, and even police officers or soldiers, among others. However, the difference in the perception of opportunity between the two samples signals that a larger share of participants in the delinquent sample did not think there were any opportunities to have a professional career. The relevance of opportunity constraints will be addressed further on in this section.

The data also shows that there is consensus as to the five most important items for a good life, providing initial evidence for the second hypothesis (h2), that concepts of a good life are similar across both samples. According to Merton, one of the characteristics of the social structure is the presence of common goals, usually expressed in monetary terms, but which are also culturally defined and accepted by all members of society (1938; 1957). The data shows

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[87] The category education contained responses such as "to study" "to have opportunities to study" "to continue studying", amongst others. The category for career or profession contained responses such as "to have a professional career" "to be an engineer" "to have a technical career", amongst others.

that while there are items in common that are considered part of a good life across both samples, these are not necessarily, nor exclusively, pecuniary as the items that are most highly ranked as constituting part of a good life across both samples of respondents are: "to have a family", "to have a good education", "to live a happy and balanced life", "to help others" and "to have a formal job".

However, further evidence also shows that there is greater consensus on the importance of material items in the delinquent sample in comparison to the non-delinquent group, contradicting Merton's claim on shared pecuniary goals as well as some of the empirical findings from developed country settings. In a study of gangs in London, Densley claimed that "gang members clearly have high aspirations to succeed and share with their non-gang counterparts the material expectations encouraged within advanced capitalism" (2013: p.40). While the data included in the present study shows material aspirations for both groups, it is also clear that participants in the delinquent sample were *more materially inclined,* as for almost all material items more delinquents expressed that these were a necessary part of a good life when compared to non-delinquents. Further evidence from the interviews with the first group of respondents corroborated these findings, as spending money from the proceeds of crime on material items was prevalent and items such as brand clothing and cars were found to be especially important. For example, when David[88] was asked what he would spend the proceeds of crime on, he talked about clothes and tennis shoes, and mentioned that brand clothing was important. He highlighted the importance of '*tratar de estar bien*' or looking presentable, an expression used by some of the interview participants that illustrates the importance of how one looks and the kinds of clothes that one wears in order to belong to a higher social group. Pedro also mentioned that he liked to buy clothes and tennis shoes, and made specific references to certain brands. When asked why these brands were so important he said:

> Well this is what is fashionable. I don't know about now; I suppose they still are [fashionable]. This is fashion and I always liked to be well dressed. This raised my self-esteem. It made me feel, I don't know…well, even better than other people…something that I was not.

In another interview, Juan José described how "alcohol consumption, partying, wanting to be well dressed, wanting to have a car, having, I don't know, jewellery…you know, looking good," were motivating factors for criminal participation. In another discussion, the interview participant mentioned that he used the proceeds of crime to buy a different outfit every week. The importance of clothes as social markers was also highlighted amongst other participants, corroborating Narayan et al.'s (1999) study, which found that in former Soviet states, particularly among youth and children, clothing was an important social marker. Clark (2002)

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[88] The names used in the discussion are pseudonyms.

also pointed out similar findings in his work, highlighting that study participants placed high value on wearing fashionable clothes.

These discussions provide evidence that material items – particularly brand clothes, are an important part of a good life. In a border city like Juárez, wearing brand clothing from the United States is a status symbol, clearly illustrated by interview subjects who spoke of buying '*fresa* clothes' with the proceeds of crime. *Fresa* is a specific term used in Mexico, and is especially prevalent in the north of the country and in Mexico City. There are no sociological studies that have adequately defined the concept so far, but in colloquial conversation with any Mexican, there is a common understanding of what the term refers to. '*Fresa'* describes a person from a high socioeconomic standing that dresses, behaves, and speaks in a certain way. People who are considered '*fresa'* frequently go on shopping trips to the Mecca of consumerism (the United States), take trips to Europe with their families, own luxury vehicles (and in the process, avoid using public transportation), usually come from conservative (and backward) Catholic families, are often keen to differentiate themselves from other people of lower socioeconomic standing, and have a range of servants (from maids to drivers) who fulfil their whims. In terms of their dress, '*fresas*' are often fashionable in a way that they wear expensive American designer brands –in the 1990s it was Armani Exchange and Calvin Klein. For the younger generation, American brands like Abercrombie and Fitch (A&F), Hollister, and American Eagle have a special appeal. Much to the dismay of the CEO of A&F, who openly admitted that the brand targets an exclusively white, upper class market, this brand has become a fashionable trend amongst the '*fresa'* population of Mexico.

Brand clothing constitutes a status symbol that reinforces class differences, signalling that those who have the money to buy these items are high on the social scale, whereas those that cannot are at the bottom of that scale. An early study by Greenberg (1977) argued that the high rate of property crime among youth in America was a response to a discrepancy between the desire to participate in the consumer society and not having access to legitimate funds to enable such participation. According to Veblen (2005), clothes and accessories constitute the best way to confirm participation in a consumer culture. But young men do not simply want to have access to things like "beer, sneakers and joints" as a teacher interviewed in McLeod's study of young, poor, men residing in the projects of Massachusetts pointed out (2010: p.48); there is actually a deeper reason for that want. Society, in a place like Juárez (and I would say in Mexico more generally), signals to the have-nots that they are inferior, second-class citizens, and they wear a label on themselves that identifies them as such if they don't have access to

certain material items. As Raphael explains in his book on the '*mirreyes*'[89] of Mexico, owning or having access to certain material goods (of which clothes are high on the list), constitutes a "passport" to enter a particular social group (2014: loc. 465). According to Veblen (2005), there are many ways to show that one is wealthy, but clothes and accessories, in contrast to other material items, can be shown off on any occasion and it is difficult for them not to be noticed by observers. "The phantom of the opera behind the truth of aesthetics is social prestige," explains Raphael (2014: loc. 616-622).

According to Raphael, the best articles in fashion are those that serve as social markers because their letters, designs and colours can be distinguished in any time and place (2014: loc. 819). In a search for the image of Edgar Valdéz's arrest (a notorious trafficker working for the Beltrán Leyva organised criminal group), the images that Google yields show him wearing a green Ralph Lauren shirt with the distinctive logo of the brand (see **Figure 5.21**). After Valdéz was arrested, other traffickers who were detained were caught wearing the same shirt, and there was a joke amongst Mexicans that the Ralph Lauren brand was becoming an official sponsor of drug trafficking. Tragicomical as it may be, it shows that clothes matter.

Figure 5.21 The arrest of 'Ralph' Valdéz

Source: Google images

In fact, physical appearance is so important that it represents a difference across classes in Mexico, as well as a barrier for social mobility. According to the National Survey on Discrimination (ENADIS), lacking economic resources was the main reason cited for which

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[89] '*Mirrey'* is a concept used to describe the sons (not daughters, as it is a male title) of the most powerful men in Mexico. *Mirreyes*, who have a high purchasing power due to their fathers' influential positions in business and/or government act with almost absolute impunity.

individuals had felt their rights had not been respected, followed by physical appearance, and age (Consejo Nacional para Prevenir la Discriminación, 2010). The same survey also found that 53% of young people from a low socioeconomic background surveyed in Mexico agreed that they were not offered employment due to their physical appearance. Not dressing in the right way constitutes an obstacle for belonging in a group, but it is also an obstacle to obtain the means to have the possibility of someday belonging to that group. But clothes are not the only items that serve as social markers. For example, one of the interview participants, Gabriel, clearly explains how luxury vehicles, weapons, and money are also items used to lure individuals to participate with organised crime.

> If I wanted a 2012 Lincoln [truck], they would provide it for me. How? I don't know. They would just give it to me. If I wanted an airplane, or anything, I could have it. I could have protection, weapons, they would provide money. And one would think, this is awesome…money, guns, weapons, power, no way, what more could anyone ask for?

In addition to avenues for social mobility, material items can also represent independence and autonomy, both highly valued amongst some of the interview participants. For example, David expressed that it was important for no one to exert their authority over him, que *'nadie le dijera nada'*, or that no one gave him orders. He also mentioned that it was important to own things that were a product of his own efforts; he did not want anyone to remind him that he had been given anything. This was crucial in his decision to associate with people involved in crime. Material items are also important in terms of relation with the opposite sex. Having female partners (the term is used in plural because some of the interview participants mentioned spending money on women, meaning that they most likely did not just have one partner but many), is more likely if you have the means to provide. Having more women is a sign of virility in a profoundly patriarchal culture like Mexico, but in order to have this opportunity, it is necessary not only to have the resources to provide for multiple partners, but also to visibly demonstrate that one has access to these resources.

The evidence presented above contradicts the idea of adaptive preferences. According to Nussbaum, "preferences are not hard-wired: they respond to social conditions. When society has put some things out of reach for some people, they typically learn not to want those things, forming what Elster and Sen call 'adaptive preferences' " (2013: p.54). This is what Merton referred to more than 50 years ago as conformity, the most common mode of adaptation, which involves acceptance of the *status quo* (1957). Although Sen and Elster's adaptive preferences, and Merton's conformity are applicable to a large proportion of the general population, it is necessary to focus on the population group for which this theory does not apply; in other words, amongst those who are not adapting to a perceived lack of opportunity constraints to live a good life (as he/she conceptualizes it). The evidence provided from this research proves that there

are population groups that still retain a desire for items that are traditionally out of their reach,[90] and go to great lengths to obtain them. The phenomenon witnessed does not correspond to the mode of adaptation that Merton defined as rebellion, either. Rather, what could be taking place is a perverse form of internal rebellion for individual gain. It is not politically motivated, nor does it seek to bring about structural change with newly defined goals. Clark has referred to this as reflecting a 'perverse form of valiant struggle against hardship' (2016).

The data indicated higher consensus in the delinquent sample as to the importance of material elements as constituting part of a good life, and likewise, a higher percentage of participants from the delinquent group agreed that there were no opportunities to access these items. According to Wolff and de-Shalit (2013), Sen's capability approach stresses that people should have access to what they have good reason to want to be or to do, but also, that they should have the freedom to choose among these options. Sen also emphasizes that creating opportunities for the mere sake of creating opportunities is hardly enough, it is necessary to allow for the fulfilment of a life worth living, in other words, a good life (Wolff & de-Shalit, 2013).

In the context of a highly divided and socially stratified society like Mexico, and in the particular context of a city like Juárez, undoubtedly and markedly affected by its geographical proximity to the most consumerist society in the world, individuals aspire to imitate consumption patterns of the middle and high classes. A good life is conceptualized as having access to material goods, but the data shows that this is more clearly the case amongst the members of the delinquent group. It is precisely this perception of a lack of opportunities to access valued material items that proves to be particularly problematic, as this goes hand in hand with open discrimination based on the lack of material goods. Both groups agree that access to material goods is limited, but the value conferred to these items is clearly greater in the delinquent group.

This is not to argue that lack of opportunities to access material goods for those who place value on them will automatically result in criminal behaviour, rather that this is one of the many contributing factors that help explain why young men participate in organised criminal activity. The non-delinquent group, considers material items less necessary to live a good life, as is shown in **Figure 5.5** above, which illustrates that delinquent sample participants are more materially inclined than their non-delinquent counterparts. On the other hand, the delinquent group is not responding to adaptive preferences, in other words, they are not adapting to not having access to material items, and instead, they find a way –even if outside

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[90] See also Clark (2012).

the limits of the law, to fulfil material desires. This is confirmed in the output of the model, which finds that opportunity constraints to access items that are most highly ranked is associated to a higher probability of organised crime participation, confirming the third hypothesis (h3).

Although there is an element of agency in the decision to participate in organised criminal activity, this research operates on the assumption that if access to these valued goods could be secured through an alternative, legal avenue, most individuals would not pursue a criminal career. In *Disadvantage*, Wolff and De-Shalit find empirical evidence to support the idea that people are not happy to lead lives where they break the law, finding that "it is the system which forces them to do otherwise, and not their corrupt character" (2013: pg. 48). Evidence presented in **Chapter 7** indicates that a high proportion of delinquent participants were previously employed in '*maquilas*', or assembly plants, where wages were insufficient to keep them above the poverty line, especially as a large share of participants in this sample (over half) had children, with some having started families at a very young age (a point further addressed in **Chapter 7**).

Additional material from the surveys revealed that the youngest members of the delinquent group were especially vulnerable to considering material items as an essential part of a good life. Furthermore, more individuals in the delinquent sample, especially amongst the youngest age group, were willing to admit that harmful substances constitute part of a good life. Young people who take harmful substances are more inclined to participate in other risky behaviours, including crime. Evidence from the interviews confirms that some of the proceeds from crime were used to purchase illegal substances. Several of the individuals interviewed used them frequently and a couple of others admitted having a strong addiction to several substances. For example, Milán mentioned that when he was growing up, his mother abandoned the household and he was left with his father and brother. His father had a cocaine addiction, and although his father was employed, he preferred to spend the income derived from his job on maintaining his addiction instead of providing for his two sons. The father consumed cocaine daily, and eventually, Milán and his brother also picked up the habit. When he was involved in crime, he used some of the proceeds of crime to buy alcohol, but also cocaine. Ricardo also spoke about using the money earned from criminal activity (although he mentioned that he was not participating in organised crime, rather was involved with a gang) to buy beer, cigarettes and marihuana, which he started to use when he was thirteen.

For Pedro, the proceeds of crime were also used to buy drugs and alcohol and Jorge described that his family was involved with drug trafficking. He started to use heroin, cocaine, and "all types of drugs". Initially, Jorge described that consumption was sporadic but eventually

became an addiction. He was doing drugs on a daily basis. Manuel described that although his family (he lived with his grandparents), were not in a difficult situation economically, he felt the need to work to sustain his addictions. "I worked only for my drugs and to be clothed, '*andar bien*'…" "I started to consume marihuana and alcohol, tobacco…and well, whatever my family gave me, it wasn't enough, because if I was hanging out with two or three people, well I had to pay for them as well, you know?"

As the historical chapter on drug trafficking in Mexico makes clear, drug consumption in the country is not widespread and most drugs now produced in Mexico are destined for the United States and other countries where consumption is much more prevalent. A study using data collected in 2001 and 2002 on drug use in Mexico found that only 2.3% of the population aged between 18 and 65 had used drugs in the past twelve months (Medina-Mora et al., 2006). However, there are certain locations, especially in border cities, where drug consumption is more common amongst a specific group of the population. Mexico's youth survey found that in 2010, 5.8% of young individuals indicated that they had consumed drugs at least once in their lives (IMJUVE, 2010a),[91] a much higher figure than the national estimates calculated by Medina-Mora et al. (2006). Two scenarios are possible: either drug consumption has increased in the period since Medina-Mora's study (which is likely), or there is a much higher prevalence of drug use amongst young people. Most of the interview participants in Juárez seemed to have had experiences of drug consumption to varying and different degrees. This finding makes it pressing to reach a deeper understanding of how widespread drug use in Mexico really is, as the available evidence paints a mixed picture.

Despite the strong inclination towards material goods and evidence of using harmful substances, altruistic expenditures are also important amongst delinquent participants, especially when it concerns families and more particularly, mothers (the open question on aspirations provides further evidence of the importance assigned to families amongst delinquent participants). Mothers have an especially important role, and sons are likely to feel responsible for providing for them, partly due to the central role that the maternal figure plays in Mexican culture. In an interview with the journalist Julio Scherer, a young offender serving time in a penitentiary centre for minors in Mexico City described his mother in the following way: "I have always said that my objective, my weakness and [at the same time] my strength, my goal, is my mother. Until this very day, in these five years, my mother is present in all of my thoughts" (2013: p.58). As the sociologist Sara Sefchovich points out, mothers are central figures in

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[91] In comparison, in countries like the United States, the proportion of people in the 12th grade who have used illicit drugs at least once in their lifetime was as high as 50.4% in 2013 (NIDA, 2013).

Mexican culture, they have the capacity to get their sons to do whatever they want using methods that range from love and devotion, to threat and intimidation (2014). As the Mexican journalist, Anabel Hernández points out, when the noted Arellano Felix drug barons were accused of murdering a well-respected cardinal in the city of Guadalajara, their "mother [who was a fervent devotee of the cardinal] was furious and refusing to speak to them, *a very serious matter for any self-respecting drug baron, who regards his mother as sacred*" [emphasis added] (2013: loc. 490). The relationship of the Arellano Felix brothers with their mother was so intense, that Hernández believes there was no way they could have murdered cardinal Posadas Ocampo, because their mother loved and admired him (2013).

Hernández also describes how the drug baron Joaquín Guzmán, leader of the Sinaloa organisation, "had a great affection and nostalgia towards his mother" (Hernández, 2010: p. 156), he missed her when she was far and wanted his women (yes, plural, like any drug baron) to cook like her (2010: p. 156). But above all, notes Sefchovich (2014), this love for the motherly figure is profoundly understood and shared by almost everyone in Mexican society. It reveals the complexity of the characters of participants of organised crime. While at times the crimes they have committed are atrocious and their ambitions show more materialistic inclinations, their aspirations are also more centred on the family when compared to their non-delinquent counterparts. Former offenders are capable of the deepest respect and sympathy for members of their family and friends, especially their mothers, who take on an almost religious role.

Evidence derived from the interviews only reinforces this image. Martin describes how in addition to buying clothes and a car, he used the money derived from crime to help his mother. He explained that he and his brothers would take turns to pay the bills and groceries for her. Gabriel describes how he used the money derived from harvesting marihuana to pay for household services. He helped his sisters to buy basic goods, such as shoes and clothing. He described that:

> Everything was to help them [his siblings] out. Studying was not important to me anymore, what I was interested in was for my nieces and nephews to eat, that my sisters had something to build on to get ahead [in life].

Rodrigo describes how he originally dropped out of school to help his mother, and after he was involved in organised crime, he used the profits derived from this to "buy clothes for everyone…I bought groceries for everyone, fixed my house up, my mother's house as well." Gabriel mentioned that he used the money derived from the cultivation of marihuana to build a house for his nine (now eight) siblings. This respondent described particularly difficult

situations, such as going hungry to feed his nephews and using what little income he gained to provide for his siblings and their children, at the expense of his own well-being and basic needs.

The interviews also reveal that it is not uncommon for some of these men to support other family members. For example, Rodrigo mentioned that he used a part of his money to help his brother buy all the things he needed and paid for his brothers and sisters to go to school. "I bought school supplies, shoes, uniforms. This is why I did it, I wanted to help my family, lend them a helping hand. I was spending everything on them." He describes that he wanted to purchase a home for himself and for his wife but was unable to do so, as he was arrested.

> I wanted to buy a house for me and my wife because I got married…and yes, and I was with her for three months and then they got me [he was arrested] and I was unable to do anything. But my intentions were to buy a house, some furniture…to have something to offer her [the spouse] because I did not have anything. I was still living in my mother's house, so I wanted to strive to 'salir adelante' [build something], one way or another.

Alfredo described a similar situation. Although he recognized that he spent some of the profits derived from illegal activities on "drugs, alcohol and women", there was a part that was used to help his family. He described that it was a priority for him for members of the family to feel that they were not lacking anything, and mentioned that material items were not especially important to him. He mentioned buying most of his clothes from 'mercados de segundas', or second hand markets, and although his brothers did enjoy brand clothing and made fun of the fact that he did not, he was never really interested in these kinds of items. He was only interested in being adequately dressed because he could recall periods in his childhood where there was not enough money for him to even own a pair of shoes.

> The one thing I cared about was to be dressed…I was not interested in luxury goods, or in cell phones, computers, tablets and all of that. I just did not want my mother to be deprived of anything that we had lacked access to when we were growing up, and that my grandfather always had a working phone because that is how I communicate with them. Only for that. There were times when they had difficulty paying bills, or my grandmother did, and that is when I would help them out, I would give them money. But that money, most of it was spent on drugs, alcohol and women…on parties. Now the little money that remains is for my princesses [his daughters].

Jorge described that a large part of his family was involved in the drug trade. Before they participated he mentioned that his grandmother used to live in a house made of carton, but after a year, they were able to build a two-story house for her. In the beginning, he explained, they had no furniture and after a while, some members of the family even owned cars. He described that before participating in crime: "I saw that a lot of people were having a hard time to buy food, or had no electricity. I never wanted that for my family. Because my grandmother, from my mother's side, is poor –she is from the sierra [mountains]. I always wanted them to have something."

Lastly, the results from the model showed some counterintuitive results, as dissatisfaction with the family's standard of living and dissatisfaction with employment were both found to be negatively associated with organised crime participation, indicating that higher dissatisfaction represented a lower probability of participation in crime, going against the original hypothesis (h4) and theories addressed at the beginning of this chapter. The descriptive data also indicated that dissatisfaction was higher in the non-delinquent sample than in the delinquent sample, which runs counter to the expectations of the research. A plausible explanation for lower levels of reported dissatisfaction in the delinquent group is that because the question asks participants to reflect on their life *before* incarceration (on their prior life conditions), and because their life before this period was arguably better, satisfaction in this group could be upwardly biased. For example, an additional module of the survey (see **Chapter 4 Annex: A.4.3,** items PA1 to NA13) asking participants to reflect on the frequency with which they experienced both positive and negative emotions (prior to organised crime participation for delinquents and in the last six months for non-delinquents), found that there were differences in which some negative emotions were experienced across both samples, although they were small. For example, while 10% of delinquents mentioned experiencing shame/humiliation "very often or every day" and "often", the corresponding figure for non-delinquents was 6.7%. On average, the results show that delinquent sample participants recalled experiencing negative emotions more often than non-delinquents.[92] According to Schwarz and Strack (1999), measures of subjective well-being are extremely sensitive to contextual influences. It is strongly encouraged that future studies working with institutionalised populations consider the effects of incarceration on retrospective evaluations, as the effects of prison could mean that participants recall their past conditions in a more positive light. These findings initially suggest that negative emotions may constitute a better measure for strain than satisfaction. In addition, information from the interviews reveals that the proceeds of illicit activity have been used to improve the family's standard of living, evidence which is discussed further in **Chapter 7,** and which could explain higher satisfaction in this area amongst delinquents when compared to non-delinquents.

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[92] In terms of affective state, the data illustrates that the mean scores for positive and negative affect are different across the delinquent and non-delinquent groups. The delinquent group has a lower mean of positive affect (49.4) than the control group (49.8). Likewise, the mean for negative affect is higher in the delinquent group (29.4) than in the control group (29.0).

5.4 Conclusions

The present chapter sought to better understand young people's aspirations, in addition to finding whether there is evidence of a common aspirational framework and similar ideas to what constitutes a good life across participants. The chapter also sought to determine whether opportunity constraints to access what is considered to be part of a good life and satisfaction in different aspects of life are relevant in explaining organised crime participation.

The findings first indicate initial evidence of a similar aspirational framework, as aspirations in the category of education are the first priority for the largest share of participants for both delinquent and non-delinquent samples. However, differences are found in the importance conferred to aspirations in the categories of career/profession and family, with the delinquent sample enlisting more aspirations in these categories in comparison to the non-delinquent sample participants.

There are also differences across samples in the items that constitute part of a good life, as there is higher consensus in the delinquent group that material items constitute part of a good life in comparison to the non-delinquent sample. Of these, brand clothes were especially important, as they represent not only symbols of status and prestige, but avenues for social mobility. Other material items are instrumental for autonomy and in relation to the opposite sex. The youngest members of the delinquent sample were more strongly inclined to grant importance to material goods in comparison to their older counterparts. Furthermore, a greater proportion of the youngest participants were willing to admit that harmful substances constitute part of a good life. Interviews conducted with participants of the delinquent sample confirmed widespread evidence of drug use among the delinquent sample, which calls for a revaluation of how widespread drug consumption in the country is, as recent studies indicate low incidence of drug use in Mexico. Despite the inclination towards material goods and evidence of the use of harmful substances, altruistic expenditures were also found to be important, especially when it concerns families and more particularly, mothers.

Opportunity constraints to access the items that are most valued were found to be a powerful predictor of organised crime participation. One of the most significant opportunity constraints for the delinquent sample is in the access to a professional career, showing that there is agreement on the importance of having a professional career amongst members in the delinquent group, but also that the perception of their opportunities to achieve this is low.

Lastly, counterintuitive results were found in the items on satisfaction, as delinquent sample participants showed higher satisfaction with their family's standard of living: additional data from the survey shows that the proceeds of illicit activities are lowering income poverty

(see further evidence in **Chapter 7),** and the material from the interviews in this chapter confirms that the extra income derived from criminal activity was used partly to finance family expenditures, possibly increasing the satisfaction of the family's standard of living amongst delinquent participants. Experiences of negative emotions may then constitute a better measure for strain than satisfaction.

Chapter 6. Micro Level Factors: Family and Community Environments

In the previous chapter, the research addressed the individual level factors –measured by aspirations and concepts of a good life, to explain criminal participation. Because this research relies on an ecological approach to crime, a second level of analysis, will be considered in this chapter. Micro level factors from the family and community environments will be explored to determine their association to organised criminal activity. For the family, the present chapter first explores whether structural or relational factors (or both) are important in explaining organised crime participation in the Mexican context. Structural factors consider being raised in a single parent household, while relational factors refer to the presence of physical and emotional violence in the household, as well as the lack of communication and affection between parents and participants. The study also explores whether parents' involvement in illicit activity and spending time in jail are also associated with organised crime participation amongst the participants of this study.

For the community environment, the research looks first, at the reference group of participants and secondly, whether the presence of violence and social cohesion in the community is associated to delinquent behaviour in the form of organised crime participation. Reference groups are determined on the basis of whether participants are closer to their peers or to their parents/caretakers. This chapter will be structured as follows: The methodology of this part of the research and the questions of the survey instrument used for this purpose will first be explained in detail. Descriptive statistics and regression analysis will follow. The chapter concludes with a discussion which puts together the quantitative findings with the qualitative evidence.

6.1 Survey Description: Modules Used for Family and Community Environments

The survey section for this chapter consisted of two separate modules. The first addressed the family environment and considered first, abandonment, by asking participants whether they had been raised by a single parent. Second, the survey looked at communication and affection by asking participants about communication, affection and support from parents. The survey then addressed physical and/or emotional violence, asking participants about the use of offensive words and insults, the use of physical violence as a form of punishment in the household where they grew up, and whether problems in the household were solved through violent means. Lastly, participants were asked whether their parents had spent time in jail and whether they had been involved in criminal activities. To measure the first variable, participants were asked whether they had been raised by one parent only, and the item was coded as dummy

variable (0=raised by both parents, 1=raised by a single parent). For the rest of the variables, participants were asked to indicate to what extent they agreed with a series of statements. Likert scale items were used, where 1 indicated "highly disagree" and 5 indicated "highly agree". The items used for evaluation of the family environment are outlined below (**Table 6.1**). It is expected that individuals raised by a single parent (h1) and who show higher agreement with the statements outlined (h2) will more likely have participated in organised crime.

Table 6.1. Codes, variable names and survey items for family environment factors

Category	Code	Variable	Survey item
Abandonment	FAM	Grew up with only one parent	Did you grow up with only one of your parents?*
Communication and affection	FAM1	Lack of communication with parents	The relationship with your parents lacked communication
	FAM2	Lack of support	Your parents were not very supportive in the decisions that you made
	FAM3	Lack of affection	Your parents did not show you affection
Physical and/or emotional violence	FAM4	Use of offensive words or insults	At least one of your parents often used offensive words or insulted you
	FAM5	Physical violence as a form of punishment	At least one of your parents used physical violence as a form of punishment
	FAM6	Problems solved through violent means	Very often problems in your family, either between your parents, or between yourself and your parents were solved through violent means
Parents in jail	FAM7	Parent(s) spent time in jail	At least one of your parents has spent time in jail
Parents involved in criminal activity	FAM8	Parent(s) involved in criminal activities	At least one of your parents has been involved in illicit activities

*Yes or No response, excluded from the scale of Likert items
 Source: Elaboration by author, FAM6 based on INEGI, Survey on Intra-Family Violence (1999)

The second module considered factors in the community environment. The research first looked at who the reference group was, that is, whether participants were closer to their peers, or to their parents or caretakers. For questions on the reference group, items were coded as dummy variables. For example, for GR1. in **Table 6.2**, the response is coded as 0=parents and 1=peers, friends or neighbours. Secondly, the study looked at whether the presence of violence in the community, measured by pervasive drug/and or alcohol consumption, fighting in the community, and knowing or associating with people involved in gangs was associated to participation in organised crime. Finally, the study looked at social cohesion, and whether perceived lack of trust, communication and cooperation in the community was associated to organised crime participation. For these items, a Likert scale as used, where 1 indicated "highly disagree" and 5 indicated "highly agree". The items used for evaluation of the community environment are outlined below in **Table 6.2**. It is expected that amongst participants in the

delinquent group, the reference group will most likely be the peers instead of the parents (h3). Also, it is estimated that lower perceived cohesion in the community (h4), as well as the presence of violence in the community (h5), will be associated with a higher probability of organised crime participation.

Table 6.2 Codes, variable names and survey items for community environment factors

Category	Code	Variable	Survey item
Reference group	GR1	Closer relationship with friends	Would you say you had a closer relationship with your parents, peers and/or friends or your neighbours?*
	GR2	Friends' opinion was more important	Considering your parents, peer and/or friends or your neighbours whose opinion was most important to you?*
	GR3	Most afraid of disappointing friends	From these three groups, who were you the most afraid of disappointing?*
Social cohesion	COM1	Few people in the neighbourhood to count on	If there was a problem in my family, there were few people in my neighbourhood or no one that we could count on
	COM2	Distrust in the neighbourhood	In general, there was a lot of distrust in the neighbourhood
	COM3	Did not know neighbours very well	I did not know my neighbours very well and we rarely spent time together
Violence in the community	COM4	Fighting was common	Fighting between people in the neighbourhood was common
	COM5	Knew people involved in gangs and/or involved in illicit activities	I knew several people from the neighbourhood that were in gangs and/or involved in illicit activities
	COM6	Regularly spent time with people involved in gangs and/or illicit activities	I regularly spent time with people from the neighbourhood that were involved in gangs and/or illicit activities
	COM7	Knew people with a strong dependency to alcohol and/or drugs	I knew several people in the neighbourhood who had a strong dependency to alcohol and/or drugs

* Excluded from the scale of Likert items
Source: Elaboration by author

The analysis section below will be divided into two parts addressing first the family, followed by the community environment. Each will be structured in the same way. First, descriptive statistics will be presented, followed by the results derived from logistic regressions to determine which variables are significantly associated to organised crime participation. The last part will discuss the qualitative evidence obtained from interviews and how that supports (or alternatively, calls into question) the quantitative findings.

6.2 Analysis

6.2.1 Descriptive Data for Family Environment

To explore the relationship between family environment and organised crime participation, the section starts with descriptive analysis. For the variable FAM, which is binary, the data indicates that while almost half of the delinquent sample (43.9%) grew up with only one parent, only one quarter (24.9%) of the non-delinquent sample experienced the same.

The rest of the items use a Likert scale. This analysis focuses on participants who indicated the responses "highly agree" and agree". For the item FAM1, lack of communication, roughly one third of participants in both samples agreed and highly agreed that there was a lack of communication with parents (see **Figure 6.3**). On the other hand, agreement with the item FAM2, lack of support, was more common in the delinquent sample (26.1%) than in the non-delinquent sample (18.9%). Interestingly, FAM3, lack of affection, was slightly more common in the non-delinquent sample. For the items on physical and/or emotional violence, the item FAM4, use of offensive words or insults, was the most common expression of violence across both samples. However, agreement on the presence of all forms of physical and/or emotional violence was more widespread in the delinquent sample. For example, in the delinquent sample, 25.6% of participants agreed and highly agreed with the item FAM6, physical violence used as a form of punishment; the corresponding figure for the non-delinquent sample was 20%. Lastly, the data also indicated a higher proportion of agreement with item FAM7, parents had spent time in jail and item FAM8, parents who were involved in illicit activities, in the non-delinquent sample than in the delinquent sample, which was surprising and unexpected. While 20.5% of delinquents agreed and highly agreed that they had a parent who had spent time in jail, the corresponding figure in the non-delinquent sample was 25.5%.

Figure 6.3 Percentage (%) who "agree" and "highly agree" with statements on the family environment: delinquent v. non-delinquent

Parents in jail and involved in criminal activity
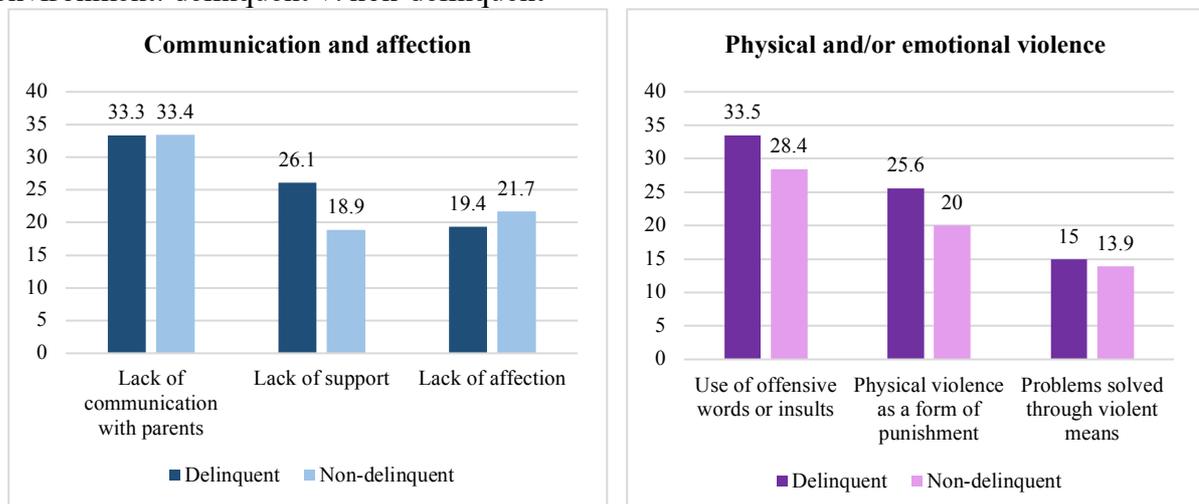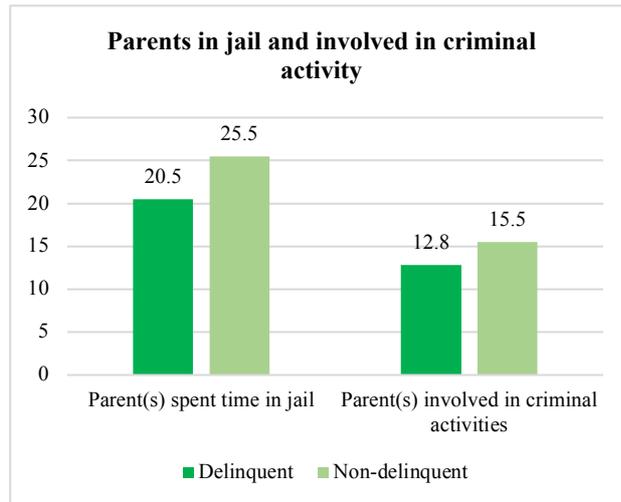
Source: Author's elaboration based on fieldwork data

Breaking down the data by age groups in the *delinquent sample* reveals a higher proportion of participants amongst the oldest age group (24 to 29) who agreed with almost all items. Specifically, a higher percentage of the oldest participants indicated that they grew up with only one parent. In addition, there was a higher proportion that agreed and highly agreed with experiencing a lack of support on behalf of the parents, lack of affection, emotional violence in the form of insults, and physical violence as a form of punishment. A higher percentage of the oldest age group also agreed and highly agreed that very often problems in the family were solved through violent means. Nevertheless, the data also reveals a much higher presence of parents who had spent time in jail as well as parents who were involved in illicit activity amongst participants in the youngest age group (12 to 17). More than twice the proportion of members from the youngest age group vis-à-vis the older participants, agreed that their parents had spent time in jail (36.4% vs. 15.5%, respectively) and had parents who were involved in criminal activities (20.5% vs. 10%) (see **Figure 6.4).**

Figure 6.4 Percentage (%) who "agree" and "highly agree" with statements on the family environment: delinquent, by age group

Source: Author's elaboration based on fieldwork data

In contrast, in the *non-delinquent sample* there was a higher proportion of agreement in the oldest age group with the items on lack of support from the parents, the use of offensive words, and problems solved through violent means in the household. Growing up with only one parent, lack of communication, lack of affection, and physical violence were more common in the middle age group of the non-delinquent sample (18 to 23). In addition, there was a higher proportion of participants in the middle-aged group (18 to 23) who agreed with the items that parents had spent time in jail and parents had been involved in criminal activity (see **Figure 6.5**).

Figure 6.5 Percentage (%) who "agree" and "highly agree" with statements on the family environment: non-delinquent, by age group

Source: Author's elaboration based on fieldwork data

Next, when breaking down the findings by educational achievement, there appears to be a clear relationship between the latter and the indicators for the family environment in the *delinquent sample*, as a significantly higher percentage of participants with no schooling grew up with a single parent. In addition, these participants presented a higher proportion of agreement with statements on the lack of affection in the family, use of offensive words, and the presence of physical violence as a form of punishment (see **Figure 6.6**). For example, while 61.1% of participants in the delinquent sample who had no schooling indicated that they grew up with only one parent, the corresponding figure for those who had a secondary education was 35.2%, almost half the proportion in comparison to those with no education. In addition, while 50% of participants agreed and highly agreed that offensive words and insults from parents were common, only 23.4% for those with above a secondary education agreed with this item.

Figure 6.6 Percentage (%) who "agree" and "highly agree" with statements on the family environment: delinquent, by educational achievement
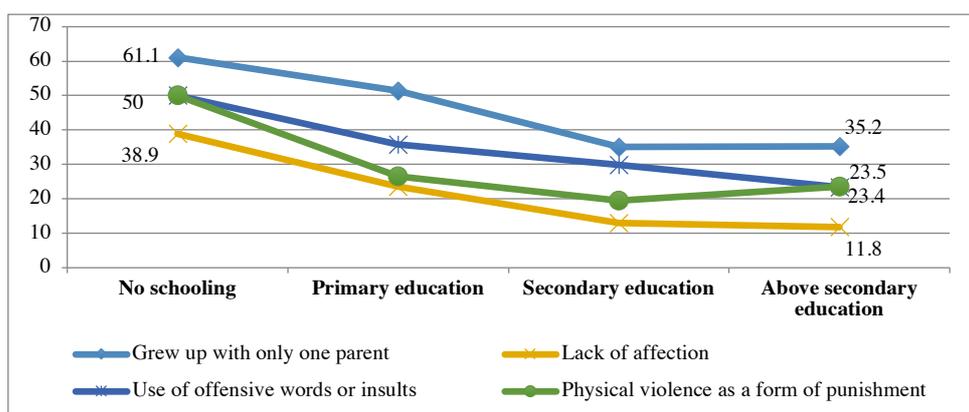
Source: Author's elaboration based on fieldwork data

For the *non-delinquent sample*, the no schooling category was removed, as only one respondent in the control sample indicated having no schooling. The data reveals a less clear relationship between educational achievement and the indicators of the family environment (see **Figure 6.7**). For example, 29.7% of non-delinquent participants with primary education grew up with a single parent, but for those with above secondary education, the figure was slightly higher, at 31.9%. Nevertheless, a higher proportion of participants with only primary education agreed with the items on lack of affection from the parents, use of offensive words or insults, as well as physical violence as a form of punishment. For example, in the last case, while 25.6% of those with only primary education agreed with the item on the use of physical violence as a form of punishment, only 12.8% of those with an educational achievement above secondary school indicated the same.

Figure 6.7 Percentage (%) who "agree" and "highly agree" with statements on the family environment: non-delinquent, by educational achievement
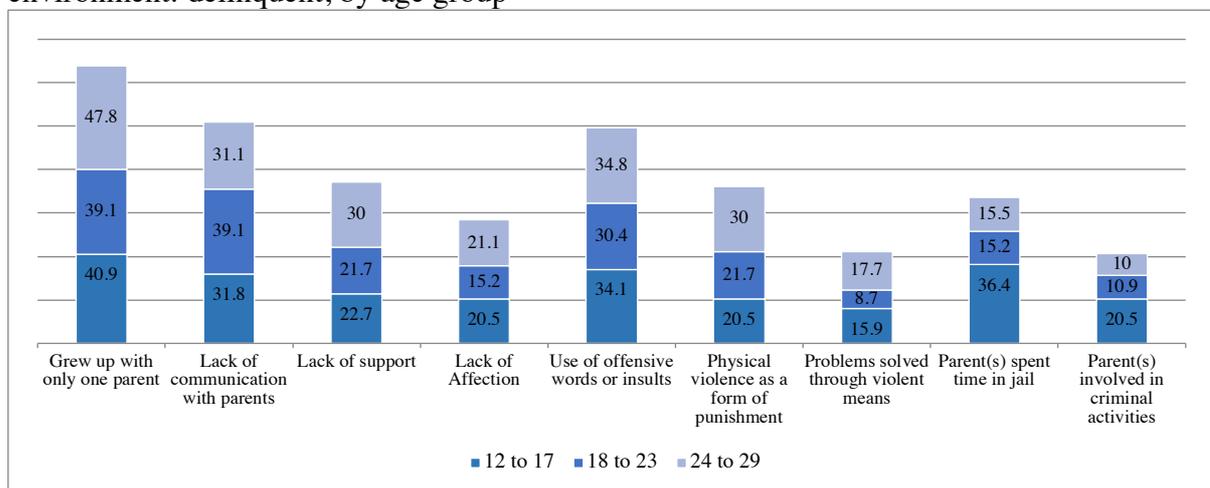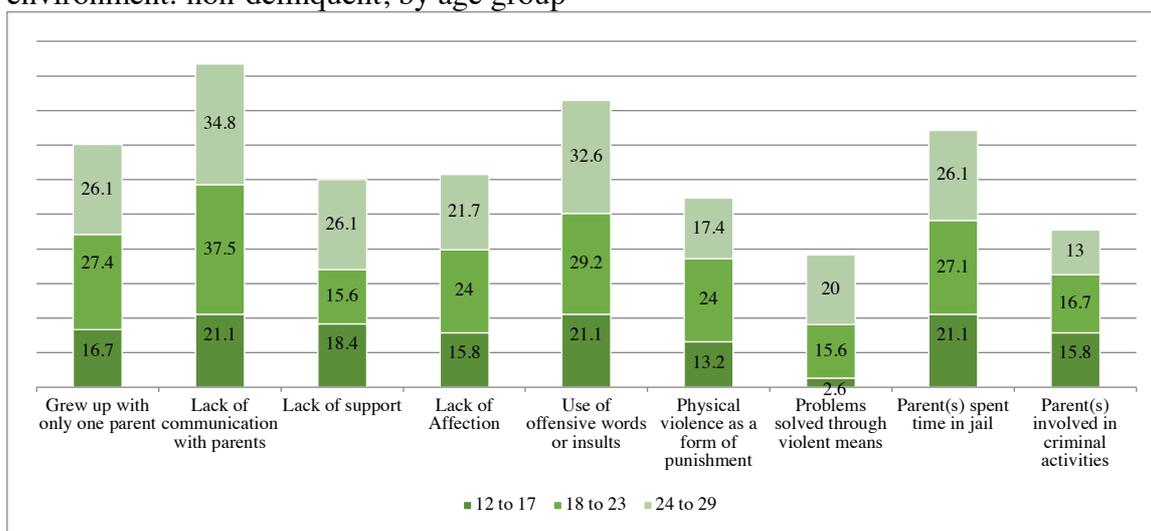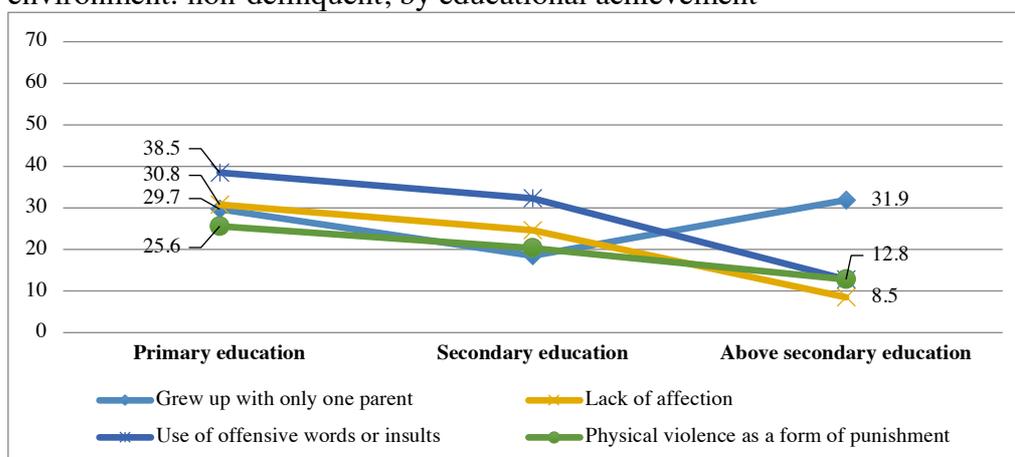

Source: Author's elaboration based on fieldwork data

In summary, the information to take away from the descriptive data on the family environment is summarized as follows:

Delinquent vs. non-delinquent sample:

- The most significant difference across samples is in regards to growing up with a single parent, more than 40% in the delinquent sample, only one quarter, or 24.9% in the non-delinquent sample.

- Higher proportion of participants in the delinquent sample agreed with items on the use of offensive words or insults and physical violence as a form of punishment, but the differences are small.

- Higher proportion of non-delinquent participants who agree with the statements that parents had spent time in jail and parents were involved in illicit activities.

Delinquent, breakdown by age group:

- The oldest participants were more affected by almost all factors in the family environment, except the items parents spent time in jail and parents were involved in criminal activities, where there was a higher proportion of agreement amongst participants in the youngest age group.

Non-delinquent, breakdown by age group:

- Participants in the middle age group showed a higher proportion of agreement with items relating to the family environment, including growing up with a single parent, lack of affection from the parents, and the use of physical violence as a form of punishment.

Delinquent, breakdown by educational achievement:

- A higher proportion of delinquent participants with no schooling grew up with a single parent, agreed that they lacked affection from parents, and were subjected to offensive language and physical violence as a form of punishment, indicating a clear trend between the items considered and educational achievement.

Non-delinquent, breakdown by educational achievement:

- The relationship between educational achievement and indicators for the family environment is less clear in this sample: there was, however, a higher proportion of agreement amongst participants with only a primary education with lack of affection, use of offensive words or insults, and physical violence as a form of punishment.

6.2.2 Models and Regressions for Family Environment

In order to test these descriptive associations, I turn to logistic regressions. This method was selected because the dependent variable was coded dichotomously (delinquent=1 or non-

delinquent=0). The independent variables are, with the exception of FAM, Likert scale items. The statements are phrased negatively, so for example, a positive association between the dependent variable, organised crime participation, and the independent variable FAM7, would indicate that higher agreement with the statement that a parent spent time in jail is associated to a higher probability of participating in organised crime.

The analysis regressed the dependent variable of organised crime participation on the eight explanatory family environment variables through a series of logistic regressions. The analysis began first by using the backward stepwise method. The backward stepwise method begins with a model that includes all predictors, or independent variables, and then tests whether any of these predictors can be removed from the model without increasing the information criterion, or the AIC (a larger AIC value penalizes the model for including more predictors) (Field et al., 2012). The results of the regression indicate that the predictors, or independent variables that should be included in the model to explain crime participation in the family environment are FAM and FAM2. The output for this part of the analysis is provided in the **Chapter 6 Annex: A.6.1**.

Given the disagreement regarding stepwise methods and its value for theory testing (Field et al., 2012), nested models were used to test the significance of blocks of variables. With this approach, the first model considered only the effect of the variable FAM on the dependent variable, organised crime participation. Model 2 considered the variable FAM and added the variables concerning communication and affection in the family environment (FAM1, FAM2, and FAM3). Model 3 kept all the aforementioned variables and added FAM4, FAM5 and FAM6, factors related to the presence of physical and/or emotional violence in the family environment. This approach continued until we had a full model including all independent variables. In Model 6, control variables for age and education were included. The coefficients reported below in **Table 6.8** are specified as average marginal effects.

Table 6.8 Marginal effects of family environment variables on organised crime participation

Category	Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Abandonment (Ref. cat. = both parents)	FAM. Grew up with only one parent	0.17** (0.05)	0.17*** (0.05)	0.18*** (0.05)	0.18*** (0.05)	0.19*** (0.05)	0.11* (0.05)
Communication and affection	FAM1. Lack of communication with parents		-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.03 (0.02)	-0.02 (0.02)
	FAM2. Lack of support		0.05* (0.02)	0.05* (0.02)	0.05* (0.02)	0.06* (0.02)	0.03 (0.02)
	FAM3. Lack of affection		-0.02 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.05* (0.02)

Physical and/or emotional violence	FAM4. Use of offensive words or insults			0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.02 (0.02)
	FAM5. Physical violence as a form of punishment			0.02 (0.03)	0.02 (0.03)	0.02 (0.03)	-0.00 (0.02)
	FAM6. Problems solved through violent means			-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)
Parents in jail	FAM7. Parent(s) spent time in jail				-0.03 (0.02)	-0.05* (0.02)	-0.02 (0.02)
Parents involved in criminal activity	FAM8. Parent(s) involved in criminal activities					0.04 (0.03)	0.04 (0.02)
Education (ref. cat. = no schooling)	Primary						-0.27** (0.08)
	Secondary						-0.45*** (0.07)
	Above secondary						-0.69*** (0.08)
Age							0.03*** (0.00)
Pseudo R-squared		0.02	0.03	0.03	0.04	0.04	0.19
Number of observations		344	344	344	344	344	344

*Denotes significant values (p<0.05)
** Denotes significant values (p<0.01)
***Denotes significant values (p<0.001)

The results for model 1 show that the predicted probability of organised crime participation increases by 17 percentage points for those raised in a single parent household in comparison to those raised with both parents (FAM). This variable is significant (p<0.05) across all models. Model 2 shows a positive effect for FAM2: other things equal, the predicted probability of organised crime participation increases by 5 percentage points when agreement with the statement on lack of support increases by one unit. This variable is significant across models 2 to 5, but is not significant when the covariates of age and education are introduced. The results for model 4 show that having a parent who spent time in jail (FAM7) is negatively associated with the dependent variable. However, the results are not significant at the conventional significance level (p=0.05). However, in model 5, this variable does appear to reach traditional levels of significance, suggesting that there may be a relationship between these two variables once we condition on additional family environment factors that influence the probability of participating in organised crime. The results for model 5 show that the predicted probability of organised crime participation decreases by 5 percentage points when agreement with the

statement that parents spent time in jail increases by one unit. The coefficient for this variable is statistically significant ($p<0.05$). **Figure 6.9** shows the confidence intervals of the effects of family environment factors on organised crime participation from the full model specification (model 5).

Lastly, the introduction of age and education (model 6) as control reduce the significance of FAM7, parents spent time in jail and FAM2, lack of support. FAM, being raised by a single parent, remains significant. The results for this model show that the predicted probability of organised crime participation decreases by 27 percentage points for individuals with primary education in comparison to those with no schooling. For those who have a secondary or above secondary level education, the predicted probability of organised crime participation decreases by 45 percentage points for individuals with secondary school in comparison to those with no schooling and decreases by 69 percentage points for those with above a secondary level education in comparison to those with no schooling. For age, results show that, other things equal, a respondent one year older is 3 percentage points more likely to participate in organised crime. Because this study only included young men in the age group 12 to 29, what this suggests is that young individuals who are closer to adulthood are more at risk of criminal participation.[93] All these results are significant ($p<0.001$), suggesting that the strong effect of education on organised crime participation is possibly reducing the significance of the effect of FAM7 and FAM2. Robustness checks were performed using logistic regressions with different specifications and by conducting OLS regressions (see **Chapter 6 Annex: A.6.2** for results). First, two models were run, one with all independent variables but no covariates of age and education (model 1); the second included these covariates (model 2). A third model (model 3) was run using binary independent variables, the items were coded as 0 "disagree" and 1"agree"; responses with 3 "neither agree nor disagree" were removed from the analysis, explaining the reduction in the sample size (n=247). A fourth model was run grouping variables for communication and affection into one category by calculating the average of FAM1, FAM2 and FAM3. The variables for physical and/or emotional violence were also grouped into one single variable by calculating the average values of FAM4, FAM5 and FAM6. Parents in jail, FAM7, and parents involved in criminal activity, FAM8, were kept as separate variables, as impunity rates in Mexico are extremely high (95%) (Universidad de las Américas, 2016), so those who have participated in crime may not necessarily have spent time in prison. The results confirm the significance of the variable FAM, in explaining the

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[93] This significant association could also be explained by the fact that 50% of the delinquent sample was constituted by participants in the oldest age group (24 to 29); whereas for the non-delinquent sample the corresponding percentage for this age group was only 26%.

dependent variable, as it is significant across all models. FAM2 and FAM7 appear to be significant, although not consistently across all models. They lose significance when including the covariates of age and education, as in the original analysis described above (see **Chapter 6 Annex: A.6.2**). Evidence from the qualitative interviews confirming the importance of these factors will be addressed in the discussion section of this chapter. Additional factors that were overlooked in the quantitative analysis will also be addressed.

Figure 6.9 Coefficients (log odds) from model 5 (95% CI)
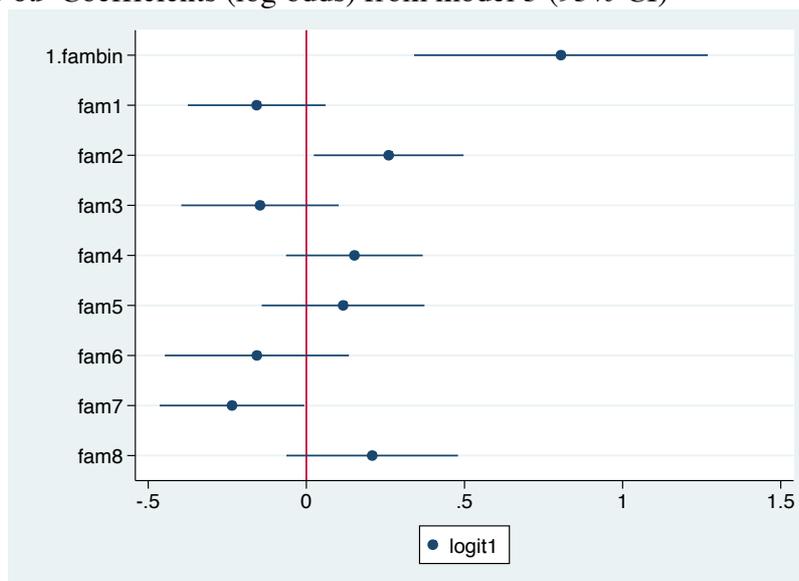
6.2.3 Descriptive Data for Community Environment

To explore the relationship between community environment and organised crime participation, as in the previous section, we begin with a descriptive analysis of the statistical data. In both samples, the data indicated that the reference group was clearly constituted by the parents, although there was a higher proportion of participants in the delinquent sample who indicated this: 77.2% of participants in the delinquent sample signalled that they had a closer relationship with their parents when they were growing up; 87.2% indicated that their parents' opinion was the most important, and 85% indicated that they were most afraid of disappointing their parents, in comparison to their friends and peers.

In regards to violence in the community, surprisingly, a higher proportion of participants in the non-delinquent sample (73.3%) agreed with the item COM7, knew people with a strong dependency to alcohol and/or drugs, in comparison to the delinquent sample (64.4%). Similarly, a higher proportion in the non-delinquent sample (66.1%) also agreed with the item COM5, knew people involved in gangs and/or involved in illicit activities, in comparison to the

delinquent sample (57.5%). A higher proportion of the non-delinquent sample also agreed with the item COM4, fighting was common in the neighbourhood. The most significant difference across both samples was agreement with item COM6, regularly spent time with people involved in gangs and/or illicit activity: while 41.7% of the delinquent sample agreed and highly agreed with this statement, the figure was 30% for the non-delinquent sample (see **Figure 6.10**). In regards to cohesion in the community, there were surprisingly similar findings across both samples. For the item COM2, distrust in the neighbourhood, there was a slightly higher proportion of participants in the non-delinquent sample, or 46.1%, who agreed that there was a high level of distrust in the neighbourhood, but the difference was negligible, as the corresponding figure for the delinquent sample was 43.9%. In both samples, over one third agreed with item COM1, there were few people in the neighbourhood that they could count on, and the same proportion agreed with item COM3, they did not know their neighbours very well and seldom spent time with them.

Figure 6.10 Percentage (%) who "agree" and "highly agree" with statements on the community environment: delinquent v. non-delinquent
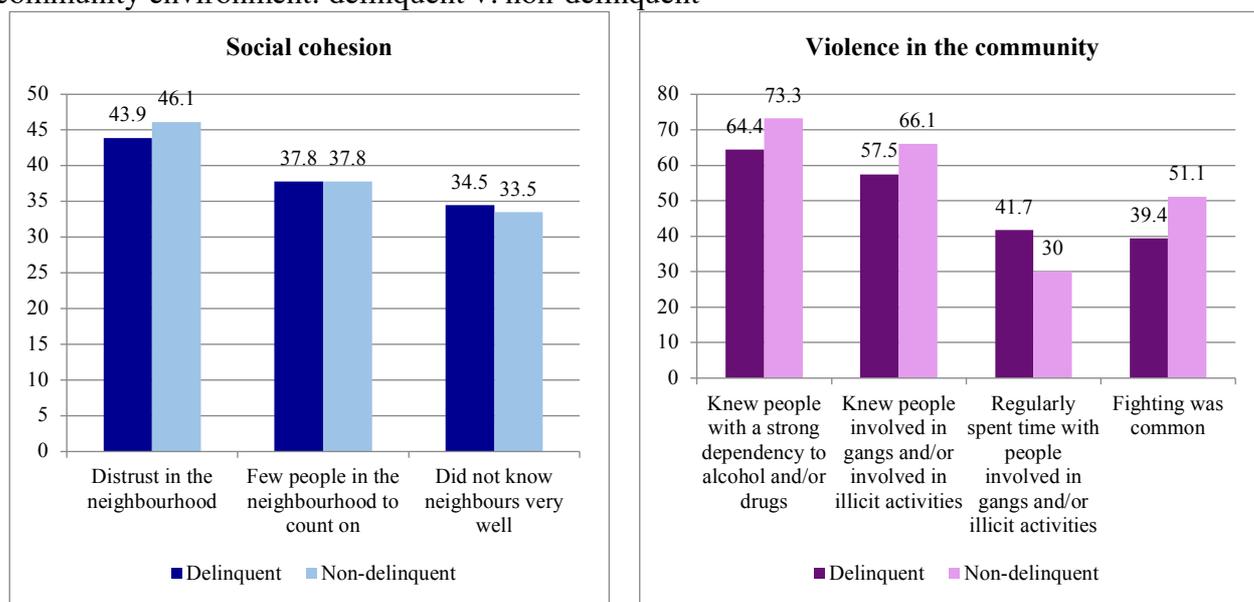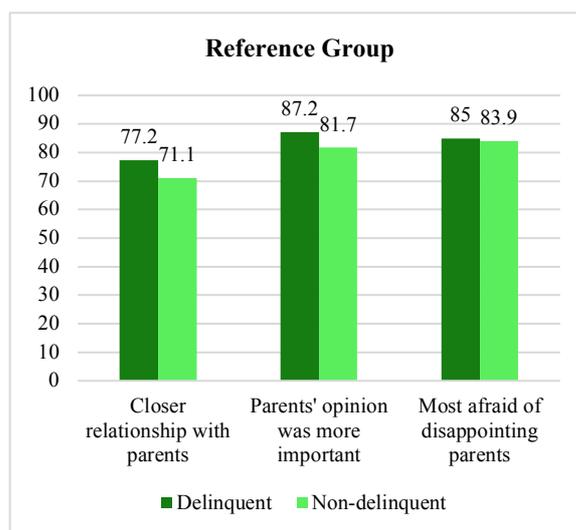
Reference Group

Source: Author's elaboration based on fieldwork data

When disaggregating data for age group in the *delinquent sample* (**Figure 6.11**), the data for the reference group revealed that parents were more clearly the reference group for the youngest participants (age group 12 to 17), as a higher percentage in the youngest age group indicated that they had a closer relationship with parents, that their opinions were more important vis-à-vis their friends, and that they were most afraid of disappointing their parents. In terms of violence in the neighbourhood, a higher proportion of the youngest participants in the delinquent sample agreed that fighting between people in the neighbourhood was common (43.2%). Most strikingly, a higher proportion of the youngest participants in comparison to their elder counterparts, agreed and highly agreed that they knew people in the neighbourhood that were involved in gangs and/or involved in illicit activities (68.2%), but also that they regularly spent time with them. While almost 60% of the youngest members agreed and highly agreed that they spent time with people involved in activities of this nature, only 34.8% and 36.7% from the two other age groups (18 to 23 and 24 to 29) agreed with this statement. On the other hand, amongst the oldest age group (24 to 29), there was a higher proportion of participants who agreed that they knew people from the neighbourhood with a strong dependency to alcohol and/or drugs, as well as a higher proportion who agreed that distrust in the neighbourhood was commonplace. Amongst the middle aged group, there was a higher proportion who agreed that they did not know their neighbours very well and that there were few people in the neighbourhood to count on.

Figure 6.11 Percentage (%) who "agree" and "highly agree" with statements on the community environment: delinquent, by age group

Source: Author's elaboration based on fieldwork data

For the *non-delinquent sample*, the data for the reference group also revealed that the importance of the parents as the reference group decreased with age. For the items on social cohesion and violence in the neighbourhood, the data revealed a higher proportion of agreement amongst the oldest members (24 to 29) of the non-delinquent sample. The oldest participants therefore agreed more that there was distrust in the neighbourhood, that they did not know their neighbours very well, that fighting in the neighbourhood was common; but also, that they knew people in the neighbourhood with a strong dependency to alcohol and/or drugs. In addition, a higher proportion of the oldest members agreed that they knew people in the neighbourhood who were involved in gangs and/or involved in illicit activities, but also that they regularly spent more time with these people, in comparison to their younger counterparts. For example, in terms of knowing people in the neighbourhood who were involved in gangs and/or illicit activity, more than 50% of the youngest age group agreed with this statement, while over 70% from the oldest age group showed the same level of agreement. In terms of knowing people in the neighbourhood with a strong dependency to alcohol and/or drugs, 55.3% of participants in the youngest age group agreed and highly agreed with this statement, while the corresponding figure for the oldest age group was 78.3% (see **Figure 6.12**).

Figure 6.12 Percentage (%) who "agree" and "highly agree" with statements on the community environment: non-delinquent, by age group
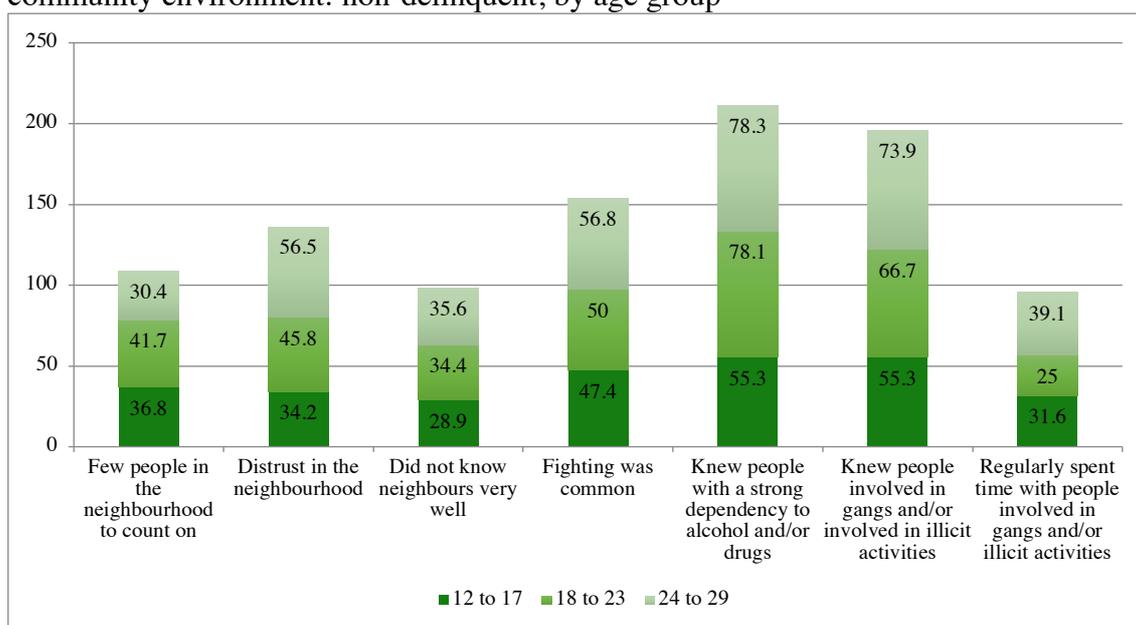
Source: Author's elaboration based on fieldwork data

Next, when disaggregating data based on educational achievement in *the delinquent sample* (**Figure 6.13**), there appears to be no relation between the latter and the reference group being the parents. For example, when asked whom they had a closer relationship with, 77.8% of participants with no schooling indicated that they had a closer relationship with their parents when they were growing up; for those with a primary education, the figure was 82.4%. For those with a secondary education, the percentage was 72.7%, and for those with more than a secondary education the figure was 76.5%. On the other hand, data on social cohesion and violence in the community showed a higher proportion of agreement for all items in this category amongst participants with no schooling in comparison to those with schooling above secondary education. The largest differences were visible in the item regularly spending time with people who were involved in gangs and/or illicit activity (see **Figure 6.13**). For the group with no schooling, 55.6% agreed and highly agreed that they regularly spent time with people who were involved in gangs and/or illicit activities. The corresponding percentage for the group who had schooling above secondary education fell almost by half, to 29.4%. Similarly, while 55.5% of those with no schooling agreed and highly agreed that fighting in the neighbourhood was common, only 35.3% of those with schooling above secondary level agreed with this statement. In addition, there was higher agreement by participants with no schooling that there were few people in the neighbourhood who they could count on in comparison to their counterparts who had schooling above secondary education, with figures of agreement of 55.6% and 41.2%, respectively.

Figure 6.13 Percentage (%) who "agree" and "highly agree" with statements on the community environment: delinquent, by educational achievement
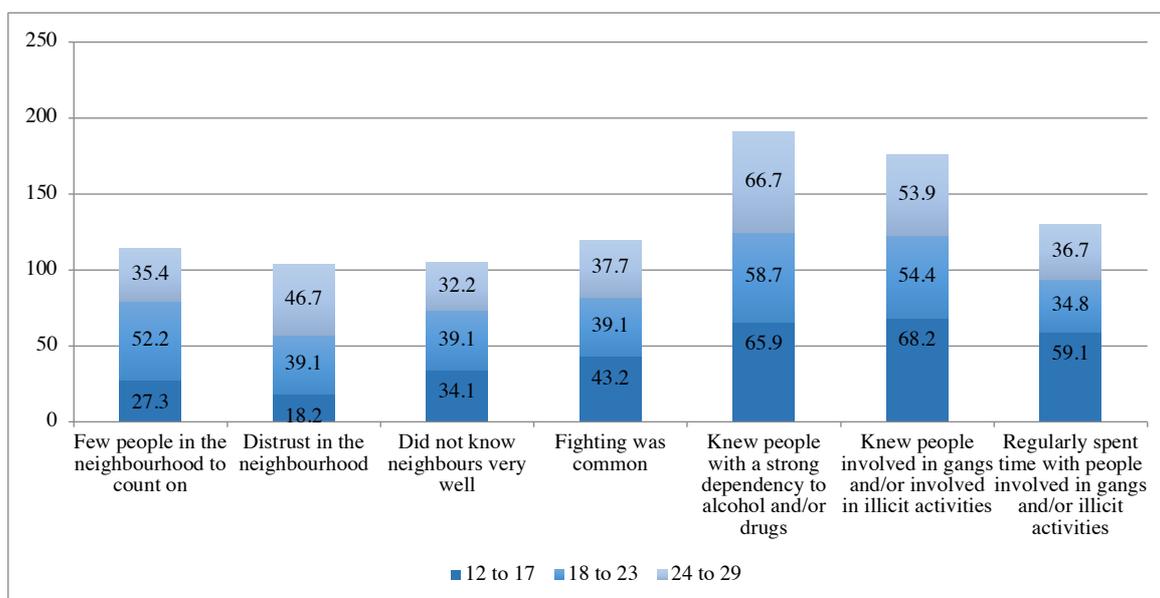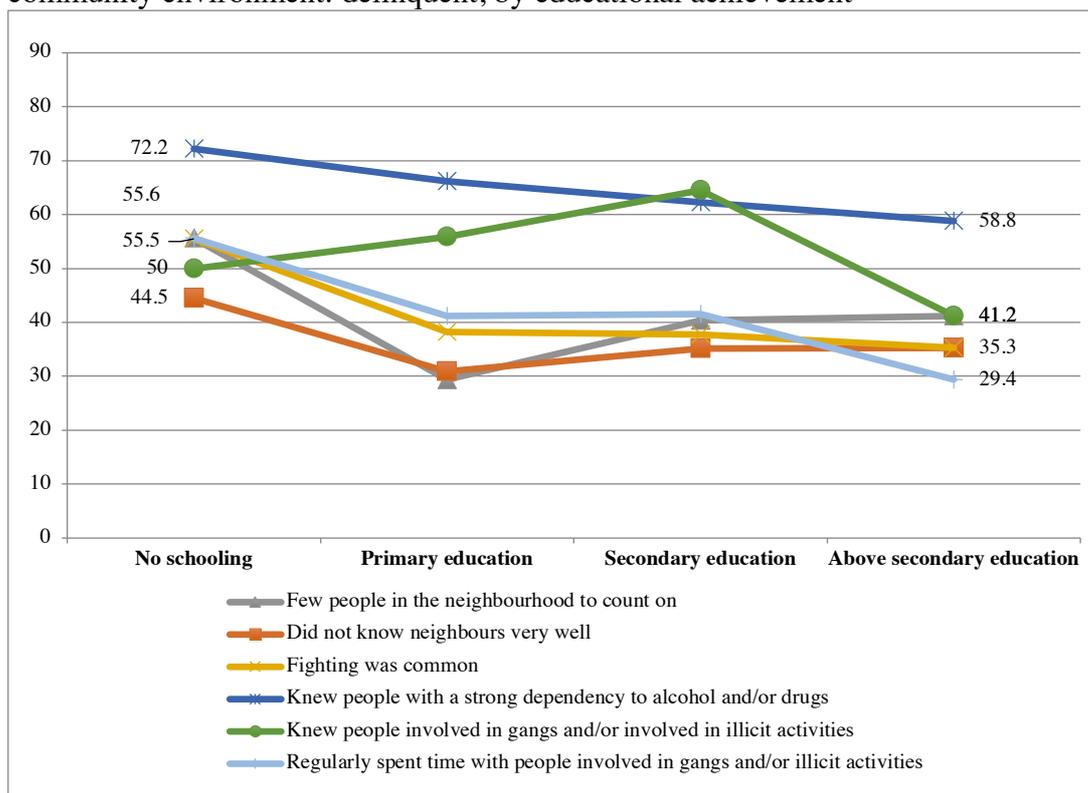

Source: Author's elaboration based on fieldwork data

For the *non-delinquent sample*, the no schooling category was removed, as only one respondent in the sample indicated having no schooling. There was no difference in regards to the level of education and the reference group being the parents. For the rest of the items, the differences in terms of educational achievement are not as apparent as in the delinquent sample. In fact, for the item on knowing people involved in gangs and/or involved in illicit activities, 61.5% of those with only primary education indicated agreement with this statement, while the corresponding percentage for those with more than secondary education was higher, with 68.1%. Although a higher difference would have been expected in terms of regularly spending time with people involved in gangs and/or illicit activities by educational achievement, this was not the case in the non-delinquent sample: while 33.3% of those with only primary education agreed that they spent time with people involved in such activities, the corresponding figure for those with more than a secondary education was 31.9%, which constitutes a very small difference. The only item where a larger difference is visible is in regards to knowing and spending time with neighbours: while more than 40% of those with only primary education admitted to not knowing their neighbours or spending time with them, the proportion for those with above secondary education fell to 25.6% (see **Figure 6.14**).

Figure 6.14 Percentage (%) who "agree" and "highly agree" with statements on the community environment: non-delinquent, by educational achievement
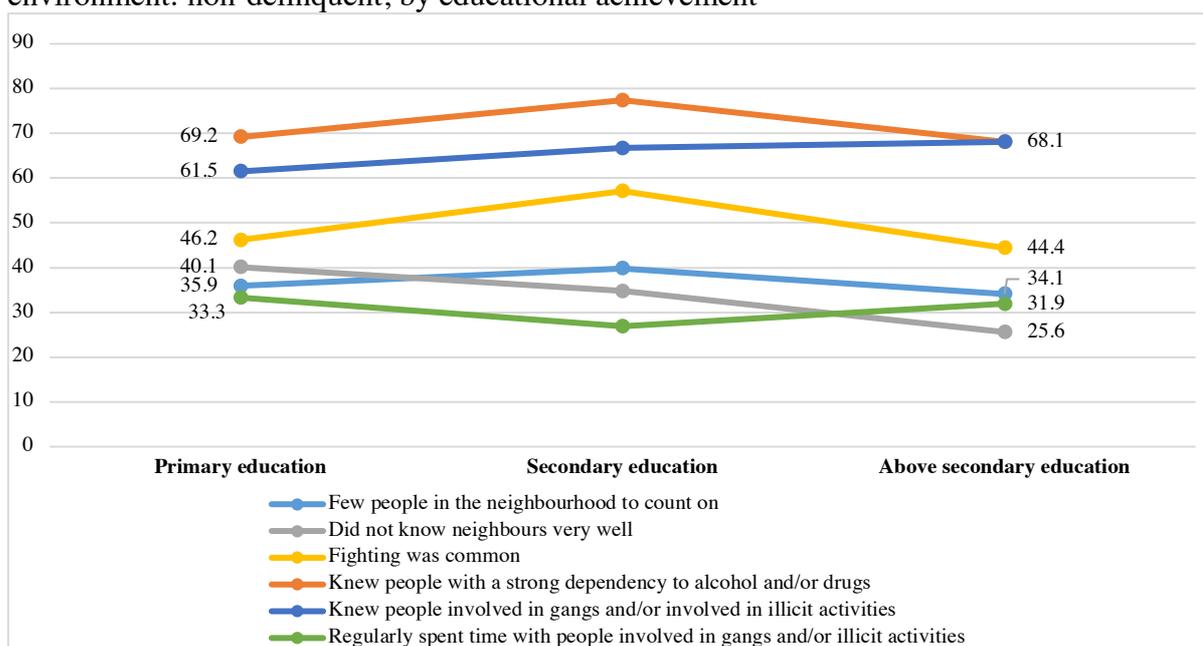
Source: Author's elaboration based on fieldwork data

The following points summarize the most relevant findings for the community environment derived from the descriptive analysis:

Delinquent vs. non-delinquent sample:

- Reference group was clearly the parents for both samples, but there was a higher proportion of participants in the delinquent sample who indicated that they had a closer relationship with parents while growing up, that their parents' opinions were more important, and that they were more afraid of disappointing their parents in comparison to their peers and friends.

- In both samples, the data indicated that social cohesiveness is low, as half of participants from both the delinquent and non-delinquent samples agreed that there was distrust in the neighbourhood. Data also revealed that strong dependencies to alcohol and/or drugs were pervasive, but so was involvement in gangs and/or illicit activities.

- A higher proportion of participants in the delinquent sample in comparison to the non-delinquent sample regularly spent time with people involved in a gang and/or in illegal activity.

Delinquent, breakdown by age group:

- Less participants in the oldest age group considered parents their reference group, when compared to younger participants.

- There was a higher proportion who knew and spent time with people who were involved in a gang and/or illegal activity amongst participants from the youngest age group.

Non-delinquent, breakdown by age group:

- Less participants in the oldest age group considered parents their reference group, when compared to younger participants.

- A higher proportion of the oldest members knew and spent time with people who were involved in a gang and/or involved in illicit activities in comparison to their younger counterparts.

Delinquent, breakdown by educational achievement:

- Amongst participants with a higher level of education, there was a lower proportion who agreed with items on the community environment. Most noticeably, there were large differences across educational achievement groups in regards to regularly spending time with people who were involved in a gang, as the proportion of participants with no education who agreed with this item was higher in comparison to participants with higher educational achievement.

Non-delinquent, breakdown by educational achievement:

- The differences in terms of educational achievement are not as clear. Most noticeably, a higher proportion of participants with more than secondary education knew people involved in gangs and/or illicit activities when compared with participants with only a primary education. Although the proportion that regularly spent time with people involved in a gang was lower in the group with higher education, the differences between the latter and the group with only primary education were negligible.

6.2.4 Models and Regressions for Community Environment

In order to test these descriptive associations, I turn to logistic regressions. This method was selected because the dependent variable was coded dichotomously (delinquent=1 or non-delinquent=0). The independent variables for the categories of violence in the community and social cohesion are Likert scale items. The variables for the reference group category have been coded as dummy variables, with 0 indicating that the reference group is constituted by the parents, and 1 indicating that friends, peers, or others are the reference group. The analysis consisted of regressing the dependent variable of organised crime participation on the explanatory community environment variables through a series of logistic regressions. As in the previous section, the analysis begun by performing a stepwise regression. The results suggested that the independent variables that should be included in the model to explain crime participation were GR1, closer relationship with friends; COM4, agreement that fighting was common; COM6, regularly spending time with people involved in gangs and/or illicit activities;

and COM7, knowing people with a strong dependency to alcohol and/or drugs. The output for this part of the analysis is provided in **Chapter 6 Annex: A.6.5**.

For the second part of the analysis, nested models were used to test the significance of blocks of variables from the community environment. With this approach, model 1 considered only the effect of the variables concerning the reference group (GR1, GR2, and GR3) on the dependent variable, organised crime participation. Model 2 considered the variables for reference group and added the variables for social cohesion (COM1, COM2, COM3). Model 3 kept all the aforementioned variables and added variables for violence in the community (COM4, COM5, COM6, COM7). In Model 4, control variables for age and education were introduced. The coefficients reported below in **Table 6.15** are specified as average marginal effects.

Table 6.15 Marginal effects of community environment variables on organised crime participation

Category	Variable	Model 1	Model 2	Model 3	Model 4
Reference group (ref. cat. = parents)	GR1. Closer relationship with friends	-0.11 (0.06)	-0.11 (0.06)	-0.13* (0.06)	-0.13* (0.06)
	GR2. Friends' opinion was more important	-0.09 (0.09)	-0.10 (0.09)	-0.09 (0.09)	-0.06 (0.08)
	GR3. Most afraid of disappointing friends	0.07 (0.08)	0.07 (0.08)	0.06 (0.08)	0.02 (0.08)
Social cohesion	COM1. Few people in the neighbourhood to count on		0.00 (0.02)	0.02 (0.02)	0.01 (0.02)
	COM2. Distrust in the neighbourhood		-0.00 (0.02)	0.01 (0.02)	0.02 (0.02)
	COM3. Did not know neighbours very well		0.01 (0.02)	0.01 (0.02)	0.01 (0.02)
Violence in the community	COM4. Fighting was common			-0.05** (0.02)	-0.05* (0.20)
	COM5. Knew people involved in gangs and/or involved in illicit activities			-0.02 (0.02)	-0.00 (0.02)
	COM6. Regularly spent time with people involved in gangs and/or illicit activities			0.09*** (0.02)	0.07*** (0.02)
	COM7. Knew people with a strong dependency to alcohol and/or drugs			-0.05* (0.02)	-0.06** (0.02)
Education (ref. cat. = no schooling)	Primary				-0.24* (0.09)
	Secondary				-0.41*** (0.09)
	Above secondary				-0.65*** (0.10)
Age					0.03*** (0.00)
Pseudo R-squared		0.01	0.01	0.06	0.22
Number of observations		339	339	339	339

*Denotes significant values (p<0.05)
** Denotes significant values (p<0.01)
***Denotes significant values (p<0.001)

The results for model 1 and model 2 show that none of the reference group and social cohesion variables are statistically significant in explaining organised crime participation. However, model 3 shows that the introduction of variables for violence in the community change our results. Model 3 shows a negative effect for GR1: other things equal, the predicted probability of organised crime participation decreases by 13 percentage points for individuals that are closer with friends in comparison to individuals who are closer to their parents. This variable is also found to be statistically significant when introducing the covariates of age and education, shown in model 4 (p<0.05).

This result counters the original hypothesis predicting that those participating in delinquent activity are more likely to consider their friends as their reference group (these results will be addressed further in the discussion section). This model also indicates that other things equal, the predicted probability of organised crime participation decreases by 5 percentage points with a one unit increase in agreement that fighting amongst people in the community was common. This variable is also significant when covariates of age and education are introduced. Model 3 also shows that COM6, or regularly spending time with people involved in gangs and/or illicit activities and COM7, knowing people with a strong dependency to alcohol and/or drugs, are statistically significant in their association to organised crime participation. According to the results of model 3, the predicted probability of organised crime participation increases by 9 percentage points with a one unit increase in agreement that time was regularly spent with people involved in gangs and/or illicit activities. The results also indicate that the predicted probability of organised crime participation decreases by 5 percentage points with a one unit increase in agreement with knowing people with a strong dependency to alcohol and/or drugs in the community. The introduction of the control variables age and education in model 4 has no effect on the significance of COM6 and COM7. **Figure 6.16** shows the confidence intervals of the effects of community environment factors on organised crime participation from model 3.

Figure 6.16 Coefficients (log odds) from model 3 (95% CI)
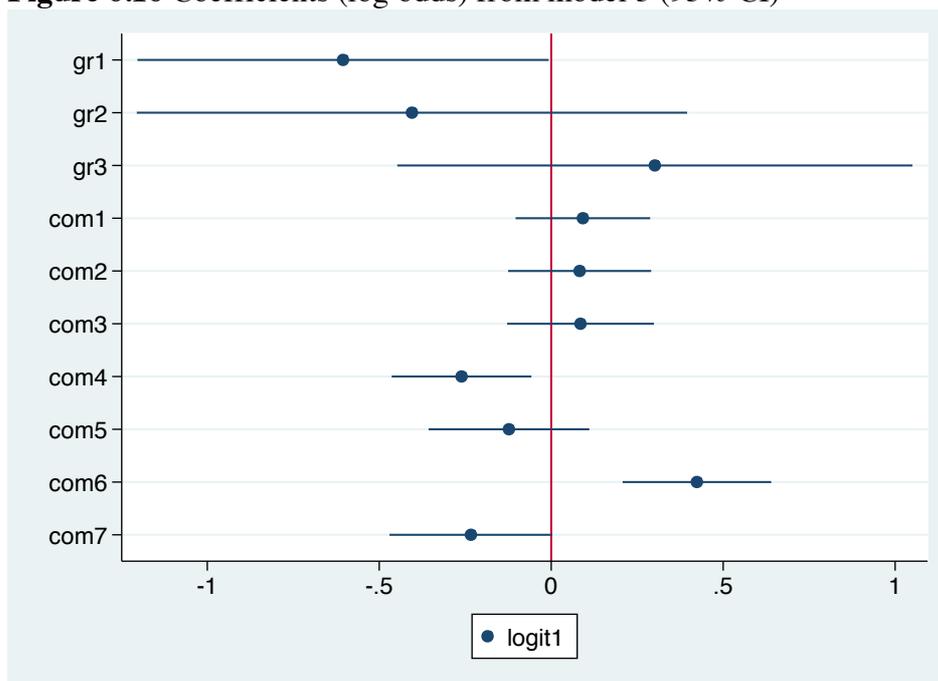
When introducing the covariates for age and education, the results for model 4 show that GR1, COM4, COM6 and COM7 continue to be significant, confirming their association to organised crime participation. When considering education, the model shows that the predicted probability of organised crime participation decreases by 24 percentage points for those with primary education in comparison to those with no schooling. For those with a secondary or above secondary level education, the predicted probability of organised crime participation decreases by 41 and 65 percentage points respectively, in comparison to those with no education. For age, the positive association indicates that the predicted probability of criminal participation increases by 3 percentage points with a one unit increase in the age of participants. Because this study only included young men in the age group 12 to 29, what this suggests is that young individuals who are closer to adulthood are more at risk of criminal participation, as has been suggested earlier in the analysis on family factors. Additional items from the survey reveal that almost one quarter (23%) of participants from the delinquent sample indicated that they began their involvement in criminal activity when they were 23 years of age or older (see **Chapter 4 Annex: A.4.3,** item EDAD1). All these results are significant ($p<0.05$).

Robustness checks were performed using logistic regressions with different specifications and by conducting OLS regressions (see **Chapter 6 Annex: A.6.6** for results). First, two models were run, one with all independent variables but no covariates of age and education; the second included these covariates. A third model was run using binary independent variables, the items were coded as 0 for "disagree", 1 for "agree"; responses coded 3 for "neither agree nor disagree" were removed from the analysis, which accounts for the

reduction in the sample size (n=250). A fourth model was run grouping variables for social cohesion into one category by calculating the average of COM1, COM2 and COM3. The variables for violence in the community were also grouped into one single variable VIOLENCE_COMMUNITY by calculating the average values of COM4, COM5 and COM7. For reference group, the variables were originally coded as binary (1=friends and peers and 0=parents), so it did not make sense to calculate average values. The results for model 6 show that GR1, COM6 and VIOLENCE_COMMUNITY are statistically significant. The results of the models confirm the significance of the variables GR1, COM4, COM6 and COM7 (see **Annex: A.6.6**). The results for GR1 and COM6 are significant across all models, indicating their association with organised crime participation; closer relationships with friends is associated with a lower probability of organised crime participation, while regularly spending time with people involved in a gang or illicit activity suggests a higher probability of organised crime participation. For COM4 and COM7, results are not significant in all the models, although the evidence seems to suggest that the more participants witnessed fighting in the neighbourhood or knew people with a strong dependency to alcohol and/or drugs, the lower their probability of organised crime participation. In the case of COM7, for example, results for model 5 show that the variable almost reached traditional levels of significance (p=0.06).

6.3 Discussion

6.3.1 Family Environment

The findings on whether growing up in a single parent household has any bearing on delinquent behaviour are mixed: some authors find that there is an association between the latter and deviant behaviour and others claim that relational factors (quality of relationship) are more important in explaining delinquent behaviour. The descriptive data confirms that a higher percentage of delinquent sample participants had grown up with a single parent, and this factor was found to be statistically significant in its association to organised crime participation, holding out as a significant variable across models, and confirming the first hypothesis (h1), that individuals raised in a single parent household were more likely to have participated in organised crime. This lends supports to the evidence from Western settings (Gove & Crutchfield, 1982; Wells & Rankin 1991); and initial evidence in Mexico (Widner et al., 2011) which tends to agree that this is a relevant factor associated to delinquency.

Nevertheless, the case of Juárez requires deeper explanations; it would be irresponsible to claim that structural factors, and more particularly, single mothers who attempt to raise children alone, are somehow responsible for youth participation in delinquent behaviour. The

dynamic is much more complex, and there are several aspects to consider. Amongst participants in the delinquent sample, it was often the case that the participants' fathers had abandoned the household.[94] Single mothers, finding themselves without a source of income, took up jobs in the '*maquiladoras*', or assembly plants in Juárez, where 60% of the workforce was female in 1991. And although the 'feminization' of the assembly plants of Juárez (and the industry in general) has decreased, women still constitute a considerable part of the workforce (Wilson, 2002). Almost 40% of delinquent sample participants indicated that their mothers had full time employment and the most often cited source of employment were the assembly plants. The shifts in the assembly plants often run throughout the entire day, which means that when study participants were young, they were either left under the care of a relative (usually a grandmother or an aunt, almost always a female figure) or neighbour, or were left unsupervised. This finding falls in line with one of the main tenets of Institutional Anomie Theory, namely that high levels of criminality are more likely where the claims of the economy have a higher priority in comparison to other non-economic institutions, such as the family. It is clear that single mothers are under pressure to give up their familial role to acquire an economic role in the assembly plants. In this way, the logic of the market penetrates into other aspects of social life, pushing mothers to take on an economic role in the *maquilas* as opposed to a non-economic, 'mother as caretaker' role.

This does not signal single mothers who are indifferent in taking care of their children; it merely suggests that there is a systemic failure on behalf of government institutions, in addition to a lack of corporate social responsibility in the assembly plants that have established themselves in Juárez, to provide support for working mothers. These assembly plants do not have child care facilities, therefore working mothers (often the sole income earners of the household), are left in situations where they have no choice but to leave their children unsupervised or under the care of friends and/or relatives. While in a welfare state, provision of childcare would be guaranteed by the state, the 'social safety net' that Mexicans rely on largely depends on their social and familial circles. Jorge and Guillermo, two interview participants, mentioned that their fathers had abandoned them at an early age, and both had mothers who worked in the assembly plant in order to provide for the family.

Evidence derived from interviews with delinquent participants also confirms that growing up with a single parent (usually the mother) was common: At least nine out of twenty interview participants mentioned being abandoned by at least one of the parents. Rodrigo, who

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[94] These results are not exclusive to participants of this study. Although one-parent families may vary by gender, race, income and other variables, most of these families are headed by women: no more than 4% of families – irrespective of race, are headed by men (Hall, Walker, & Acock, 1995).

was abandoned by his father at the age of eight, recalled feeling resentment due to his father's absence. His father had left when Rodrigo was very young, and the mother was responsible for the household (for the following interview excerpts, CC indicates the initials of the author, P indicates interview participant).

> CC: When was the last time that you saw him [father]?
>
> P: Last time I saw him, he was with his wife and he didn't even look at me, he didn't even want to greet me, nothing…
>
> CC: Did he [father] ever visit you [after he left]?
>
> P: No, no, no. No, he never looked out for us, in any sense. At the moment they split up [parents], he failed to take care of us and no, no…he was never even interested in visiting us, in asking whether we were lacking something, or to see if we were doing anything wrong.
>
> CC: What do you think should have been different in your life for you not to end up in this situation?
>
> P: What should have been different in my life? I don't know, maybe that my father had been with us, that he would not have abandoned us.
>
> CC: Emotionally, economically, or in both ways?
>
> P: Mm…in every way. In every way. He was missing in my life for a lot of things.
>
> CC: For what things?
>
> P: For…I don't know, I needed advice from someone, I needed support, I needed someone to understand me. My mother was the only one, but poor her, she worked, and well, at times I would see that she would arrive home feeling stressed. I had problems and I saw that she would arrive stressed and tired, and I preferred not to say anything…I would go out…I don't know, with my friends and I would vent there.

Although less common, some interview participants mentioned abandonment on behalf of the mother. Milán explained that his parents had separated and his mother had a new partner and after that, he never heard from her again. Felix mentioned that he was abandoned by both his parents and left under the care of his grandparents. He suffered abuse at the hands of his grandfather. Felix met his mother when he was twelve years old; the identity of his mother was revealed by a drunk relative. He was for the longest time convinced that his grandmother was actually his mother:

> ...My grandfather was my father and my grandmother was my mother. So, it was a very, very unpleasant and a very shocking impression in my life because a lot of thoughts started to come into my head: Why did she abandon me? Why did she not think about all the things that were happening to me during that time? And by then, my heart was very contaminated; I had a lot of resentment. A lot, a lot of resentment, anger. Hate, even.

The evidence from the interviews provides a deeper insight into the experiences of parental abandonment and the effects on participants, providing support for the quantitative findings. For the variable FAM7, or parents spending time in jail, the results of the full model (see **Table 6.8**), suggest that higher agreement with the statement that one of the parents had spent time in jail was associated with a lower probability of organised crime participation. This

contradicts the second hypothesis (h2), that higher agreement that parents spent time in jail would be associated with a higher probability of organised crime participation, and runs counter to evidence of the established literature in Western settings which finds that convictions of one family member are strongly related to convictions of other family members (Mednick et al., 1987, Farrington et al., 2009; Farrington et al., 1996) but also initial evidence in Mexico pointing to an association between the illicit behaviours of adults and their children (Nevárez-Sida et al., 2012). However, several studies have also pointed out that there may be a beneficial effect of parental incarceration on children *if the parent has been violent or disruptive in the home* (Cunningham & Baker, 2003; Eddy & Reid, 2003; J. Hagan & Dinovitzer, 1999; Wildeman, 2010). Some of this research suggests that rates of domestic violence are high in households with men who are criminally active, (Murray & Farrington, 2008; Western & Wildeman, 2009) and that the removal of these men may benefit the children (Jaffee, Moffitt, Caspi & Taylor, 2003).[95]

The results from the statistical analysis for the variable FAM7. (parents spending time in jail) does not hold out across all models (see **Chapter 6 Annex: A.6.2**). However, evidence from the interviews with delinquent participants shows the pernicious effects of growing up with a parent who is a negative role model (usually the father), shedding some light on how their presence can contribute to participation in crime, and how the absence of this type of parental figure could be beneficial for children. These parents were either involved in criminal activities and/or heavily abused drugs. Alfredo, who worked as a '*sicario*', or hired assassin, described that violence was a normal part of his life while growing up: "I know that I am now in jail for several years, and that what I was doing was not good, but in the end, this is what I have always experienced…it's what I have always seen." He mentioned that his uncle and father were killing people from the time that he was still a child, and he was used to witnessing all types of crimes –from homicide to torture: "I remember from a young age that I used to watch people hanging from trees and my uncles would torture them. Or there were times when after they were tortured, they were given a shot to the head." Near the end of the interview, Alfredo was asked what should have been different in his life to not end up on a criminal path: "Another life, with other parents…another life with other parents. To not have witnessed what I saw since I was young. Unfortunately, I think *I was born to do this*, because like I said, since I was a kid this is what I saw [emphasis added]."

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[95] In a study of the effects of living with two biological parents, Jaffee et al. (2003) found that when fathers engaged in high levels of antisocial behaviour, the more time they lived with their children, the more behavioural problems their children had.

In addition to parents with violent inclinations, other participants also mentioned parents who were heavily involved in drugs: at least four interview participants out of twenty mentioned that one of their parents (usually the father), had a drug or alcohol addiction. Octavio mentioned that both his parents had died due to drug overdoses, and Alfredo mentioned that both his parents were alcoholics. Milán described how after being abandoned by his mother, his father was depressed and consumed drugs and alcohol on a regular basis. He described that his father worked only to sustain his addiction, and would forgo the money for the household for buying drugs, making it clear that he preferred to spend his income fuelling his addiction. His father was injecting himself with cocaine on a daily basis.

On the one hand these findings indicate that growing up with a single parent has detrimental effects; on the other, growing up with both parents, but with fathers who are involved in criminality and abuse illegal substances, also has pernicious effects. Those who have a criminal parent (usually father) who is not around due to incarceration are less likely to be influenced by their behaviour, shedding some light on why there was a negative association between parents who are in jail and organised crime participation. In this case, it is not just the absence of fathers, but also the presence of a negative paternal figure, which is particularly problematic, and may partly explain the criminal behaviour of the young men in this study.

Unfortunately, the role of fathers in the development of criminal behaviour in their sons has been underemphasized in the literature on Mexico, despite evidence that youth who report less anger and alienation with their fathers and more trust and communication engage in less delinquency (Yoder et al., 2016). Instead, in a recently published book by the Mexican sociologist Sara Sefchovich, the author highlights the important role that mothers have in what is still a very conservative society. Her book calls on mothers -not fathers- to take an active role in preventing their sons from participating in organised crime, highlighting that figures like Joaquín Guzmán (leader of the Sinaloa organisation) care deeply for their mothers, venerate them, which gives them significant power that they can wield over their sons to redirect their actions. It is difficult to disagree with Sefchovich on the importance of the motherly figure in Mexico; nevertheless, what she advocates perpetuates gendered systems of care, where women are thought to be the sole figures responsible for bringing up children, while men are still considered to be the traditional breadwinners.

As the literature review pointed out, the quality of relationships with parents (fathers included), is important in explaining delinquent behaviour. Instead, perhaps the focus of the literature should not be on single mothers, rather on fathers who have failed as positive role models. A survey conducted amongst incarcerated adolescents that have committed serious crimes in Mexico found that 23% of participants in the study mentioned that the person that

had done the most damage to them in their lives was their father; for mothers, the corresponding figure was only 4% (Azaola, 2016). Focus should then be made on incentivising men to be better fathers, to participate and to take an active role in the household as caretakers, instead of blaming (or persuading) single mothers to take responsibility for their sons' delinquent behaviour.

The lack of support in the family, FAM2, was an additional significant factor in the analysis, providing some support for the second hypothesis (h2), that lack of parental support would be associated with a higher probability of organised crime participation. Although it was not significant across all models, results show a positive association between lack of support and organised crime participation, meaning that those who agreed they lacked support in their families had a higher probability of participating in organised crime. In the interviews, several participants confirmed this experience at home. Pedro, for example, talked about having a good relationship with his parents, but mentioned that he felt that he had no one in his family to talk to. Rodrigo also commented on the lack of support on behalf of his father, who had abandoned the family when he was eight years old. Speaking about his father's abandonment he mentioned: "I needed advice from someone, I needed support, I needed someone to understand me". Gabriel, who grew up without both his parents, described the effect that not having parental support had on him:

> …I see cell mates [now] who have people who visit them. The mom visits and the first thing they want is money. They leave her alone and walk away. And I think, no way, these guys don't know, they don't even appreciate their own mothers. I don't know what it is like to receive a hug from a mother who says 'I love you', or a father who says 'I'm here *mijo* [my son], I will support you, what do you need?' I don't know what that is like, and I would have liked to have had that. And maybe I would not be who I am; I would not be *where I am*. Maybe I would be on top now. I would be someone in the community, do you understand? And now, I am no one in the community. I am simply a piece of filth…[emphasis added]

In addition to confirming the quantitative findings, the material from the interviews with delinquent participants sheds light on other factors that were overlooked in the survey and provides initial evidence that they are relevant in explaining criminal participation. For example, throughout the interviews, *experiences of loss and grief* came up often. At least eight out of the twenty interview participants indicated having lost relatives or someone close to them, often to organised crime related activity. For example, Gabriel mentioned that both of his parents had died and that he was practically raised by one of his brothers, who had passed away a couple of years before this interview was carried out. His brother was abducted because he refused to sell drugs. '*Lo reventaron por dentro* [they blew him up]', and Gabriel found his body a couple of days later.

Alfredo, who worked as a hired assassin, lost his older brother, who he looked up to. The older brother practically took care of him after Alfredo left his home because his mother

was often violent. They both lived on the streets. Alfredo mentioned that he did not feel guilty about any of the crimes he committed (with the exception of the murder of three innocent people), as he felt it was all justified avenging his brother's death. David also described how he had lost his uncle, who was a father figure to him:

CC: Tell me more about your relationship with him [uncle].

P: He lived with my grandmother, as he was the son of my grandmother. He worked in a kitchen, and yes, maybe he smoked marihuana and drank, but he was very responsible with his family. He did not get in trouble. And well, we got along well; there were never problems between us. He would get up, make my lunch, prepare breakfast, the food. If he went anywhere, he would take me with him, wherever he went - with this wife, with his daughter, he would take me along. And I was with him the day he was killed. From that moment, well, I felt like something had been taken away from me. And that is when I made the decision, that there was no need for this to be happening. And that is when I said, I don't know, I didn't really think of anything, the decision was just like that…to do what I wanted…

CC: So you think that if this had not happened, maybe you would not have made this decision?

P: I think I would not have, because maybe I would have taken a road that was, I don't know, more calm…because as a matter of fact, it was he who tried to take care of me, to protect me. He used to tell me where I could be, where I could go, where I could not…or what was good, what was bad. Maybe I already knew, but I was not mature enough to make a decision. And maybe I think I missed him.

CC: And during this time that you were very close to your uncle, do you think that in a certain way he replaced your father, or did you have a good relationship with your father too?

P: No. No, yes, yes, maybe the support I did not have with my father, I had it with him. What I would have wanted my father to teach me, or what he should have told me to do, he [uncle] did it for him…it's like he took on that role.

Eduardo's uncle, who was involved in organised crime and was also a father figure to the participant, had also been killed. When asked about his uncle he declared: "He was like my father…he sought me out more than my own father did." Milán, on the other hand, recalled the experience of losing his father, who had been killed by federal police a couple of weeks after he and Milán met. They had not seen each other in two years because Milán had been in treatment in a drug rehabilitation centre.

P: [After the rehabilitation centre] No, well, I felt good because I knew he [father] saw I was doing well. And I felt good because when I was with him in the past, I had been doing crazy things. And that time, when we met, I was clean, and I felt good. And he said 'you look good, son', because I did, I looked good. 'Thanks dad', and all the rest of it…and two weeks passed and they took him away from me.

Jorge recalled that a lot of the friends that he surrounded himself with while growing up had been killed: "Since I was thirteen until I turned 18, everyone started to die…others were killed, and others were locked up. I started to distance myself". He appeared moved and in profound shock to what had happened with his friends: "Just look at how many young people have been killed…just so many…I have been with people and we have had conversations. I haven't even been able…and they have had to die. And they have been my friends, almost my brothers, and unfortunately, they have had to die."

These cases reveal, first, a profound lack of support and the replacement of father figures with other people, usually members from the extended family, or with friends. But what they also reveal is that loss is very common, and that future studies on this issue should incorporate this as an important contributing factor, one that was overlooked in the surveys, but came up in the interviews. Second, although an integral part of the narrative in their lives, loss has *not* become normalized: participants are visibly affected by their experiences. It is also apparent that some of the interview participants have had no psychological help in coping with these losses. Lastly, anger and a desire for revenge, both a product of loss have helped individuals justify some of the crimes they have participated in.

Physical violence was not found to be a significant factor in the analysis, contradicting the established literature in developed country settings and the evidence on Mexico. The journalist Julio Scherer (2013), who interviewed a sample of young delinquents serving time in Mexico City for a variety of offenses, found that what they had in common is that they grew up in disintegrated families, with fathers and father figures that beat them mercilessly. However, his study did not draw comparisons with a non-delinquent sample so there is no conclusive way to determine whether violence in the household is pervasive amongst low-income households more generally. In the interviews with offenders there was evidence that violence in the household occurred, providing some evidence for the second hypothesis (h2). At least five out of twenty interview participants mentioned that there was physical violence in the household where they grew up. In most cases, the father perpetrated the violence, but in some cases, the violence came from a new partner involved with the mother, often after she had separated from the biological father.

Sebastián mentioned that his parents had separated when he was very young: "My mother left my father when I was three years old and my mother got together with someone else. And I, well, I went to live with my grandmother because my mother's husband, well, *la neta*,[96] he treated me badly." The participant described that his mother's new partner had a shift in the assembly plant that lasted from night to morning. When he would arrive in the morning, he was already frustrated and had to make sure the children –Sebastian included, were bathed and fed before going to school, so any misbehaviour on their behalf would make him react violently. Manuel also mentioned that his mother's new partner was a violent character, so he went to live with his grandparents. He witnessed violence against his mother and half-siblings on multiple occasions:

> He had a son, right, Gustavo, [or] Tavo, my brother. And I remember taking him [Tavo] to the patio in the back [of the house], behind a boiler so that he wouldn't listen to the screams, and so he wouldn't see any

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[96] Colloquial expression, closest translation would mean "in all honesty".

of the…there was a basket of laundry where we barely fit and I would put him in there. We would fit in there and I would cover his ears so he wouldn't hear, right?

The evidence derived from the interviews shows that violence was common, mostly perpetrated by a male figure, either the biological father or the mother's new partner. Only in rare cases did participants describe mothers who behaved violently. The lack of significance in the quantitative analysis could perhaps signal that participants are not revealing to what extent they are victims of physical violence in the household. Further studies need to consider alternative ways to draw out sensitive information, as there is evidence that physical violence in the household is common amongst offenders in Mexico (Azaola, 2016; Scherer, 2013). This factor needs to be considered more in depth to understand whether this is common across low income households more generally, or if it is specific to the population that have participated in serious forms of crime. However, since there is no control group of non-delinquents to compare in either of the studies previously mentioned, we do not know if the same proportions of adolescents in marginalised households who have no criminal record have also been victims of domestic violence. This study found that the levels of violence in the households where the delinquent and non-delinquent participants grew up in were not so dissimilar.

6.3.2 Community Environment

The results of the analysis first suggest that those who have closer relationships with friends are less likely to participate in organised crime, contradicting the expectations of the third hypothesis (h3), that the reference group for organised crime participants would most likely be the peers instead of the parents. This also contradicts the theory cited at the beginning of this chapter, which stated that deviant youth were more likely to consider their peers as a reference group over their parents. While it may be the case that reference groups, and particularly friends, are important in illustrating youth deviancy in the Western context, it may not be so clear in a context such as Mexico, where families have primary importance, and where an overwhelming part of the population is still very conservative. Descriptive data clearly indicated that parents were overwhelmingly more important than friends and peers (surprisingly, more so in the case of delinquents), as a very high proportion of participants indicated that they had a closer relationship with their parents when they were growing up, that their opinion was more important, and that they were the people participants were most afraid of disappointing. Moreover, evidence discussed in **Chapter 5** showed that aspirations in the category of family were more important in the delinquent sample than in the non-delinquent sample. In addition, despite criminal inclinations in the delinquent sample, the proceeds of criminal activities were partly used to help family members, evidence that further supports that

families are the reference group for delinquent sample participants. Parents are, therefore, the reference group *par excellence*, even more so in the case of deviant youth, forcing us to rethink whether these theoretical assumptions hold out in contexts where family ties are of primordial importance.

The results of the logistic regression also revealed that one of the most significant and consistent factors explaining organised crime participation across all models was spending time with people involved in a gang and/or illicit activity, providing evidence for the fifth hypothesis (h5). This suggests that while positive friendships can represent a source of resilience, negative friendships could constitute a pull factor to participate in deviant activity. According to Costello and Hope, "the 'peer effect' in criminology has essentially been seen as synonymous with negative or pro-deviant peer influence" (2016: "Mechanisms of Positive Influence," para. 1), and there is ample evidence of a correlation between peer delinquency and delinquency of the individual. Data from the interviews reveals that a significant amount of the twenty interview participants –more than half, had spent time in a gang.

In sum, the analysis reveals that regularly spending time in a gang is positively and significantly associated to organised crime participation; however, it is imperative to understand that not all who participate in gangs necessarily go on to participate in organised crime. A gang constitutes a gateway to involvement in this type of crime but is not forcefully conducive to it: close to 30% of the non-delinquent sample regularly spent time with people who were involved in a gang, but at the same time had never committed offenses or had any criminal record. Furthermore, the literature review on gangs in Mexico highlighted that gang membership has historically *not* been associated with violent crime and that gangs and organised crime are separate phenomena in Mexico. Although in the Western context, the line between organised crime and gangs is often blurred (Densley, 2013), in Mexico they appear to be separate entities (Balcázar Villarreal et al., 2012).[97] Even in the context of Juárez, where some cooperation between a handful of gangs and organised crime been established, these two are described as separate entities. As one interview participant explained:

> I only completed primary school…after that, when I started to hang out with gangs…but it was only *barrio*…it was never anything very involved, like for example the mafias [organised crime], or any of that…it was all *barrio* [neighbourhood].

Jorge also described how gangs and organised crime are different. When asked whether he joined a gang when he was growing up, he explained:

> Well, no, I mean no, no…in that time we were a *barrio*…we were a *barrio*. Yes, no, there wasn't any…all these *famas* and all of that…the cartels. I mean, yeah, we hung out together, those from the *barrio*, and

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[97] It is still unclear how many gangs operate in Juárez, how prevalent gang membership is in terms of numbers, which of these gangs cooperate actively in organised crime, what kinds of roles gang members fulfil, etc.

everything. Imagine that there was a street corner, and my grandmother's shop, and my house, nearby. We would hang around in my grandmother's store. But this would be *por andar de vagos* [just for hanging around]. And yes, we did drugs, but like I said, we didn't…

Being part of a gang is described by participants as a basic part of life in the peripherised areas of Juárez. As one interview participant explained when asked why he formed part of a gang: "I think that it's likely that this is because this is a way of life in Juárez. *No hay quién no pase por las esquinas* [no one in Juárez is able to avoid life on street corners]". Cunjama López explains that the behaviour of Mexican street gangs is far from being anything close to what has been experienced in developed country settings, particularly the United States, but also in Central America, and although some gangs have become involved with organised criminal groups, in general, most gangs in Mexico are not involved with organised crime and the drug trade. This contrasts with the findings in developed country settings, where participation in the drug trade and gangs seem to be unequivocally tied (Bourgeois, 1993; Densley, 2013; Esbensen & Huizinga, 1993; Fagan, 1989; Padilla, 1992; Pitts, 2011; Taylor, 1990). For example, in his study of gangs in London, Densley (2013) found that around 80% of gang members considered in his study characterized their gangs as 'remunerative drugs "businesses"' (p.52).

In Mexico, joining a gang and transitioning into organised crime is a process, and not all gang members go through all the steps and end up participating in organised crime or in the drug trade. It is clear however, that the initial steps of this process begin with engagement in risky behaviours, which begins with cutting school to spend time on the streets to hang out with friends (one of the main reasons that interview participants gave to explain school abandonment was a desire for '*andar en la vagancia*', or to hang around, see **Chapter 7**), and may then escalate to smoking cigarettes and consuming alcohol from a very young age.

The early use of alcohol and tobacco makes the use of drugs much more likely,[98] and the use of drugs often follows a pattern, beginning with marihuana use and escalating to the use of more corrosive drugs, usually cocaine, and in limited cases, heroin. Interview participants mentioned using smoking and/or drinking alcohol for the first time as early as 10 years of age. Milán, for example, mentioned that when he started to hang out with people from the neighbourhood, he started doing drugs, consuming alcohol, and committing crime. Manuel described that he first tried alcohol and drugs at the age of 10. He and other young members of his group were egged on by an older individual who encouraged them to try tequila and marihuana.

Once drug consumption begins, there is a risk that it may escalate into addictions that require substantive amounts of cash to sustain. At least four interview participants highlighted

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[98] For example see Torabi et al. (1993) and Wagner and Anthony (2002).

having suffered from addictions. For example, Sebastián detailed that he began by using marihuana, and then escalated to the use of other drugs, including inhalants, and ultimately, heroin. At the highest point of his addiction he was shooting heroin up to 7 or 8 times a day and needed approximately MXN $350.00 (GBP £13.77) a day to maintain his addiction. Manuel also mentioned using marihuana, eventually tried cocaine, and became an addict. Eduardo consumed marihuana and cocaine on a daily basis: "Well yes, I did put a lot of drugs in my body…a lot of drugs. I spent around three thousand, four thousand pesos on drugs [per day]." As mentioned in the historical chapter on drug trafficking (**Chapter 3**), although drug use is not a public health issue in Mexico, it has increased in specific locations –including Ciudad Juárez. Other studies of adolescents that have committed serious crimes corroborate that drug use is widespread amongst this population. One such study found in a sample of adolescents in prisons in 4 states in Mexico that 57% of adolescents that were serving time had consumed drugs, and of those, 60% did so on a daily basis (Azaola, 2016).

Much like the use of drugs does not occur in a vacuum and is the result of a process of risky behaviour escalation that begins with alcohol and tobacco use at an early age, the same occurs with crime. The transition from alcohol and tobacco to cocaine and heroin use is similar to the transition from petty crime to organised criminal activity. Participation in crime may begin with theft, and is followed by more serious offenses, including association to an organised criminal group to carry out activities related to drug trafficking and homicide. For example, Martin described how he began associating with people from his neighbourhood. They were involved in illicit activities, and when they realized he had economic troubles, they offered him an opportunity to participate in illicit activities with them. They began by stealing and then progressed to organised crime related activity (the respondent was not asked to reveal what kind of activities he was referring to).

Others mention that they joined gangs that were already carrying out organised-crime related activities. This perhaps illustrates why there is a positive association between age and organised crime participation: Individuals who participate in gangs when they are young can easily leave, whereas older participants participating in gangs involved in serious forms of delinquency and/or cooperating with organised crime are much more at risk of involvement, and have a more difficult time leaving behind this dynamic. Some interview participants mentioned that they could not simply leave the gang cooperating with organised crime, as doing so would put them and their families at risk. For example, Juan José hung out with people from the *barrio,* but these friends were already involved in organised crime when he started associating with them. He described that he began simply by hanging out with them: "first, we

would drink together, *cotorrear* [chill or hang out], and then I realized what they were involved in…and I [kept] hanging out with them...”

Figure 6.17 illustrates the process for involvement in organised criminal activity. Although each of the interviews provides a different account of the path towards criminality, these are the generalisations that can be derived from the interview material to simplify what can be a complex and intermittent phenomenon.

Figure 6.17 From '*barrio*' to organised crime
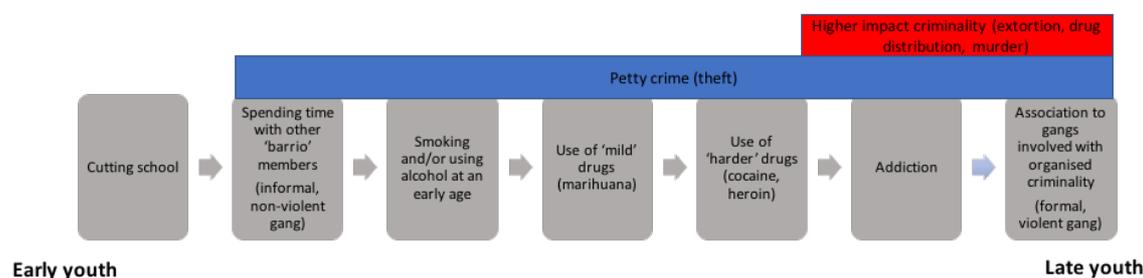
Source: Elaboration by author

The present analysis also found that participants who agreed that fighting in the community was common and knowing people with a strong dependency to alcohol and/or drugs were less likely to participate in organised crime, contrasting with hypothesis (h5). These results could indicate that those in prison tend to reflect on their lives outside of prison in a rather optimistic way (see evidence in discussion section of **Chapter 5**), which would explain why participants in the delinquent sample were less willing to admit that fighting in their communities was common and that they knew people with drug and/or alcohol dependency in their communities. The other possibility is that they themselves were directly involved in these activities and did not want to (further) incriminate themselves. As the interview evidence reveals, a significant number of participants recalled experiences of drug use and several admitted to having had addictions. No evidence came up in the interviews that provided evidence they were heavily involved in fighting; however, this was not a point that was directly addressed in the interviews either.

6.4 Conclusions

The present chapter highlighted the importance of the community and family environments in explaining organised crime participation, which leads to the following conclusions: The evidence from quantitative and qualitative analysis from the family environment indicates the impact of growing up in a single parent household and confirms its association to organised crime participation. Interviews revealed that more than half of the interview participants grew up without their fathers and that their absence had created significant emotional damage. At the same time, parents spending time in jail (it is often fathers who have served jail time) was found to reduce the probability of participating in organised crime, suggesting that the removal of a negative paternal figure constitutes a better alternative than the continued presence of a father involved in crime. What is needed is not just the presence of fathers, but fathers who are positive and supportive role models. Evidence provided in the interviews showed that some of the participants' fathers who were present were involved in organised crime and/or abused drugs. A positive association between lack of support from the parents and organised crime participation was also found. Even though it was not significant across all models, evidence from interviews confirmed that lack of support in the families was mostly experienced due to absent fathers, but also due to working mothers.

Further evidence from the interviews suggests that future research on this subject should use a mixed methods approach. Additional factors that were not considered in the survey of the present study, such as experiences of loss of relatives and friends, frequently came up in the interviews and were revealed as significant in explaining criminal participation. In addition, although experiencing physical violence was not found to be significant in the quantitative analysis, there was evidence in the interviews with delinquents that this was common, with violence mostly perpetrated by a male figure. This could perhaps signal that participants are not revealing to what extent they are victims of physical violence. Further studies need to consider alternative ways to draw out sensitive information, as there is evidence that physical violence in the household is pervasive amongst offenders in Mexico.

In regards to the community, descriptive data and evidence from the interviews reveals that the reference group is undoubtedly the family (and not peers) for most participants. Nevertheless, there is evidence that friends are important, as the results of the analysis suggests that positive friendships can be a source of resilience for young people, steering them away from participation in organised crime. On the other hand, the results of both the quantitative and qualitative analysis confirmed that regularly spending time in a gang significantly increases the probability of organised crime participation. This does not mean that being part of gang necessarily leads to organised crime, rather gangs constitute a gateway into organised criminal

activity. In addition, evidence revealed that older participants that join a gang that is already cooperating with organised crime have a higher risk of participation in activities of this nature.

Joining organised crime is a process; it starts with engaging in risky behaviours that escalate in severity: it may start with cutting school to hang out with friends and then escalate to consuming alcohol and using tobacco at an early age. This in turn progresses to drug use, which begins with marihuana, then escalates to the use of more harmful drugs, turning in some cases into an addiction. Drug addictions were not considered in the survey, but were revealed during the interviews. Several interview participants mentioned that they either consumed drugs on a regular basis or had a drug addiction, forcing us to rethink whether previous studies indicating that drug use is not a public health issue in Mexico are accurate.

Agreement with statements that fighting was common and knowing people with strong dependencies to alcohol and/or drugs was associated with a lower probability of crime participation, suggesting that delinquent participants were directly engaging in activities of this nature but were not admitting their direct participation (for example, evidence of wide-spread drug use came up in the interviews). Alternatively, these results could also suggest that those in prison tend to reflect on their conditions prior to incarceration in a positive way, creating an upward bias in their responses, and explaining why a lower number of delinquents recall that fighting was common in their neighbourhoods or that they knew people with strong dependencies to addictive substances in comparison to their non-delinquent counterparts. Lastly, the analysis found that parents were the reference group across participants in both samples, but more so in the case of delinquents. This calls for a revaluation of the theoretical assumptions derived from evidence in developed countries and urges a reformulation of the theory in developing country contexts where family ties are still imperative.

Chapter 7. Macro Level Factors: Multi-Dimensional Poverty and Organised Crime Participation

Organised crime in Mexico has been the subject of headlines and analyses since the declaration of the 'war on drugs' launched at the start of Felipe Calderón's administration in 2006. The discourse that has been pervasive in the country is based on a Manichean view of the world, which fails to acknowledge factors beyond individual decisions, ignoring the multiple and complex environmental factors that play a role in organised crime participation.

This research suggests that explanatory factors stem from three different levels. Micro and individual levels have been discussed in the previous two chapters. Factors at the macro level (the subject of this chapter) also play an important role in criminal participation, as the effects of poverty and other factors, such as inequality, on crime are "fairly robust" (Pratt & Cullen, 2005: p. 412). The hypotheses explored in this chapter is that poverty contributes to explaining participation in organised criminal activity. However, the use of a multidimensional approach for poverty measurement used in this research provides a more comprehensive and nuanced picture, explaining which aspects of poverty – in addition to income – can contribute to explaining who participates in organised crime.

This chapter will be structured as follows: It will first explain how multidimensional poverty is defined in Mexico. A literature review will ensue, containing a brief overview of the empirical evidence linking poverty and inequality to crime. Studies on the prison population in Mexico will also be included in this section. After introducing the methodology used in this chapter, an analysis of the data will follow, presenting first descriptive statistics on the indicators of multidimensional poverty followed by the results of a logistic regression of the dependent variable (i.e., participation in organised crime), on several poverty indicators used as explanatory variables. A discussion of the results and public policy implications will then be presented. The chapter will conclude with a final section summarising the main findings.

7.1 Defining Multidimensional Poverty in Mexico

Currently, Mexico is one of the few countries in Latin America that calculates its own national multidimensional poverty index (MPI) (OPHI, 2015b).[99] This index is different from the global MPI developed originally by the Oxford Poverty and Human Development Initiative (OPHI, 2015a). The global MPI considers three dimension of poverty (health, education and living standard), which are measured using ten indicators listed below:

- Health: nutrition and child mortality
- Education: years of schooling and school attendance
- Living standard: cooking fuel, sanitation, water, electricity, floor, and assets

The national index in Mexico does not group indicators into these three dimensions. Instead, the index is currently calculated by CONEVAL and considers *income* as well as six *social deprivation indicators* to determine whether individuals are multidimensionally poor. This index will be referred to as the M-MPI in the remainder of the chapter and references to multidimensional poverty in Mexico will be based on this national index.

For *income*, poverty is measured using two thresholds: the minimum well-being line and the well-being line. The first measure considers the per capita monthly cost of a food basket that meets minimum nutritional standards for a healthy and balanced diet, whilst the second measure considers the per capita monthly cost of a food and a non-food basket of items. The non-food basket considers the monthly cost of additional necessary household expenditures, including for example, the costs of using public transportation, cleaning items for the household, personal care items, clothing and accessories, amongst others. The costs of the baskets vary between urban and rural areas.

In addition to income, the six *social deprivation indicators* considered for M-MPI calculation are:

1) Educational lagging;

Deprivation in:

2) Access to health services;

3) Access to social security;

4) Access to food;

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[99] Mexico, Colombia, Chile, and the state of Minas Gerais in Brazil have adopted a multidimensional approach to measuring poverty. Other countries of the Latin American region, such as Costa Rica, the Dominican Republic are in the process of developing their own MPIs (OPHI, 2015b).

5) Quality and spaces of the dwelling; and

6) Access to basic services in the dwelling.

Using these deprivation indicators outlined above and the corresponding well-being lines, individuals are then grouped into one of the following categories listed in **Table 7.1**:

Table 7.1. Classifications of poverty according to the M-MPI

Categories of Poverty	Definition
Extreme multidimensional poverty	Population with an income below the minimum well-being line (meaning that income is insufficient to purchase the food basket), *and* deprived in three or more of the social indicators.
Moderate multidimensional poverty	Population with an income below the minimum well-being line (meaning that they cannot purchase the food basket), *and* deprived in one or two of the social indicators.
Multidimensional poverty	Population with an income below the well-being line (meaning that income is insufficient to purchase both the food and non-food basket items), *and* deprived in at least one of the social deprivation indicators.
Vulnerable due to deprivation in social indicators	Population that presents deprivation in one or more of the social indicators but has an income above the well-being line.
Vulnerable due to income	Population that presents no deprivation in social indicators but whose income is below or equivalent to the well-being line.
Not poor and not vulnerable	Population with an income above the well-being line and no deprivation in terms of any of the six social indicators.

Source: Elaborated by author based on information from CONEVAL (2014c)

7.2 Survey Description: Modules Used to Measure Multidimensional Poverty

The present study involved the administration of 180 surveys among a sample of young male delinquents between the ages of 12 and 29,[100] serving time in a social rehabilitation centres in the state of Chihuahua. The sample of inmates had been sentenced for a variety of crimes related to organised criminal activity. A purposive sampling method was used, so that only delinquents in this age group, sentenced (or awaiting sentencing) for specific crimes were included. Once a list of inmates with the characteristics outlined was obtained from the prison authorities, a randomised selection from this list was carried out. Every fifth person on the list was selected to participate in the study. For comparative purposes, an equal number of surveys were administered to a non-delinquent sample of young males in the same age group with no criminal record and who were residing in a marginalized area of Ciudad Juárez (for a more extensive explanation of the methodology of the present study see **Chapter 4**). This section will describe the modules used in the survey to measure multidimensional poverty amongst these two groups. Although the questions used by CONEVAL for M-MPI calculation have been

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[100] The original sample contains populations between the ages of 12 and 29, those considered young by the youth institute IMJUVE. However, some of the questions included in this section were only relevant to adults, so minors (aged 12 to 17) have been excluded from the results of this part of the study, as some of the questions on multidimensional poverty –specifically those relating to access to health and access to social security, were only answered by the adult population.

replicated, some modifications had to be made to the survey. How each of these indicators were measured for this study will be addressed below.

For the calculation of M-MPI, inmates were asked about their socio-economic situation prior to incarceration, while individuals in the non-delinquent sample were asked about their situation at the time the questionnaire was administered. It was not possible to ask participants in the first sample to reflect on specific details of their condition prior to organised crime participation due first, to the differences in the length of the criminal careers of the individual participants as well as the intermittent character of these activities. Because some of the questions of the survey were very detailed, the best approximation was to ask participants to reflect on their conditions prior to incarceration so that they would provide the information that they could recall best, rendering the information more reliable.[101]

For the survey questions addressing multi-dimensional poverty, similar items to those included in the National Survey on Income and Expenditures Survey (ENIGH) of Mexico (used to generate the national M-MPI) were used, although some modifications were necessary. For example, in the indicator for *income*, it would have been extremely time consuming to follow the national methodology used in ENIGH, which involves asking questions on household expenditure for a series of specific items. Using this methodology would have taken up almost the entire time available for survey purposes for negligible gains. Participants were therefore asked to indicate the income category of their household and this figure was divided by household size to determine whether the individual was poor or extremely poor by income standards. Income ranges were calculated using data on income deciles for households according to the ENIGH survey. Income ranges have been used reliably in other national surveys, including the Mexican Youth Survey (IMJUVE, 2010b) and the Americas Barometer for Mexico (2012).

In terms of the six deprivation indicators of the M-MPI, deprivation was determined along the guidelines set out by CONEVAL, with a few modifications. Participants were categorised as deprived or not deprived with regard to each of these indicators and were coded as 1"deprived" 0 "not deprived". These indicators, along with classifications for income based on well-being and minimum well-being lines, were then used to classify participants into different categories of poverty based on the criteria in **Table 7.1**. The questionnaire to determine how deprivation was determined for individuals along these indicators was as follows: For

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[101] For example, when participants in the delinquent sample were asked about their income, it is possible that the answer provided reflects income while the respondent was engaging in criminal activity. The limitations of not being able to assess the precise situation of all participants prior to organised crime participation is acknowledged and addressed further in the discussion section.

educational lagging,[102] those who did not complete secondary school and those between the ages of 12 and 15 who were not enrolled in an educational institution were considered deprived. For the delinquent sample, those who had not completed secondary school and those aged 12 to 15 who had not been enrolled in an education institution prior to incarceration were considered deprived. Those deprived along these criteria were coded with a 1, and those who were not deprived were coded with a 0. This was the same for the rest of the social indicators. For *access to health services*, individuals were considered deprived if they did not have access to health services through any of the public or private institutions providing health care, including for example, the program Seguro Popular[103] or the Mexican Institute of Social Security (IMSS).[104]

To determine deprivation in terms of *access to social security*, participants were asked whether they were enrolled in IMSS, in the System of Savings for Retirement (SAR)[105] or the Retirement Funding Administrators (AFORE),[106] or if they had access to a retirement fund or pension through a family member who was a beneficiary of social security. If participants failed to answer at least one of these questions positively, they were considered deprived in terms of this indicator.[107] Delinquents were asked about their access to health services and social security prior to incarceration and were categorised as deprived along the same criteria.

For *access to food*, Melgar-Quiñonez, Nord, Pérez-Escamilla, Álvarez and Segall (2008) developed a food security scale recognising four possible levels: severe food insecurity, moderate food insecurity, low food insecurity and food security. Individuals deprived in access to food are those who present a degree of moderate or severe food insecurity. Although FAO guidelines include 15 questions to assess food insecurity (FAO, 2012), the questionnaire administered in this study was long, and it was not possible to include all the items suggested. Four items to assess the degree of food insecurity in the household were included. If there was a positive answer for the questions indicating moderate and severe food insecurity (see **Table**

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[102] The use of educational lagging has important limitations in relation to the current understanding of UNESCO and other international agencies working on educational attainment. However, because the methodology in this chapter tries to replicate the methods used by CONEVAL in poverty measurement, I have adhered to using this term.

[103] Seguro Popular is a public health insurance established as an effort to expand health care for those who had no access to health insurance (World Bank, 2016).

[104] Governmental organisation that provides access to health services for those formally employed or those studying in a public institution (IMSS, 2017).

[105] Individual accounts of employees whose pension is being saved for future use (CONSAR, 2017).

[106] Companies authorised to manage individual retirement accounts that accumulate contributions made by the employer, the federal government and the employee ("Retirement Funds Administrators", 2017).

[107] For access to social security, a person is not considered deprived by CONEVAL if she/he has access through formal employment. Due to the voluntary character of enrolment in social security, an individual who is self-employed or independent and has access to medical services as a job benefit or is enrolled in SAR or Afore is not considered deprived.

7.2), the individual was considered deprived along this dimension. Delinquent sample participants were asked about their condition along this dimension prior to incarceration.

For *quality and spaces of the dwelling*, the criteria were based on the construction material and the spaces of the dwelling. An individual was considered deprived if the dwelling in which he resided presented any of a series of characteristics, such as a dirt floor, or a roof made from material such as waste or cardboard (for specific characteristics see **Table 7.2**). In terms of *access to basic services* in the dwelling, deprivation was present if the respondent's dwelling presented at least one of a series of characteristics, including no access to electricity or no drainage in the household. Because poverty varies regionally, and it is likely that very few households in the north of Mexico (where this study took place) would exhibit these characteristics, access to basic household appliances was added to help identify deprivation along this indicator.[108] This indicator was renamed *access to basic services and household appliances*. Delinquents were asked about the conditions of the household they resided in prior to incarceration.

In order to provide a more rounded and comprehensive measure of M-MPI, I introduced a seventh indicator to capture deprivation in *access to recreational activities*. Participants were asked to indicate (yes/no) if they were interested in different activities, including for example, dancing of any kind, performing in plays, practicing sports, among others. They were then asked if they had had the opportunity (meaning the time and resources) to practice any of the activities they had mentioned they were interested in. Delinquents were asked about their opportunities to practice these activities prior to incarceration. The importance of this element has been largely neglected in the development literature, but should not be underestimated.[109]

A table detailing the indicators, along with the corresponding survey questions and criteria to determine if deprivation is present is provided below in **Table 7.2**. The survey questions for delinquent and non-delinquent sample participants are the same, the only difference is the time period, as delinquent participants are asked about their conditions prior to incarceration, while non-delinquents are asked to reflect on their current conditions (see **Chapter 4 Annex: A.4.3**

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[108] Specifically, access to a refrigerator and a washing machine. For example, data from INEGI reveals that 91.3% of households in the northern state of Chihuahua had access to a refrigerator in 2010 in comparison to only 60.0% and 57.9% in the southern states of Oaxaca and Chiapas. Similarly, 81.1% in Chihuahua have access to a washing machine; this figure is only 37.3% and 36.2% in Oaxaca and Chiapas, respectively. As such, it is likely that not many of the households in the north of Mexico will present any of the four characteristics, so a stricter criterion for poverty measurement is necessary.

[109] In *Creating Capabilities*, Nussbaum stresses that a life worthy of human dignity requires at a bare minimum an ample threshold level of ten 'Central Capabilities', one of which is play, defined as "being able to laugh, to play, to enjoy recreational activities" (Nussbaum, 2013: p. 34). Additional evidence points to the importance of recreation. In a study of two South African townships, Clark finds that participants confirmed that "free time and recreation are central to a good life" (Clark, 2002: p. 125). His results indicate that this item was spontaneously mentioned by more than half of study participants.

for survey questions on multidimensional poverty and **A.4.4** for examples of differences across surveys**)**.

Table 7.2 Poverty indicators used to calculate M-MPI, survey questions for delinquent sample participants and deprivation criteria

Poverty indicators	Survey Question	Deprivation if…
1. Income*	Income range	Income is below the well-being line or below the minimum well-being line. The well-being line is established in urban areas at MXN $2,542.00 (GBP £100.83) per capita on a monthly basis. For the minimum well-being line, the figure is MXN $1,614.65 (GBP £ 64.07).
2. Educational lagging	-Did you complete primary school? -Did you complete secondary school? -Were you enrolled in school prior to your arrest?	Those who did not complete secondary school or who were not enrolled in any educational programme prior to incarceration.
3. Access to health services	-Were you enrolled in any medical service associated with any institution, including the Seguro Popular, public institutions of social security (IMSS, ISSSTE federal or state, PEMEX, Army or the Marine) or private medical services?	No access via any of the institutions mentioned.
4. Access to social security	-Were you enrolled in IMSS? -Did you have access to SAR or Afore? -Did you have access to any pension through a relative with access to social security?	If they failed to answer positively to at least one of these questions.
5. Quality and spaces of the dwelling	In the dwelling of residence prior to incarceration: -What was the main material of the floor of the dwelling? -And the roof of the dwelling? -What was the main material of the walls of the dwelling? -Were more than two people sharing the same room at some point during your residence?	Considered deprived if the dwelling had any of the following characteristics: -Main material of the floor is earth -Roof made from waste, cardboard, metallic or asbestos plates or straw -Material of the walls made from clay; bamboo, palm or reed; carton, metal or asbestos plate; or waste -more than 2.5 occupants per room in the household
6. Access to food*	In the last year you resided in your household: -Did you ever worry that you would run out of food? -Did you have a diet based on a small variety of food stuffs? (moderate) -Due to a lack of resources, did you ever feel hungry but could not eat? (severe) -Due to lack of resources, did you ever eat only once a day or go a whole day without eating? (severe)	If there was a positive answer for the items indicating moderate and severe food insecurity.
7. Access to basic services and household appliances*	In the household where your previously resided: -What was the main water source? -Did you have access to a drainage system? -What was the source of electricity? -The fuel most often used for cooking was…? -Did you have access to the following household appliances: a) refrigerator and b) washing machine	If the dwelling presents *at least one* of the following characteristics: -Water obtained from a well, river, lake, stream, or tubed water brought to the dwelling from another house, public fountain or hydrant -The dwelling did not have drainage or the drainage is connected to a tube that leads to a river, lake, ocean or crevice -The dwelling did not have electricity -The fuel used to cook or heat food items was firewood or carbon -Household did not have access to either a refrigerator, washing machine, or both
8. Access to recreational activities*	-Can you tell me if you are interested in any of the following activities? 1) Dancing of any kind; 2) Singing or playing an instrument; 3) Writing music; 4) Writing stories or poetry; 5) Performing in plays; 6) Painting, drawing or sculpting; 7) Photography or film-making; 8) Reading for pleasure; 9) Practicing any sport; 10) Other (specify). - Prior to you arrest, would you say you had the opportunity, and by this I mean the time and	If they indicated that they did not have time or resources to practice the activities that they enjoyed.

	resources, to practice any of the activities you mentioned you were interested in?	

* Indicates those that have been altered from the original indicators developed by CONEVAL
Source: Elaboration by author

Based on this discussion, the next section presents descriptive statistics for deprivation along each of these indicators and compares the results for the delinquent and non-delinquent samples. A quantitative analysis using logistic regression of the dependent variable, crime participation (*delincuente*), on the social deprivation indicators follows. These are considered as the independent variables, referred to for the remainder of the paper as deprivation due to educational gap (*resedu*), deprivation in access to health care (*accsal*), deprivation in access to social security (*socsec*), deprivation due to quality and spaces of the dwelling (*espviv*), deprivation in access to food (*acclaim*), deprivation in access to basic services and household appliances in the dwelling (*servvivadj*), deprivation in access to recreation (*accrec*), and deprivation in income (*depriving*).[110] All of the independent variables are binary and have been coded as 0=not deprived and 1=deprived along the criteria that have been previously explained.[111] For crime participation (*delincuente*), the data has been coded as 0=non-delinquent for survey participants with no criminal record, and 1=delinquent for the sample of participants in prison.

7.3 Analysis

The following figure (**Figure 7.3**) summarizes the differences in deprivation between the delinquent and non-delinquent samples for each of the indicators described. The graph indicates that deprivation is higher in the delinquent sample for five indicators, specifically educational lagging, access to health services, access to social security, quality and spaces of the household, and access to basic services and household appliances.

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[110] This chapter works with the terminology used officially by CONEVAL. The limitations of their translations are acknowledged by the researcher.
[111] For example, one of the individuals in the delinquent sample would be coded as 1 'delinquent' for the dependent variable crime participation (*delincuente*). If he did not complete a secondary school-level education, he would be coded with a 1 'deprived' for the independent variable educational gap (*resedu*).

Figure 7.3 Percentage (%) of deprivation along M-MPI indicators for delinquent and non-delinquent samples
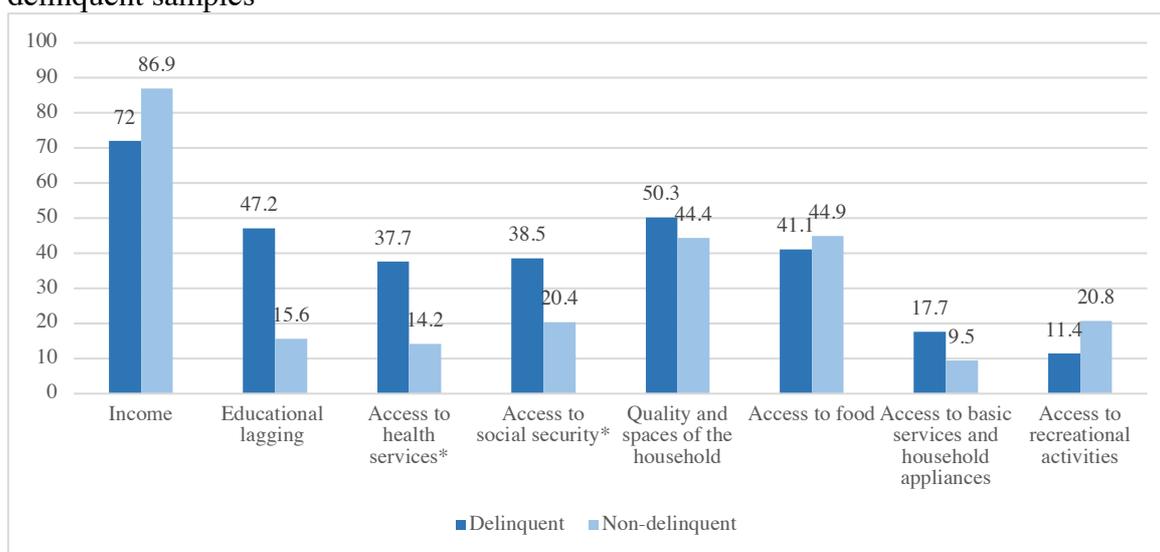
Source: Author's elaboration based on fieldwork data
Analysis excludes missing values
*Only adults are considered in these two dimensions

Data analysis indicates that more than one third of delinquents were *extremely poor* by income standards, meaning that their monthly income was insufficient to buy the basic basket of food items. Likewise, more than one-third of the delinquent sample was *poor* by income standards, meaning that the monthly income was insufficient to buy a basic basket of food and a basic basket of non-food items. Altogether, 72% of delinquents were poor by income standards (see **Figure 7.3**). For the non-delinquent sample, the results indicate that 86.9% were poor by income standards, more than the percentage of poor and extremely poor in the delinquent sample. The results also indicate that almost half of the delinquent sample were *lagging in education* (47.2%) and the data reveals that there is a significant difference between educational lagging across both groups, as the proportion that did not complete secondary school in the first sample is more than three times the corresponding figure for the non-delinquent sample (15.6%).

For *access to health services*, more than one third of the delinquent sample (37.7%) indicated that they were not enrolled in the medical services supplied by any of the aforementioned institutions. For the non-delinquent sample, the proportion of deprivation along this indicator was less than half of the figure for the delinquent sample (14.2%). The data also indicates that in terms of *access to social security*, more than one third of the delinquent sample was also deprived (38.5%). More specifically, roughly half of the delinquent sample indicated that they did not have access to IMSS (47.8%) and above more than half were not enrolled in SAR or Afore (50.7%). For the non-delinquent sample, only one fifth were deprived in access to social security (20.4%). Almost one fourth of the sample (24.8%) were not enrolled in IMSS

and more than two-fifths were not enrolled in SAR or Afore (43.2%). The data indicates that deprivation along this dimension was higher among delinquents than non-delinquents.

For *quality and spaces of the dwelling*, the data indicates that around half of the delinquent and non-delinquent samples were deprived along this indicator, with the delinquent sample experiencing slightly more deprivation (50.3% versus 44.4% respectively). However, the data in **Table 7.4** indicates that deprivation in this indicator was mostly due to overcrowding in the household. The percentage of households in both samples with dwellings in precarious conditions such as poor quality roofing and walls made from materials such as carton or metallic plates, and earth floors, were notable exceptions.

Table 7.4 Proportion (%) experiencing deprivation in quality and spaces of the dwelling and access to basic services and household appliances

Quality and spaces of the dwelling		
	Delinquent	Non-delinquent
Main material of the floor of the dwelling is earth	2.2	0.7
Roof of the dwelling made of carton or metallic plates	9.6	2.1
Walls of the dwelling made of carton or metallic plates	0.7	0
Overcrowding	43.0	45.8
Access to basic services and household appliances		
	Delinquent	Non-delinquent
Water obtained from an outside source	3.0	2.8
Lack of drainage system or dwelling connected to a drainage source that was not the public system	2.9	1.4
Dwelling lacked electricity	1.5	0
Firewood used for cooking	3.0	2.1
No access to basic household appliances*	15.4	9.9

*Note: Indicates percentage (%) of participants who did not have access to a refrigerator and/or washing machine
Source: Author's elaboration based on fieldwork data

In terms of *access to basic services and household appliances*, deprivation in this indicator is higher for the delinquent group (17.7%) compared to the non-delinquent sample (9.5%). The largest differences are visible in the percentage of dwellings in the delinquent sample with no access to basic household appliances (15.4% and 9.9% for the delinquent and non-delinquent samples, respectively). Overall, however, the degree of deprivation in this

indicator is not high for either of the two groups for reasons that will be discussed in the next section. In terms of *access to food*, the data indicates that both samples were similarly deprived (41.1% and 44.9% for the delinquent and non-delinquent samples, respectively). However, there was a discrepancy between the two groups, as the proportion who experienced more severe forms of hunger was higher in the delinquent sample: the proportion who experienced hunger and failed to have a meal on one occasion or more (30.9% and 23.2%), and those who had only one meal a day or failed to eat throughout the whole day on one occasion or more (24.4% and 23.4%) were both higher in the delinquent sample (see **Table 7.5**).

Finally, in terms of *access to recreational activities*, the data indicates that while only around one tenth (11.4%) of the delinquent sample were deprived in terms of this indicator, almost twice the proportion of the non-delinquent sample were similarly deprived (20.8%). When participants were asked about the recreational activities they were interested in, additional data from the survey indicates that delinquent participants had the highest interest in practicing sports (91.7%, n=165), followed by reading for pleasure (66.7%, n=120), and painting, drawing of sculpting (63.3%, n=114). Differences in the interest in recreational activities are clear in **Figure 7.6**. Of the 20 delinquent participants surveyed (out of180) that indicated not having access (time or resources) to participate in recreational activities they were interested in, 18 participants agreed that it would have made a significant difference in their lives to have had access to these activities.

Table 7.5 Proportion (%) experiencing deprivation in access to food

	Delinquent	Non-delinquent
Diet based on a reduced variety of food items	34.6	38.7
Experienced hunger and missed a meal on one occasion or more	30.9	23.2
Had only one meal a day or failed to eat throughout the whole day on one occasion or more	24.4	23.4

Source: Author's elaboration based on fieldwork data

Figure 7.6 Proportion (%)interested in different types of recreational activities
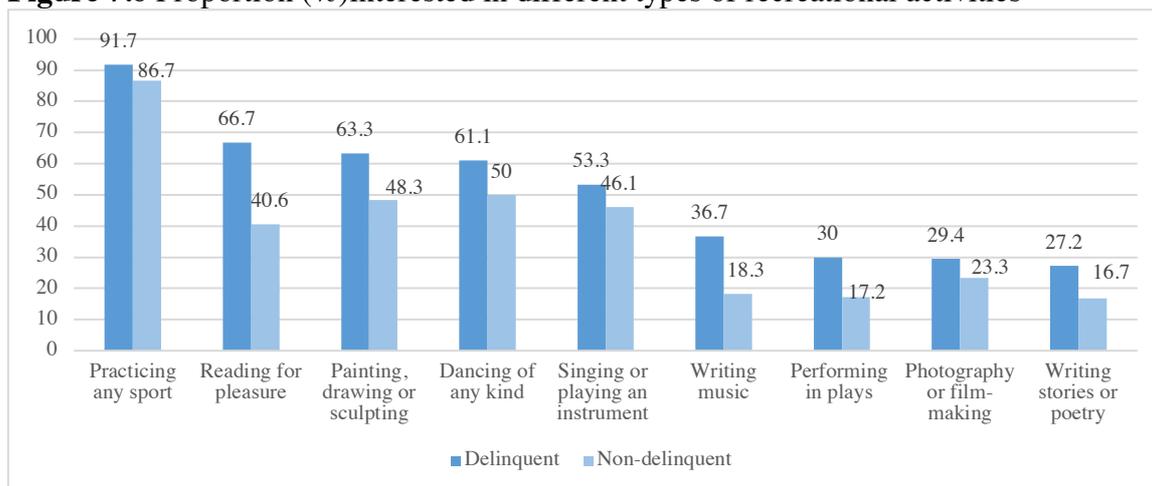
Source: Author's elaboration based on fieldwork data

Considering all indicators and based on the national definition to determine who is multidimensionally poor, the data indicates that 65.1% of the sample of delinquents are in the three categories of multidimensional poverty[112] and of these, 18.9% are in *extreme multidimensional poverty* (see **Table 7.1** for classifications of poverty and **Figure 7.7** below for full classification). For the non-delinquent sample, 74% are in the three categories of multidimensional poverty and of these, 17.7% are *in extreme multidimensional poverty*. Although the percentage of participants in the three categories of multidimensional poverty is higher in the non-delinquent group (74%) than in the delinquent group (65.1%), the percentage who are in extreme multidimensional poverty is slightly higher for the delinquent group. It is interesting to note that there is a stark contrast in the proportion of the population in the classification of poverty *vulnerable due to deprivation in social indicators* (see **Table 7.1**), as the corresponding percentage of delinquents (26.5%) under this classification is almost three times as large as the figure for the non-delinquent sample (9.2%).

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[112] This figure represents the sum of figures for extreme, moderate, and multidimensional poverty.

Figure 7.7 Percentage (%) of sample falling into different classifications of poverty
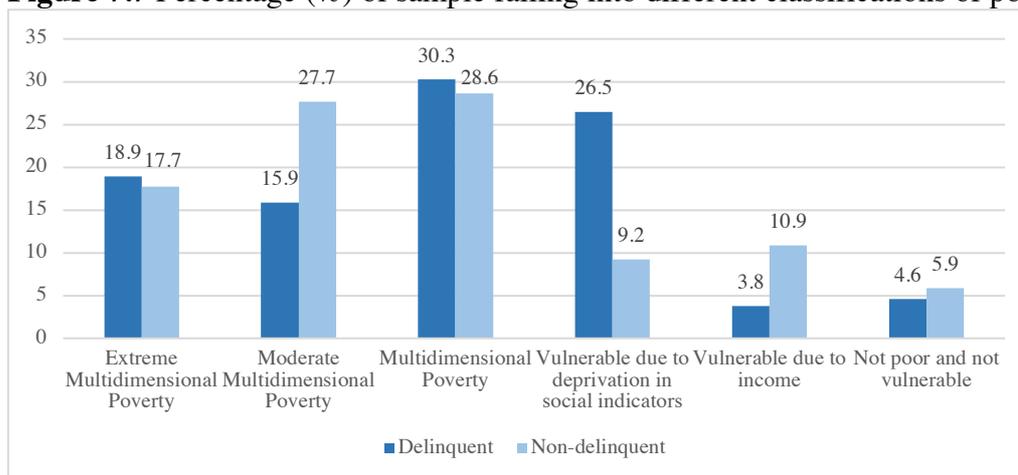
Source: Author's elaboration based on fieldwork data
*Analysis excludes minors and missing values

For the second part of the analysis, a logistic regression of seven explanatory variables of multidimensional poverty on the dependent variable, organised crime participation, was performed. Because the analysis predicts only two categorical outcomes (whether an individual participates in crime or does not), a binary logistic regression was used. The dependent variable, organised crime participation (*delincuente*) was coded dichotomously (0=non-delinquent, 1=delinquent). The independent variables representing the different dimensions of poverty are all coded as dummy variables (0=not deprived, 1=deprived) according to the criteria that have been previously explained.

A logistic regression using the backward stepwise method was first performed. The backward stepwise method begins the model with all the predictors, or independent variables, and then tests whether any of these predictors can be removed from the model without increasing the information criterion (a larger AIC value penalizes the model for including more predictors) (Field et al., 2012). The results of the regression indicate that the predictors, or independent variables that should be included in the model to explain crime participation are income deprivation (*depriving*), educational lagging (*resedu*), deprivation in access to health (*accsal*), and deprivation in access to recreation (*accrec*). The output for this part of the analysis are presented in **Chapter 7 Annex: A.7.1**.

However, because some experts believe that stepwise methods have no value for theory testing (Field et al., 2012), nested models are used to test the significance of these variables. With this approach, the first model considered only the effect of income deprivation (*depriving*) on organised crime participation (*delincuente*). Model 2 considers the variable (*depriving*) and adds the variable on educational lagging (*resedu*). Model 3 considers these two variables (*depriving* and *resedu*) and adds the variable on access to health (*accsal*). This approach

continued until we had a full model including all the indicators of poverty. The coefficients reported below in **Table 7.8** are specified as average marginal effects.

Table 7.8 Marginal effects of multidimensional poverty on organised crime participation

Variables (Ref. cat. = not deprived)	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Income	-0.22** (0.06)	-0.24*** (0.05)	-0.24*** (0.05)	-0.24*** (0.05)	-0.24*** (0.05)	-0.24*** (0.06)	-0.24*** (0.06)	-0.24*** (0.06)
Educational lagging		0.41*** (0.04)	0.36*** (0.05)	0.36*** (0.05)	0.36*** (0.05)	0.37*** (0.05)	0.36*** (0.05)	0.33*** (0.05)
Access to health services			0.27*** (0.05)	0.28*** (0.08)	0.28*** (0.08)	0.28*** (0.08)	0.28*** (0.08)	0.30*** (0.07)
Access to social security				-0.02 (0.08)	-0.02 (0.08)	-0.03 (0.08)	-0.02 (0.08)	-0.02 (0.08)
Quality and spaces of the household					-0.00 (0.05)	0.00 (0.05)	0.00 (0.05)	0.02 (0.05)
Access to food						-0.04 (0.05)	-0.04 (0.05)	-0.02 (0.05)
Access to basic services and household appliances							-0.00 (0.08)	-0.00 (0.08)
Access to recreational activities								-0.19* (0.07)
Pseudo R-squared	0.02	0.15	0.19	0.20	0.20	0.20	0.20	0.21
Number of observations	306	306	249	249	249	248	246	244

Note: Reduction in sample size is due to exclusion of minors and missing values from analysis
*Denotes significant values (p<0.05)
**Denotes significant values (p<0.01)
***Denotes significant values (p<0.001)

The results for model 1 show that the predicted probability of belonging to the group who participated in organised crime decreases by 22 percentage points for those who were income deprived (*depriving*) in comparison to those who were not deprived. The results for income deprivation are significant across all models tested. The descriptive data in the previous section showed that participants in the non-delinquent sample were more income deprived when compared to delinquents, suggesting that participation in crime reduces income poverty. To test if this was the case, the variable of delinquency was regressed on income deprivation (dependent variable). The analysis indicates that there is a significant association, as the predicted probability of being income deprived decreases by 15 percentage points for those who had participated in organised crime in comparison to those who had not (p<0.01).

Model 2 shows that both income deprivation (*depriving*) and educational lagging (*resedu*) are significant. Educational lagging remains significant across all models. According to model 2, the predicted probability of belonging to the group who participated in organised crime increases by 41 percentage points for those who present educational lagging in

comparison to those who do not. Model 3 shows that in addition to these two variables, deprivation in access to health care (*accsal*) is also significant: the predicted probability of belonging to the group who participated in organised crime increases by 27 percentage points for those who were deprived in access to health in comparison to those who are not deprived. This variable is also significant across all the models. The remaining variables in models 4 to 7 do not appear to be significant. Lastly, model 8 shows that deprivation in access to recreational activities (*accrec*) is also significant, showing that the predicted probability of belonging to the delinquent group decreases by 19 percentage points for those who were deprived in access to recreation in comparison to those who were not deprived. Robustness checks were performed by conducting another nested model analysis grouping the indicators of poverty into three broad categories (as established by the global MPI),[113] which considers 10 indicators of poverty in three categories: health, education and living standard (see **Chapter 7 Annex: A.7.2** for model). The results confirm the significance of these variables.

Figure 7.9 Coefficients (log odds) from model 8 (95% CI)

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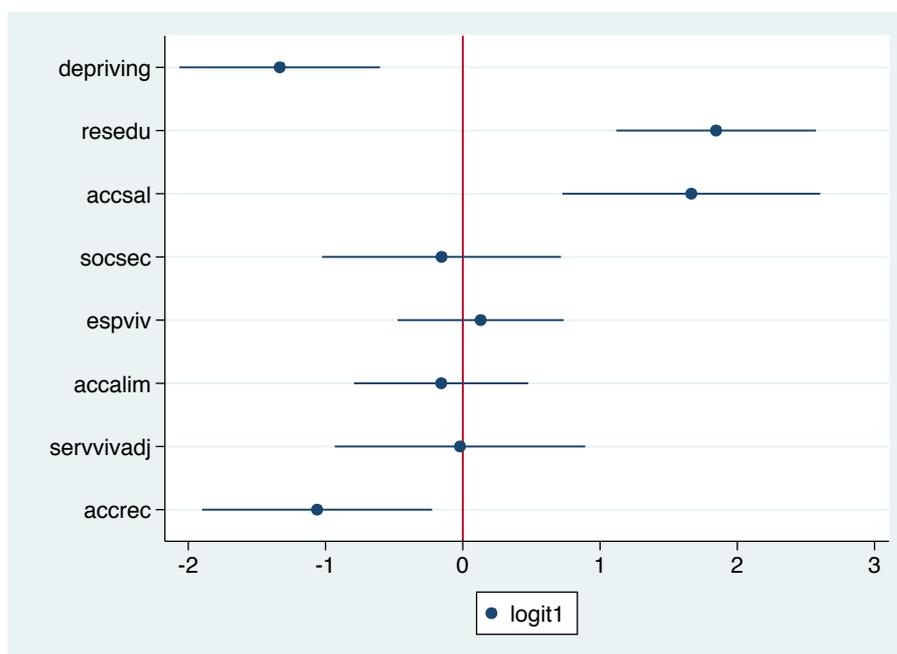
[113] The global MPI considers the dimensions of health, education and living standard. For health, the indicators used are nutrition and child mortality; for education, years of school and school attendance, and for living standard, cooking fuel, sanitation, drinking water, electricity, flooring, and assets. Because the indicators used by the Mexican government are slightly different, I have grouped them where they are most relevant. For example, for the category of living standard, quality of the spaces and household, access to basic services and household appliances were included, and an indicator for access to recreational activities was added.

7.4 Discussion

The analysis found an association between crime and several indicators of multidimensional poverty; however, the research design of this study does not allow establishing concrete causality between indicators of multidimensional poverty and criminal participation. The direction of the effect is also unclear, as the analysis could also be revealing the effect that criminal participation has on the indicators of multidimensional poverty that were found significant. Despite the lack of clear causality, there are important and substantial findings that call into question the results of established literature when applied in a developing country context that focuses on a population that has rarely been accessed. The present section discusses the implications of these findings, and puts together the quantitative findings with the material derived from in-depth interviews with a sub-sample of the delinquent participants in order to obtain a clearer picture.

Efforts to measure multidimensional poverty have been carried out at the national, state and municipal levels in Mexico. However, the most marginalised populations (including those in prison), have been largely ignored and are not usually represented in the pool of data on this subject. The data derived from the surveys reveals first, that delinquents are worse off in over half of the poverty indicators compared to the non-delinquent group (see **Figure 7.3**). Despite participation in organised crime, participants in the delinquent sample are still more deprived than non-delinquents along five social deprivation indicators, suggesting that crime is not reducing multidimensional poverty along all indicators. There is, however, evidence of small income gains, as delinquent participants are less income deprived than their non-delinquent counterparts. Furthermore, deprivation in income is shown to have a negative and significant association with participation in crime, showing that those who were income deprived had a lower probability of having participated in organised crime, suggesting that the proceeds of crime lower income deprivation.

The difference in income deprivation across the delinquent and non-delinquent samples, however, is not large, signalling that the majority of those serving time in prison at the time of the study had not made large economic gains in organised crime, or had squandered their gains unwisely, as over 70% of the sample were still income poor prior to incarceration. This finding corroborates the reality of organised crime participation, perhaps best illustrated by a former participant of organised crime interviewed by the Mexican journalist Alejandro Almazán: "*Eso de que todo aquel que entra al narco se hace rico, es nomás un pinchi mito* [the idea that everyone who participates in narco-trafficking become wealthy is only a *** myth]" (Almazán, 2011). According to this source, in the city of Culiacán (capital of the state of Sinaloa and a

prime 'hot-spot' of organised criminal activity), 70% of those who participate in this type of criminal activity are very poor, and most of the money they make from the trade is spent on drugs and alcohol (2011).

Material from the interviews with delinquent participants reveals that the economic gains from participation in the drug trade are significantly larger (see **Table 7.10**) than the wages from formal and informal employment. Data from the surveys reveals that 32% of participants in the delinquent sample had a formal job in the assembly plant at some point of their lives, where interview participants indicated that they would earn a weekly wage between MXN $500.00 and $800.00 (GBP £19.83 and £31.70). Monthly, this corresponds to a sum between MXN $2,000.00 and $3,200.00; and the lowest amount corresponds roughly to one third (39.7%) of the income necessary to be placed above the well-being line for a two-parent household with a *single breadwinner and no children*.[114]

Participants indicated obtaining significantly higher amounts when participating in organised crime. Data in **Table 7.10** summarises the proceeds of organised criminal activity and compares them to formal and informal employment as described by delinquent participants in the interviews. For example, Guillermo mentioned that he would make a *daily* wage of between MXN $2,000.00 and $3,000.00 (GBP £79.33 and £119.00) through delinquent activities.[115] In comparison, when he held a job in public transportation, he was making a daily wage of only MXN $83.33 and $100.00 (GBP £3.30 and £3.97), which means that the proceeds of crime were between *twenty and thirty times greater* than the daily wage in his formal job. Rodrigo mentioned making between MXN $5,000.00 and $10,000.00 (GBP £198.33 and £396.67) on a weekly basis in organised crime related activity, while in a construction job he made *one-tenth or less* than that amount.

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[114] According to CONEVAL, for two persons an amount of MXN $5,036.00 (GBP £199.76) per month to cover both a basic basket of food and a non-food basket of items is needed to be placed on the well-being line. Assuming that there is a single breadwinner in the household with two adults and no children, the lowest wage (MXN $500.00 weekly) derived from employment in the assembly plant, which is MXN $2,000.00 (GBP £79.33) per month, represents only 39.7% of the income that would be necessary for the household to be on the well-being line.

[115] The exchange rates mentioned throughout the thesis correspond to the exchange rate between the Mexican Peso (MXN) and the British Pound (GBP) at the time of the writing, which spanned from 2014 to 2017. Throughout this period, the exchange rate has fluctuated between a low of MXN $22.92= GBP £1.00 and a high of MXN $25.2= GBP £1.00.

Table 7.10 Comparison of proceeds from employment vs. organised crime related activity

Interview participant	Employment	Daily wage	Weekly wage*	Type of delinquent activity	Proceeds	Difference
Rodrigo	Informal sector (construction)	Between MXN $73.05 and $109.57** (GBP £2.89 and £4.34)	Between MXN $438.30 and $657.42 (GBP £17.38 and £26.07)	Not specified	Between MXN $5,000.00 and $10,000.00 per week, only performed the job once a week (GBP £198.33 and £396.67)	Proceeds of crime were *ten to fifteen times greater* than the weekly wage in construction
Jorge	Assembly plant	Between MXN $133.33 and $166.67 (GBP £5.28 and £6.61)	Between MXN $800.00 and $1,000.00 (GBP £31.70 and £39.67)	Drug trade	Between MXN $1,600.00 and $2,000.00 per day (GBP £63.46 and £79.33)	Proceeds of crime were *twelve times greater* than the daily wage in the assembly plant
Juan José	Assembly plant	MXN $200.00 (GBP £7.93)	MXN $1,200.00 (GBP £47.60)	Theft	MXN $6,000.00 and $8,000.00, even $40,000.00 per delinquent activity (GBP £238.00 and £317.33, even £1,586.67)	Proceeds of crime were *more than thirty times greater* than the weekly wage in the assembly plant
Eduardo	Assembly plant	N/A	N/A	Not specified	Between MXN $12,500.00 and $15,000.00 per day (GBP £495.83 and £595.00)	

Interview number	Employment	Daily wage	Weekly wage*	Delinquent activity	Proceeds	Difference
Martin	Assembly plant	MXN $150.00 (GBP £5.95)	MXN $900.00 (GBP £35.70)	Not specified	Up to MXN $50,000.00 for each assignment (GBP £1,983.33)	Proceeds of crime were *fifty times greater* than the weekly wage in the assembly plant
Gabriel	Day labourer (picking fruit)	MXN $120.00 (GBP £4.76)	MXN $720.00 GBP £28.56	Drug distribution Drug harvesting	MXN $100,000.00 monthly (GBP £3,966.00) MXN $250.00 per day, plus food (GBP £9.92)	Proceeds of crime (drug harvesting) were *twice* the amount of the daily wage working as a day labourer picking fruit.
Guillermo	Public transportation	Between MXN $83.33 and $100.00 (GBP £3.30 and £3.97)	Between MXN $500.00 and $600.00 (GBP £19.83 and £23.80)	Theft	Between MXN $2,000.00 and $3,000.00 per day (GBP £79.33 and £119.00)	Proceeds of crime were between *twenty and thirty times greater* than the daily wage in public transportation
Octavio	Informal sector	N/A	N/A	Drug distribution	MXN $500.00, which later increased to $6,000.00 per day (GBP £19.83 to £238.00)	
Andrés	Public transportation	Between MXN $400.00 and $500.00 (GBP £15.86 and £19.83)	Between MXN $2,400.00 and $3,000.00 (GBP £95.20 and £119.00)	Drug trafficking, presumably across the border Extortion	MXN $2,000.00 per crossing of each vehicle (GBP £79.33) Between MXN $100,000.00 and $120,000.00	Proceeds of crime (extortion) were over *forty times greater* than the weekly wage working in public transportation.

					(GBP £3,966.67 and £4,760.02)	

* Calculation by author considering 6 working days
**Corresponds to half of the estimated salary for a construction worker, as indicated by the respondent in the in-depth interview. According to La Jornada, almost 50% of construction workers are paid two to three minimum salaries per day. In 2016, the minimum daily wage was established at MXN $73.05 (GBP £2.89) which would be equivalent to MXN $146.10 (GBP £5.79) for two minimum salaries and MXN $219.15 (GBP £8.69) for three minimum salaries (SAT, 2016).

Despite the disparity in earnings between formal employment and organised crime related activity shown in **Table 7.10**, it is important to bear in mind the following observations. First, participation in this type of crime is neither stable nor constant. While a significant amount of money is made from criminal activity (e.g. through kidnapping), it is unlikely that this happens frequently enough to represent a stable income. Second, there is evidence that incomes earned depend on the individual's position in the hierarchy of organised crime, meaning that there are significant disparities in the income gains for those at the top of the hierarchy in comparison to those at the bottom. While no data is available on the distribution of profits in organised criminal groups in Mexico, valuable insights from research on youth gangs in other contexts provides initial evidence that this is the case.

In a research on youth gangs in London, Densley (2013) found that "income variation between elders and youngers (terms used to denote hierarchy within the gang) appears 'highly skewed'" (p.57). According to his study, one elder gang member, who occupied a more 'senior' position in the gang, indicated that those below him would get a weekly wage of approximately GBP £500.00, while the real weekly proceeds of the drug sale would amount to around £5,000.00 or £6,000.00, meaning that those in the lowest tier of the gang were only getting a '10 percent cut' (p.57).

Densley compares gangs to multi-level marketing, which he explains is "intrinsically flawed, yet it appeals because it sells the dream of material wealth and independence and appears to be outside the mainstream of business as usual" (2013: p.80). According to the author, this is very similar to the 'sales pitch' that street gangs and organised crime use when they are recruiting youngsters to participate in the illegal economy (p.80). He points out that "what both groups fail to advertise is that the system benefits the few over the many. For every gang younger who makes a decent living or even a decent supplementary income from drug dealing, there are countless others who do little more than break even" (p.80). If the findings from Densely's study are relevant in the Mexican setting, it is safe to assume that the profits of participants from the lower tiers of the organised criminal hierarchy are significantly lower than those earned at the top.

Moreover, it is widely known that those who make it to top positions in the organised crime hierarchy are very few, as participation in this kind of activity reduces life expectancy

significantly. As Alfredo clearly indicated in his interview, he was part of a group of '*sicarios*', or hired assassins, originally consisting of eighteen members. Only three remained at the time he was interviewed. According to his testimony: "The life of a *malandro* [thug] begins gradually, depending on how you live. There are many who do not make it, others that do. I am one of the few from the *barrio* [neighbourhood] who managed to survive until now."

Lastly, additional evidence derived from the interviews reveals that part of the proceeds from criminal activity are frittered away on things like alcohol, women and drugs. Despite lower income deprivation amongst delinquent sample participants, the proportion classified as vulnerable due to deprivation in social indicators (see **Figure 7.7**) is almost three times as large for the delinquent sample in comparison to the non-delinquent sample. The reduction in income deprivation seen in the analysis, therefore, did not necessarily translate into decreasing deprivation in terms of health, basic services or education, all indicators where delinquent participants were more deprived than non delinquents. This reveals a clear preference amongst delinquent participants for investment in material goods that yield immediate rewards, confirming findings discussed in depth in **Chapter 5**. According to Alfredo, "most of that money [from criminal participation], the majority of it was spent on drugs, alcohol and women…on parties. Yeah, the little I have remaining is for my two princesses [his two daughters]". As Densley (2013) concludes in his study of youth gangs in London: "the occupation of drug dealing, in the reality of most young people who enter gangs, does not provide the hoped-for escape from the economic constraints imposed by their class position and racial marginalisation" (p.61).

The analysis also shows a negative association between deprivation in access to recreation and crime, meaning, on the one hand, that those who had more free time (and were therefore less deprived in recreation) had a higher probability of belonging to the delinquent group that participated in organised crime. On the other hand, the analysis could be showing that participation in crime is reducing deprivation in recreation due to the availability of extra income from crime that allows participants to access leisure activities that they enjoy. As a consequence, they feel less deprived along this front. In the first case, a possible explanation for an association in this direction is that youth who are out of school and unemployed are less deprived in the time they can spare for recreational activities compared to those who are studying and/or working. There is evidence that those not in education, employment or training, or NEETs, are prime targets for recruitment to organised criminal groups. Hope (2013) contends that one of the most often cited causes of participation in crime is the lack of

opportunities for employment and education for young people: "Having an army of *ninis*,[116] of unemployed individuals, of young men who do not have much or much to hope for, certainly does not contribute in the face of a security crisis" (n.d.). According to the director of the National Autonomous University of Mexico (UNAM), there are more than 7 million young people in Mexico who neither work nor study (Narro, 2012). In fact, Mexico has one of the highest percentages of NEET populations, the latter representing 22.4% of the population in the age group 15 to 29. This figure is much higher than the OECD average which stands at 14% (OECD, 2015).

In terms of educational lagging, the data clearly shows that one of the largest differences between the delinquent and non-delinquent samples is found in this indicator. The delinquent sample exhibits a drastically higher proportion of educational lagging than the non-delinquent sample and the regression analysis finds that educational lagging is associated to and predicts a higher probability of organised crime participation. The difference in educational lagging across samples is due to lower educational achievement (lower proportion of participants who completed higher levels of education, including high school and tertiary education)[117] and higher abandonment rates amongst delinquent participants.[118]

The link between delinquency and school abandonment has been explored along multiple fronts in developed countries, but the findings on the association between the two are mixed: while some studies overwhelmingly point to an association between dropping out of school and delinquency (for example, Henry, Knight, & Thornberry, 2012; Moretti, 2005; Thornberry, Moore, & Christenson, 1985), others argue that factors leading up to dropping out, such as low educational performance (poor grades), are more predictive of delinquency than dropping out itself (for example Henry et al., 2012; Sweeten, Bushway, & Paternoster, 2009).

There is initial evidence to signal that the reasons for school abandonment in Mexico may be different, and that poor grades are not necessarily predictive of participation in delinquent acts. The literature derived largely from studies in the United States indicates that dropping out of school is associated with factors such as low educational performance, but in contexts like Mexico, the overwhelming reason for dropping out is economic in nature, with income constraints cited as the main reason for dropping out of school in the national survey on middle school education (SEP, 2012b). This is immensely important, as Sweeten et al. (2009) argue,

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[116] Term used to define those who neither work nor study, *ni trabaja, ni estudia*.

[117] Less than 10% of delinquent participants completed high school or above; the corresponding figure for the non-delinquent sample was 26%.

[118] In response to the survey item, ED12. Did you ever voluntarily abandon school at any point in time?, 56% of the delinquent sample signalled yes; 47% signalled the same in the non-delinquent sample.

the reasons why young individuals abandon school may have a lot say about their involvement in crime: those abandoning school to assume adult roles in their lives (for example, to become breadwinners and fathers) are less likely to participate in delinquent behaviour, while those that abandon school due to poor grades are more likely to participate in delinquent behaviour.

In this study, moving in the direction of adulthood by becoming parents instead increases the likelihood of criminal participation, as evidence amongst the delinquent population revealed a high incidence of teenage pregnancy. Roughly half of the delinquent sample had parental responsibilities, in contrast to only one third in the non-delinquent sample.[119] Interview material with delinquents also revealed that young men were having families at a very early age, with some participants describing that their partners had their first child at age 15 or 16. Contrary to the findings of the study cited above, these results indicate that parental responsibilities (which involve assuming adult roles), instead of being associated with lower delinquency rates, are actually a catalyst for participation in crime, as the economic burden of the family increases the probability that the individual will attempt to provide for the family through any avenue available. As Guillermo explains, "...there are many people doing the same thing: they are committing crimes to support their families, or many commit crimes to sustain an addiction."

Data from the survey in this study reveals that the main reason behind school abandonment were not constituted by problems typically referred to in the literature on school desertion, such as bullying,[120] a hostile environment in the school, or even poor academic performance. In fact, amongst the delinquents there was a common reference to doing well academically, and only 21.8% of the delinquent sample indicated that they had dropped out of school due to poor academic performance. At least one participant described in his interview feeling that he went to school only to "warm his chair", while other described that school was "simply not for me". Furthermore, a separate analysis of factors in the school environment associated to school abandonment and delinquency in this study concluded that an increase in agreement with the statement 'the material learned at school is not useful' increased both the probability of school abandonment as well as the probability of organised crime participation.

Interview participants in the delinquent sample instead revealed two main motives for dropping out: income constraints and a desire for *andar en la vagancia*, or a preference for hanging out. However, both groups – delinquent and non-delinquent –, faced similar economic constraints, which suggests that a desire for *andar en la vagancia* better explains why the

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[119] This result is representative of the entire sample, including the age group 12 to 29 (n=360).
[120] According to the OECD, Mexico has the highest number of cases of bullying within its schools out of all member countries. See Warkenting (2014).

educational achievement of delinquents is significantly lower than that of the non-delinquent group.[121] Lastly, in addition to high rates of abandonment and an obvious educational lag in the delinquent sample participants, the proceeds of crime are not being used to access educational opportunities, even though evidence from the survey indicates that a significant percentage of the participants in prison expressed that they aspired to study a professional career (also addressed in **Chapter 5**). Because many of them abandoned school voluntarily, this could suggest a change in attitudes that developed during the period of incarceration, but further studies are necessary to confirm if this is the case.

In terms of access to health care, the data indicates an important discrepancy between the delinquent and non-delinquent groups, as more than twice the proportion of delinquents are deprived in access to health care compared to the non-delinquent group (see **Figure 7.3**), and this analysis finds that deprivation in access to health care is associated to crime participation. The direction of the effect between access to health care and crime is unclear and the analysis could be showing an effect in both directions.

In the first case, there is existing evidence that poor physical health leads to criminal behaviour. Schroeder et al. suggest that evidence exists to signal that the loss of health predicts the onset of offending amongst those who have never offended (Schroeder, Hill, Hoskins Haynes, & Bradley, 2011). The logic is that strains that are repetitive, such as poor physical health, "are likely to create a predisposition for crime because chronic conditions are likely to tax non-delinquent coping strategies, reduce the tolerance for additional adversities, create a generally hostile attitude, and increase the chances that individuals will be in a state of negative affect at any given time" (Schroeder et al., 2011: p. 23). For Broidy and Agnew (1997), anger is the primary emotion linking strain and crime, but other emotions such as depression and anxiety have been found to constitute important emotions linking strain and crime. Additional data from the survey of this study revealed that negative emotions were experienced more often amongst participants in the delinquent sample in comparison to non-delinquents.[122] Descriptions of family and community environments described in **Chapter 6** also provide further evidence of negative emotions experienced amongst delinquents.

If instead, participation in crime is predicting an increase in deprivation in access to health, this could be due to the nature of activities that are carried out by delinquents, activities that

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[121] While 85% of the adults (18 to 29) in the non-delinquent sample completed secondary school, only 54.1% of adults completed a secondary school education in the delinquent sample.

[122] For example, in the period prior to experiencing problems with the law, 16.7% of the delinquent sample indicated experiencing negative emotions such as sadness 'very often or every day' and 'often', in contrast to only 8.9% of the non-delinquent sample.

place them at a higher risk of needing both physical and psychological attention. The present study shows that the delinquent population was deprived in access to physical health, which suggests that they were not receiving any treatment for psychological issues, nor were they using the income gains from crime to access physical or mental health care, explained by a preference for material items that would yield immediate gains, as opposed to a preference for investment in education or healthcare, both of which would yield benefits in the longer term. In sum, this study provides initial evidence of an association between deprivation in access to health and criminality, but the research design does not allow causal inference to conclusively determine that deprivation in access to health causes criminality.

Quality and spaces of the dwelling was not found to be a significant variable and the percentage of participants in both the delinquent and non-delinquent samples indicating deprivation along this indicator was very low. Nevertheless, it was surprising that close to one half of participants in both samples had experienced deprivation in access to food, which was extremely high, even when compared to the national figure for deprivation along this indicator, which was 23.4% for 2014.[123] Although this variable was not found to be significant, the data from this study shows that more than 40% in both delinquent and non-delinquent samples were either in a condition of moderate or severe food insecurity, signalling that social programs promoted by the Mexican government, like 'Sin Hambre,' (literally translated as 'Without Hunger') have been ineffective in meeting their objectives. Although data for the state of Chihuahua (where Ciudad Juárez is located) indicates that 127 communitarian dining halls have been set up under the program (Sin Hambre, 2015), there is no data to effectively evaluate the impact of the program in reducing moderate or severe food insecurity.

In sum, the research design cannot conclusively determine causality, but there is evidence that participation in organised crime reduces income poverty and that educational lagging, due to lower educational achievement and school abandonment, is clearly associated to crime. It is also clear that delinquent participants are less deprived in access to recreation, explaining their availability for criminal participation, although the reduction of income poverty shown in the analysis could also have an effect on resources to access recreation, explaining why delinquents are less deprived along this indicator. Lastly, the link between organised crime and deprivation in access to health needs to be further explored in order to determine the direction of the effect.

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[123] The discrepancy could be due to differences in how this indicator is measured in this study in comparison with CONEVAL's approach. These differences are addressed in section 6.3.

7.5 Conclusions

The research findings lead to the following conclusions: The data reveals that the gains from organised crime do not reduce poverty measured multidimensionally, although there a small decrease in income poverty is found. Those deprived of income have a lower probability of having participated in organised crime, suggesting that participation in these activities reduces income poverty, but only marginally. The descriptive data from the surveys also reveals that the largest share of the delinquent sample belong to the category of multidimensional poverty, indicating that taking part in activities of this nature does not constitute an effective or sustained pathway out of poverty. The finding that the proportion of participants who are vulnerable due to deprivation in social indicators is much higher in the delinquent sample also suggests that despite lower income poverty, the proceeds of criminal activity are not used to decrease poverty in the dimensions discussed throughout this chapter, confirming that the proceeds of crime are used for conspicuous consumption (see **Chapter 5** for detailed discussion).

Data from the surveys reveals that one of the largest and most significant differences between the delinquent and non-delinquent group is educational lagging. Qualitative evidence reveals that a street culture of 'andar en la vagancia', or hanging out with friends, is an important driver in explaining why young people in the delinquent sample abandon school. School performance is not shown to be an important driver of school abandonment, nor of delinquent behaviour, as a high percentage of participants in the delinquent sample indicated that they performed well academically.

Assuming adult roles to explain school abandonment does not reduce the probability of criminal participation, as adolescent pregnancy is more common in the delinquent sample, suggesting that the pressures of family life could be a catalyst for crime. Lastly, significantly lower educational achievement in the delinquent group indicates that the proceeds of crime were not used to access education although there is a strong desire for a professional career expressed by delinquents, something that could have developed during the period of incarceration. The importance of the experienced deprivation in this indicator is especially relevant as the evidence suggests the government has not taken enough steps to ensure that young adults stay in school,[124] as on-going conditional cash transfer (CCT) programmes have failed to deter early school abandonment. In addition, when released from prison, former

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[124] This point is further addressed **in Chapter 8**.

offenders have little opportunity to go back to school or to find employment, severely reducing options for their own sustenance and pushing people back into criminality.[125]

In terms of access to recreation, the analysis reveals that those who have more free time are at greater risk of participation in organised crime, especially where the opportunity structure exists for activities of this nature. As additional data reveals, in comparison to developed countries, Mexico has a high percentage of NEET's, constituting an important source of foot soldiers for organised crime. The income derived from criminal participation could also have an effect on the access to leisure and recreation, as the extra income could also be used for this purpose, explaining why the delinquent sample participants are less deprived along this indicator. Finally, in terms of access to health, there is initial evidence that poor health leads to criminality. Participants in the delinquent sample of this study had issues related to emotional and physical health, and they were more deprived than non-delinquents in access to treatment. There is also evidence from the survey to show that feelings of anger and frustration were more common in the delinquent sample than in the non-delinquent sample. On the other hand, the analysis could be showing that participation in crime is increasing deprivation in the health dimension due to the effect that participation in activities of this nature has on physical and psychological health. It is also clear that the gains from crime are not used to access health care, but the research design for this chapter cannot determine causality or the direction of the association linking crime with deprivation in access to health. Overall, the link between emotional and physical health and criminal behaviour is underexplored and needs to be addressed in developing country contexts to better understand if and how it contributes to participation in activities of this nature.

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[125] Recidivism rates in many countries, including the United Kingdom, the United States, and Mexico are over 70% (Reisel, 2013).

Chapter 8. Public Policy Recommendations

I would not want this chapter to turn into what the sociologist/historian Sara Sefchovich calls a 'discursive cloud': irrelevant, irreverent, and completely disconnected from reality. The purpose of this thesis was *not* to write a policy paper, but to try to make sense of the senseless, to understand what seems to be incomprehensible...and perhaps, if it contributes to illuminating a version of the truth (not the truth in its entirety), to make some recommendations that may well fall on deaf ears or alternatively, contribute in some small way to alleviating this problem. My hope is for the latter. To do this successfully, the present chapter incorporates policy recommendations based on the levels of analysis used in this thesis, presenting first recommendations for individual level factors, followed by micro and macro level factors. It will also incorporate –where relevant – the suggestions outlined by offenders who were asked in the in-depth interviews what they thought the government should do to prevent young individuals from participating in organised crime.

8.1 Individual Level Factors

The chapter on individual level factors (**Chapter 5**) looked at the aspirations and ideas of a good life amongst young men in Ciudad Juárez. It also explored whether differences in these two, in addition to opportunity constraints, could explain organised crime participation amongst some of the individuals in the study. Initial evidence of common aspirations across participants in both samples were found; however, more participants in the delinquent sample agreed that material items constitute part of a good life than their non-delinquent counterparts. Items such as brand clothes were found to be particularly important, as they represent not only symbols of status and prestige, but avenues for social mobility. Furthermore, a larger proportion of delinquent participants were willing to admit that harmful substances -including drugs, constitute part of a good life. Finally, opportunity constraints to access the items that were most valued were found to be a powerful predictor of organised crime participation. In response to these findings, the policies suggested call for managing aspirations of former delinquents, in addition to channelling frustration away from crime towards transformative action, such as political activism. The research also calls for a revaluation of class and race relations in what is still a highly discriminatory and elitist society. These recommendations are expanded on below.

Co-create and manage aspirations. No efforts or programs for managing aspirations were found in the literature on Mexico,[126] although studies exist that support it.[127] The need for provision of counselling and psychological attention for those currently serving time in social rehabilitation centres is pressing. Offenders should have access to counsellors that can advise them on possible employment opportunities, and who can be in regular contact with them to monitor their progress once they leave the penitentiary system. Together, taking into consideration the wants and needs of offenders, they can design a possible life plan with more realistic aspirations that better correspond to the opportunities that are available.[128] Manuel, one of the interview participants from the delinquent sample, suggested that counselling be provided by individuals who were formerly involved in crime: "I think that more than anything what would help young people who start to get involved in crime is for them to hear advice from people of their same age, or who have been through similar situations."

Demand for change, and not criminality, as an answer to inconformity. Instead of channelling frustrations through a Kalashnikov, more constructive avenues (such as demand for political change), should be encouraged to steer young people away from criminality. Currently, Mexican civil society is a long way from maturing into the collective social consciousness that is needed to demand a transformation of the country's institutions, despite a generalised view amongst youth that the government is not doing its job properly.[129] *It is therefore pressing for educators, and academics more generally, to create a civic culture where demand for change, and not criminality, becomes the answer to inconformity*.[130] Concretely, for academics who engage with students (and not just those who lecture in social sciences), at the minimum students should be informed on the political situation in the country. Getting young

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[126] The only relevant program in Mexico consists of an isolated effort to generate employment opportunities for offenders released from prison. This program establishes partnerships between large enterprises and penitentiary centres through which former offenders are offered employment opportunities in unskilled jobs. Efforts of this nature have been limited, and these programs are neither widespread nor homogenous across the country.

[127] In a study of offending populations in the United States, Inderbitzin (2007) finds that readjustment of aspirations (a process through which offenders are mentored by staff members of the detention centre to lower their aspirations or make them more aligned with their reality), prevents them from committing crimes once they are released.

[128] This does not imply that individuals should adapt in the way that Elster had suggested (giving up aspired to-grapes assuming that they were sour anyway). Rather, the original goals and aspirations should be the last step in a gradual process that also includes stepping-stones with more manageable and realistic goals that are co-designed by former offenders and counsellors.

[129] Almost 50% of young participants in the national survey on discrimination in Mexico in 2010 mentioned that the reason that poverty in the country was so rampant was due to 'a government that does not work effectively' (Consejo Nacional para Prevenir la Discriminación, 2010).

[130] And this is not just a banal and generic recommendation, as proposals along these lines surface in the work of authors such as Paulo Freire (1970), who suggested that traditional educational practices and roles 'dehumanised' teachers and students, and advocated that both actors be involved in the co-creation of knowledge for better decision-making, or in the work of Elaine Unterhalter *(forthcoming)*, who addresses the link between education and empowerment for transformation.

people interested, discussing, debating, and engaging with issues of a social nature is a first step to address the pervasive political apathy that reigns supreme amongst Mexican youth, despite widespread discontent with the government and its institutions.[131]

Spread the idea that whiter is not better. According to the ENADIS discrimination survey, 40% of participants agree that people in Mexico are treated differently according to their skin tone (Consejo Nacional para Prevenir la Discriminación, 2010). It is by no means surprising that in this same survey, most people considered in the sample of participants identified their skin tone as lighter than the corresponding classification (2010). One of the reasons is the correlation that exists between skin tone and income, where white (or whiter) individuals tend to be located at the high end of the income scale. In Mexico, 'white' people have inherited the wealth originally accumulated through the exploitation of the native populations of Mexico and today, this wealth continues to be concentrated amongst individuals of the same colour (yes, social mobility is that low).

It is therefore no surprise that amongst the upper classes, a significant proportion are white (so white that when they travel to the United States, they are often asked if they really *are* Mexican). Mexicans come in many shapes and colours,[132] but it is true that the overwhelming majority of the population that migrates is poor, and poor migrants are often not white. It is also no surprise that amongst the sample of offenders surveyed in the study (n=180), only one was white, a finding that constitutes initial evidence not just of incarceration that disproportionately affects the poor (see **Chapter 7**), but also the coloured. In a culture that treats people according to the tone of their skin (if you are white, it is assumed that you have money, and hence you deserve better treatment), individuals desire things associated with "whiteness"; explaining the desire to possess brand clothing traditionally worn by the white upper classes, referred to in **Chapter 5** as *'fresa'* clothes.

Cultural change to tackle these attitudes will take generations to take root and so far, no national programs exist to address this issue. The first step is to recognize that we, as Mexicans, are a racist and discriminatory society, where class (and race) relations have created 'us versus them' mentalities in which inequalities are reproduced in everyday behaviours. This is visible

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[131] According to data from Latinobarometro (2013), in 2013 only 26.3% of participants surveyed talked about politics with friends 'frequently' or 'very frequently', and only 21.2% had attended a demonstration or protest march at least once in the past three years, even though almost half of participants of the Latinobarometro survey indicated that they disapprove of the performance of the current Peña Nieto government. These trends indicate a generalised discontent with the way the government works, but a general apathy towards working to change the situation. Educators, academics, civil society groups, and even parents have a responsibility to (re)shape young people's thinking.

[132] See the project, Proud Mexicans at http://www.proudmexicans.org/.

in the language and the expressions that Mexicans use, which are fully charged with discriminatory tones (for example, the use of the term *'naco'* to describe someone who lacks refined taste, as defined by the upper class), and in the way the media portrays aesthetics. As addressed in **Chapter 5**, there is a strong culture of adoration of 'whiteness', one where the protagonists of soap operas, news anchors and pretty much every single advert that glorifies aesthetics in Mexico rarely portrays the physical characteristics of those at the bottom of the income ladder (or of the majority of the population for that matter). Including more people with the physical characteristics of the large share of Mexicans in the media and advertising is likely to be an important first step to turning this around, and potentially to create a moderating effect on the desire to possess material items associated to 'whiteness'.

8.2 Micro Level Factors

The chapter on micro level factors (**Chapter 6**) explored factors in the family and community environments and found in the first case that being raised in a single parent household, in addition to a lack of support in the family, were significant predictors of participation in organised crime. Although domestic violence was not found to be a significant factor, evidence from interviews with delinquent participants confirmed that it was common. Additional interview material revealed that experiences of loss and grief were common amongst participants, a factor that should be further explored in future studies of organised criminal participation in the Mexican setting. At the same time, the research also found that parents spending time in jail reduces the probability of participating in organised crime participation, suggesting that the removal of a negative paternal figure constitutes a better alternative than their continued presence. The research calls for greater support for working mothers, especially for those working in the assembly plants in Juárez, one of the largest sources of employment in the city. It also calls for a re-evaluation of gender roles, particularly greater involvement and participation from fathers with their sons, as well as counselling and therapy for those dealing with experiences of loss and grief and those who have been victims of domestic violence. In the community environment, the results confirmed that regularly spending time in a gang significantly increased the probability of organised crime participation. However, being part of gang does not unequivocally lead to organised crime, rather gangs constitute a gateway into organised criminal activity. An adequate assessment of gangs and the extent of their cooperation with organised crime in Mexico is pressing, as this is still a poorly understood phenomenon. The recommendations derived from these findings are expanded on below.

Greater support for working mothers. Public policies in Mexico provide day care service, but it is far from universal, and even for those who have a right to it, it turns out to be "absolutely insufficient" (Sefchovich, 2014: p. 112). In a conference on violence prevention in Mexico, Campa Cifrían (2014) mentioned a federal program in which several heads of households were given a 'small economic contribution' to improve the infrastructure of their homes and look after a small group of children whose mothers are working and have no place to leave their children. More than concrete and homogenous policy options, these constitute ad-hoc half-hearted measures to address what has become a pressing problem.

According to Raphael (2014), 1 out of 2 households in Ciudad Juárez, where the present study was carried out, have only one breadwinner, and this breadwinner is often a single woman. Evidence from interviews has revealed that at least nine out of 20 interview participants had been abandoned by at least one of their parents, usually the father. The economic burden of the family therefore falls on the mother, who must work, and often leaves the child unattended. Almost 40% of delinquents indicated that their mothers had full time employment; the largest source of employment were the assembly plants. As a large portion of employment in Juárez relies on the *maquilas*, or assembly plants, it is pressing for civil society organisations to push for fairer working conditions for mothers, providing them with increased flexibility in their working hours, the option to leave the workplace when necessary, or financial support for day care services.

More persuasive mothers, but also more involved fathers. In her book '*Atrévete*', the sociologist Sara Sefchovich describes how the best strategy to reduce violence in Mexico is for mothers to persuade their sons not to engage in organised criminal activity. According to the author, who bases her argument on the important influence that mothers still have on their sons in a country like Mexico, every mother has "special weapons" to control their decisions. She can either resort to question, signal, persuade, and even threaten, in order to direct her son's actions (2014: p. 86). And while the idea has some merit – mothers are indeed central figures in the lives of Latin American, and especially Mexican, men – it is necessary to come up with concrete ways to do this.

Academics interested in this subject are encouraged to study the reduction of life expectancy due to participation in organised crime as well as to delve more deeply into the actual economic gains associated with organised criminal activity. As discussed in **Chapter 7**, organised crime participation only marginally reduces poverty. And for those who participate, only a very small proportion manage to make it to 'leadership/senior' positions within the organised crime hierarchy, where payoffs are significant. Only with effective dissemination of

information of this nature could one begin to hope for a change in the direction that Sefchovich advocates.

In addition to persuasive mothers, more involved fathers. In Mexico, amongst previous generations and even in young married couples today, there are still very clear gender roles. While men are still traditionally breadwinners, women are increasingly joining the workforce but are still expected to take complete responsibility of the household, which results in a double burden, or what the sociologist Arlie Hochschild (1989) called 'the second shift' . Refusal to take up this responsibility through small actions and creating a more equal distribution of household and child care responsibilities is necessary to begin a change in what is still a very patriarchal culture. In other words, men should not be let off the hook, they should and must be involved.

One of the disadvantages of existing parenting programs is that they are informed to a larger extent by the input of mothers (Yoder et al., 2016), reinforcing existing gendered systems of care. Programs that include fathers can be modelled on good practices, such as the American program *Fathers and Sons*, which uses the feedback from fathers to facilitate fatherhood involvement in the lives of their sons and which has been proven to bolster communication between both parties (Caldwell, Bell, Brooks, Ward, & Jennings, 2011). Other programs such as *Building Bridges to Fatherhood* have been designed to connect fathers who do not reside in the household with their children through the identification of family bonding needs. Although these programs do not change or interrupt youth delinquency, they can serve as preventive measures to the reduce risk or likelihood of criminal participation (2016).

Another strategy is the implementation of Functional Family Therapy (FFT).[133] FFT, which targets family interactions and communications, was revealed to be effective in the reduction of crime in the United States, when therapists adhere to the treatment model (Sexton & Turner, 2010). According to Alexander, Pugh, Parsons, and Sexton (2000), data from studies using FFT found that when applied with adherence to the treatment, it reduced offending between 25% and 60% more effectively than alternative programs. Measures such as these can be implemented in Mexico through the Agency for the Integral Development of the Family (DIF), which is largely in charge of child welfare. A review of diverse academic journals found no evidence of the use of FFT or an evaluation of its effectiveness in the Mexican setting, which means ample opportunity exists for its implementation. Although direct extrapolation of

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[133] FFT is a short-term intervention that includes, on average, 8 to 12 sessions for mild cases and up to 30 hours of direct service through clinical sessions, telephone calls, and meetings involving community resources, for more difficult cases (Sexton & Alexander, 2000). In the year 2000, there were 50 active certified service sites for FFT in 15 states in the United States (Alexander et al., 2000).

existing programs in the United States is not recommended, these can and should be tropicalised to account for cultural differences in the Mexican setting that may affect the program's effectiveness.

Treatment for victims of domestic violence and for those who have experienced loss. Although domestic violence was not found to be a significant factor in the analysis, the quantitative data revealed a high presence of physical violence amongst participants in both non-delinquent and delinquent groups. Mexico currently has a program run by DIF, where victims of household violence (including men, women and children) can receive professional help (psychological therapy, both individual and in group) to address these issues. However, it is not clear whether DIF implements this program at the national level, or whether it is restricted to a handful of states.[134]

There are multiple options for treating children and youth who have been victims of violence in the household; nevertheless, it is not clear what kind of therapy is administered by DIF.[135] The best practice identified in the literature is Trauma-Focused Cognitive Behavioural Therapy (TF-CBT), which has been shown to be effective in treating traumatic events (including with respect to domestic violence and the loss of a loved one). Wide empirical support has been found for this particular form of therapy, showing its effectiveness to treat children exposed to domestic violence (Cohen, Mannarino, & Iyengar, 2011; Weiner, Schneider, & Lyons, 2009). In randomized clinical trials comparing this therapy to other methods,[136] it produced significantly greater gains in fewer sessions (Child Welfare Information Gateway, 2012).[137] Although extrapolation of policies implemented in the United States and their replication in the Mexican setting is not ideal, the positive results merit some attention; at least through the implementation of a pilot study through the DIF agency.

Promote and carry out an adequate assessment of gangs in Mexico and enact policies to address the issue. Not all youth who spend time in a gang participate in organised crime; nevertheless, the present study did find a positive relationship between spending time in a gang and participating in organised crime, providing initial evidence of the association between these

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[134] Information was found for the state Jalisco.

[135] On a positive note, an evaluation of the program indicated that 87% of the cases that reported this problem have been treated by the Attention Units for Intra-Family Violence (UAVI) by DIF in Jalisco (DIF Jalisco, 2015).

[136] Including supportive therapy, nondirective play therapy, and child-centred therapy, amongst other therapies.

[137] This therapy has been found to reduce symptoms of post-traumatic stress disorder (PTSD) as well as depression and behavioural difficulties. In addition, this therapy has been shown to be effective with children and families of different cultural backgrounds, including Hispanic families (Weiner et al., 2009).

two phenomena. Despite these initial findings, the study of gangs in Mexico is still in its infancy, as an understanding of basic aspects of gangs, such as their *prevalence* (how widespread they are, how many members they have, where they are present), *composition* (age, race, gender, etc.), and *nature of offending* (criminal acts they engage in) are still lacking. In addition, although Ciudad Juárez is an example of a location where gangs and organised crime cooperate, an understanding on the extent of cooperation between gangs and organised crime in other parts of the country is still necessary.

The Eurogang survey, created by academics in Europe and the United States represents an important tool for the study of this phenomenon in Mexico and in other countries of the region, where initial evidence suggests cooperation between gangs and organised crime, such as the organised criminal group Los Zetas and the MS-13 gang in El Salvador. Because this problem is not yet properly understood, policies to respond adequately are lacking. According to Howell (2010), conducting a comprehensive assessment of a community's gang problem is the base for implementing a successful model to prevent gang involvement.

This chapter will not venture to make recommendations for the Mexican setting as key questions, such as the ones highlighted above, remain unanswered. At the most, what can be hoped for is to outline the most important lessons drawn from the implementation of programs that deal with youth gangs in the United States. In line with the examples provided in the literature, programs should first incorporate a mix of community intervention (with young and less violent offenders) as well as suppression techniques[138] (to target the most violent gangs and older, criminal gang members) through a hybrid model, which has been increasingly recognised as a plausible approach to deal with gangs (Tita & Papachristos, 2010). Suppression techniques, which involve the implementation of punishment for those who carry out gang-related activity, alone amount to a declaration of war on behalf of the government on social problems (Howell, 2010) and whatever their positive effects, the results derived from suppression alone tend to be short lived (Klein, 1995; Papachristos, 2001).[139] Instead, the community should work with law enforcement, rather than both parties working against each other.[140]

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[138] According to Tita and Papachristos, typical suppression tactics include hot-spot policing, saturation patrols, enforcement of exclusionary zones and gang 'sweeps' (2010).

[139] For example, a large-scale suppression initiative carried out by the LAPD (consisting largely of street gang sweeps), was shown to be ineffective as gang activity did not significantly decrease (Klein, 1995).

[140] For example, the historic case of the Vice Lords gang in Chicago showed how community involvement can lead to the transformation of a gang into a legitimate community organisation, so much so that it went from being a gang to an organization that managed to secure funding from the Rockefeller Foundation (Tita & Papachristos, 2010). More recently, several gang intervention experiments in the United States combining intensive surveillance of gang-involved offenders with the provision of services have produced positive results (Howell, 2010).

It should be kept in mind, however, that these programs are not a silver bullet for the gang problem, as in practice hybrid programs combining suppression techniques with community involvement have been difficult to implement in the United States. This has been partly due to community distrust in the authorities; a characteristic that is shared in Mexico, not only because the police discriminate against certain groups (especially the poor), but also because the police at all levels (municipal, state and federal) are highly corrupt. For the police and the community to work together in Mexico requires substantive and systemic change in the way the police works. Although reforms have taken place to purge corrupt elements from the police in several states, these have not been accompanied with stricter criteria for enrolment,[141] nor with significant wage increases,[142] meaning that the incentives for corruption to remain in place are still present.

Secondly, as an anti-gang program[143] in Boston showed, the ongoing production and consumption of data-driven information, as well as the need to design evaluation efforts into programs' goals are essential (Tita & Papachristos, 2010). These efforts should ideally consist of quasi-experimental design methods and should extend over a five to seven year period to allow adequate time for design, implementation and acquiring pre and post program data (Spergel, 2010). Despite its importance, Curry (2010) points out that two of the most famous gang prevention and intervention programs[144] in the history of the United States have had no effective evaluation.[145] In Mexico, the situation is direr as many social programs (with the exception of the CCT *Prospera*), have not been evaluated rigorously in order to determine program effectiveness.

In sum, whatever the shape of programs to address gang membership is followed in Mexico after adequate assessment of the problematic (outlined at the beginning of this section), it should incorporate a multiplicity of actors -including authorities and community members through an approach that uses both suppression as well as community involvement; it should

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[141] The requirements for enrolling in the police in the state of Mexico are minimal. An individual requires a certain height, in addition to completing a secondary level education, as well as a written statement expressing the reasons for their interest in the police, amongst other things ("Abren convocatoria para la Policía Estatal Preventiva," 2016).

[142] A state police officer in Mexico on average made MXN $9,250.00 (GBP £364.17) per month in 2011; annually this amounts to MXN $111,000.00 (GBP £4,000.00) (Sistema Nacional de Seguridad Pública, 2011); in comparison, the NYDP annual salary is USD $42,500.00 (GBP £32,902.00) (NYPD, 2015).

[143] Operation Ceasefire was a program that combined the use of suppression tactics by police, prosecution, probation, amongst other actors, but also sought collaboration with community-based groups (Spergel, 2010), reaching out to local youth and fostering relationships with important community and faith-based organizations.

[144] The author cites the Chicago Area Project (CAP) and New York City's Mobilization for Youth (MFY).

[145] In fact, according to Chaskin (2010), the evidence regarding 'what works' in terms of gang intervention is relatively weak and the investment in the evaluation of these interventions is low, mainly because "many gang prevention programs lack the theoretically oriented conceptual frameworks that are required to conduct a high-quality evaluation" (Butts & Roman, 2010: p.176)

be data driven, and its effectiveness must be evaluated, as data on the programs' outcomes has proven to be "invaluable for leveraging funds and resources" (Howell, 2010: p.68).

8.3 Macro Level Factors

The chapter on macro level factors (**Chapter 7**) explored which dimensions of poverty contribute to explaining organised crime participation. Income, access to health, educational lagging, and access to recreation were found to be significant explanatory factors. The findings reveal that those who are more income poor are less likely to have participated in crime, suggesting that participation in these activities reduces income poverty, but only marginally, as most delinquent participants are still categorised as multidimensionally poor, even throughout their participation in organised crime. This indicates that participating in crime does not constitute an effective or sustained pathway out of poverty. Data from the surveys also reveals that one of the largest and most significant differences between the delinquent and non-delinquent group is educational lagging, and differences in educational achievement are found to be a significant factor in predicting criminal participation. A preference for *la vagancia* and a belief that the material learned in school was not useful explain higher drop out rates and lower educational achievement amongst the delinquent sample participants in comparison to the non-delinquent participants, pointing to an education system that has failed to engage these students with the material being taught in school. The analysis also reveals that those who have more free time, as well as those who are deprived in access to health care have a higher probability of organised crime participation, especially where the opportunity structure exists for activities of this nature, although the direction of the affect could run in the other direction, meaning that criminal participation reduces deprivation in access to recreation and has an effect on health.

On the basis of these findings, the research calls for a more comprehensive strategy for poverty reduction in Mexico, but also effective mechanisms targeting at risk youth to communicate that participating in crime does not constitute an effective or sustained pathway out of poverty. In addition, this research suggests that to better understand the link between criminality and poverty, multidimensional poverty should be measured amongst populations that have traditionally been excluded from household surveys, such as those in the confines of the prison system. To reduce educational lagging, specialised policies to prevent school abandonment amongst youth at risk of participating in organised crime are necessary, as income constraints are not the main factor explaining drop out rates amongst these populations. Instead, focus needs to be directed towards engaging students with the material taught in school, calling

for greater emphasis on quality of education, in particular in regards to teachers. Employment opportunities targeting idle youth as well as former participants of crime who have been released from prison and are at high risk of recidivism, in addition to an expansion of health care access and psychological treatment, are necessary. These recommendations are expanded on below.

More robust poverty reduction programs and income redistribution. The star program of the Mexican Secretariat of Social Development (SEDESOL) for poverty reduction in the country is the CCT program *Prospera*. The program has been implemented since 1997 and adopts a multitier approach to poverty reduction through intervention in the areas of health, education, and nutrition.[146] The effects of the program on poverty reduction and income redistribution have been mixed. Although an early impact evaluation of the program found that it had reduced the poverty headcount by around 11%; the largest reductions in poverty from this program were achieved amongst the "poorest of the poor population" (Skoufias & di Maro, 2006). Presumably, this excludes the population of the northern state of Chihuahua (where Juárez is located), as extreme forms of poverty are concentrated in the southern states of Mexico, such as Guerrero and Oaxaca.[147]

In terms of income redistribution, the results of Prospera have been modest, with the program managing to reduce inequality by almost nil in 1996 (Campos-Vázquez, Esquivel, & Lustig, 2015).[148] Currently, Mexico is still one of the most unequal countries in Latin America, where individuals belonging to the top 0.01% of the population in terms of wealth, have an income that is 200 times greater than the median of incomes when compared to the average Mexican household, and 1,086 times larger if this number is contrasted with the income of the families that belong to the lowest income decile (Raphael, 2014: loc. 2421).

These results show that government efforts to reduce poverty and inequality have not been sufficient. Taking on these problems would require a much more robust *Prospera* (a

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[146] By 2004, the program benefited almost 5 million families and had an annual budget equivalent to 0.3% of the country's GDP (Skoufias & di Maro, 2006).

[147] For example, while the numbers issued by CONEVAL show that in 2014, almost 50% of the population of Mexico was multidimensionally poor and almost 10% was extremely poor (CONEVAL, 2014a), in the state of Chihuahua, the corresponding figures were 34.4% and 5.4%. In Guerrero, more than twice the proportion were poor (65.2%) in comparison to Chihuahua and almost five times the proportion (24.5%) were extremely poor in 2014.

[148] Gini index in 2010 was calculated at 0.503 before considering government transfers; with government transfers, it decreased to 0.495, a decrease of 0.008. However, the literature does indicate that the achievements in terms of inequality reduction that have been witnessed in Mexico can be attributed largely to a decline in labour income inequality, although the authors underline that government transfers have played an increasingly important role as an "equalizing factor" (Campos-Vázquez et al., 2015).

Prospera 2.0 if you will) consisting of a higher cash transfer amount[149] and while maintaining its conditional status, it should provide beneficiaries with access to *quality* education. In the case of Chihuahua, the criteria for access to *Prospera* benefits needs to be adjusted, as objectively poor households are denied coverage due to regional differences in poverty across Mexico.

The program also needs to be coupled with additional measures, including raising the minimum wage and implementing more progressive fiscal policies. CONEVAL has confirmed that the current minimum wage[150] is not sufficient to meet nutritional needs (measured with the food basket).[151] Furthermore, although the Mexican Constitution stipulates that a minimum salary should guarantee a dignified standard of living, the reality of the Mexican minimum wage could not be further from this.[152] In interviews with offenders, at least four participants mentioned that the government should make efforts to provide better employment opportunities along with better salaries.

The Oxfam report also highlights that Mexico's fiscal policy is inconsistent with a highly unequal economy, in which fiscal instruments are designed to reduce the wealth gap between the rich and the poor (Oxfam, 2015). On the contrary, fiscal policy in Mexico is designed in a way that the redistributive effect is practically nil (2015). For example, while the percentage of reduction in the Gini coefficient due to fiscal policies for OECD countries is an average of 14.4%, for Mexico, the figure is only 1.8% (Raphael, 2014: loc. 2321). Furthermore, the fiscal structure is much more focused on taxing consumption than personal income or corporate income, which corresponds to a regressive fiscal policy,[153] as poorer households tend to spend a higher proportion of their income than their richer counterparts (Oxfam, 2015). Under this logic, those who have a higher income stand to benefit more from the fiscal system in place in Mexico (2015).

In very general terms, Prospera's limited success signals that its continued implementation is worthwhile, but it should not be used as a flag by the government to boast that poverty reduction has been large in scale. Rather, the shortcomings of Prospera should be

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[149] The amount allocated to beneficiaries is calculated considering, among other factors, what a child would earn in the labour force or what he would contribute to family production.

[150] The current minimum wage in Mexico is equivalent to MXN $67.29 (GBP £2.56) per day.

[151] According to INEGI, approximately 6.5 million workers in Mexico have an income that is below the daily minimum wage and around 22 million individuals receive an income between MXN $124.00 and $203.00 (GBP £4.71 and £7.72) on a daily basis. In Ciudad Juárez, those working in the assembly plants are earning wages between MXN $500.00 and $800.00 weekly (see **Chapter 6**).

[152] As the Oxfam report points out, this is an exceptional case in the region of Latin America, as in no other country has the purchasing power of the minimum salary lagged to the same extent as in Mexico (Secretaría de Desarrollo Económico, 2014).

[153] While for OECD countries, 32.7% of total tax revenue was derived from taxes on goods and services, for Mexico, the corresponding figure was 49.8% in 2013 (OECD, 2015: p.89).

supplemented with a more robust program, one that considers variations of regional poverty and that is accompanied by progressive fiscal policies as well as an increase in the minimum wage.

Strategies of counter-advertisement are pressing. Throughout Mexico, several organised criminal groups have used *narco-mantas*, or public notes printed on large signs displayed in visible locations (for example, hanging from a pedestrian bridge), to communicate that participation in organised crime constitutes an effective way out of poverty. For example, a *narco-manta* created by Los Zetas was displayed on a pedestrian bridge in 2008 in the industrial city of Monterrey for the recruitment of interested parties to join the organisation:[154]

> The operative group "Los Zetas" wants you, solider or ex-soldier. We offer a good salary, food, and attention for your family. Do not suffer abuse and stop going hungry. We will not feed you Maruchan instant soup...those interested, call: 867... ("Narcomantas Mexico," 2017)

While the data derived from this study does indicate that the profits derived from organised criminal activity highly surpass standard wages (see **Chapter 7**), the analysis also shows that participation in activities of this nature does not constitute an effective pathway out of poverty, as most participants were still deprived along most dimensions of poverty considered in this study. Effort should be made to effectively communicate that organised crime does not represent an effective way out of poverty or a viable option for the achievement of material aspirations.

In addition, the risks associated with participation in these activities should be openly shared, especially amongst youth who have a greater inclination to take part in risky activities. Evidence from the in-depth interviews showed the impact that participation in organised crime has on life expectancy. One of the interview participants, Alfredo, mentioned that of the 150 individuals that he became involved with, only 50 were still alive at the time of the study. According to another interview participant, Eduardo, "the road [of organised crime] that one takes only leaves an individual either here [in prison] or in the graveyard". In an interview with a former offender, Juan José, confirmed that young people who participate in organised crime often do not understand what they are getting into:

> P: I think that if young people understood how the law works, they would not make the choices I made.
>
> CC: What are the laws like?
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> P: *Son pesadas* [they are heavy]...

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[154] Translated from the original text in Spanish: Grupo Operativo "Los Zetas" te quiere a ti militar o ex-militar. Te ofrecemos buen sueldo comida y atenciones a tu familia Ya no sufras maltratos y no sufras hambre Nosotros NO te damos de comer sopas Maruchan...interesados comunicarse tel: 867...[sic]

CC: In what way?

P: Well, I knew I could end up here [in prison], but not with an eight or the twenty-year sentence that they [originally] wanted to give me. If I knew that this was the law, that this is how many years you have to serve for a homicide, I would have never done something like that.

CC: How many years did you think you would have to serve for killing someone?

P: Something like five years, maximum.

Measure poverty amongst populations excluded from the census. Institutionalised populations (including those in prison), have traditionally been excluded from census data. The same is true for the survey questions used for the elaboration of the national multidimensional poverty index used in Mexico. Although several studies have been carried out to understand the socioeconomic background of offenders, they have not measured poverty multidimensionally and consequently, our understanding of the poverty experienced by offenders is limited (this research represents an initial effort to overcome this issue). Future research should explore the socioeconomic status of prison populations and perhaps use the questions derived from the ENIGH survey to carry out a multidimensional poverty assessment of prison populations.

Specialised policies to prevent school abandonment amongst youth who are at risk of participating in organised crime. Most programs to target school abandonment in Mexico have focused on income constraints, the primary reason why school children drop out in Mexico (INEE, 2014; SEP, 2012b). These programs focus on the provision of scholarships and conditional cash transfers, namely through the program Prospera (mentioned earlier).[155] While this program has been hailed as a success story and has even been replicated in other parts of America (including the United States), it has not significantly reduced income inequality (addressed earlier) nor has it effectively prevented school abandonment (although it has contributed to significantly higher enrolment rates amongst the rural poor).[156]

Other more specific measures to tackle school abandonment have included a program to detect students with high absence rates and low academic achievement, as these factors were found to be associated with school desertion amongst the general population of Mexican students. In personal communication with the person in charge of prevention programs for

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[155] During the academic year 2011-2012, 305,369 scholarships were awarded, in addition to the 857,087 scholarships already provided by the program *Oportunidades* (SEP, 2012b).

[156] According to one impact evaluation, given that the average youth aged 18 had an achievement of 6.2 years of completed schooling prior to the program, the data from the impact evaluation suggest an average increase of educational attainment of about 10% (Skoufias, 2001).

school abandonment of the Secretariat of Public Education (SEP), she described two projects to address school abandonment (in addition to the Progresa program): "Construye T" and "Yo no abandono". The first seeks to strengthen the capacity of the school to contribute to the development of socioemotional skills amongst youth (SEMS, 2014) and the second consists of a series of manuals that educators can willingly choose to implement in their schools. As will be explained further on, incentives are currently not in place in the public education system for the implementation of these measures, as teaching positions are unfortunately not granted to those most qualified (teaching positions in the public system can be bought or inherited), nor are teachers' performances being evaluated.

The programs described above have names that point to the lack of importance they are granted (the name "Construye T" sounds like a cheap public assistance program). Furthermore, and more importantly than poor marketing strategies, none of these measures have significantly reduced school desertion. According to SEP (2012a), an average of 3,120 Mexican students abandoned high school (EMS) each day in 2010-2011, which was equivalent to over 600,000 students in Mexico abandoning school that same year. According to Daniel Fernandez Franco, a consultant for the Mexican Secretariat of Superior Education (SEMS) in the last seven years, school abandonment has only been reduced by 1% (SEMS, 2013).

These low achievements show that there needs to be a more comprehensive approach for the reduction of school abandonment, and a particular focus on youth at risk, especially those with the potential to participate (or who are already participating) in organised crime. These students have a different profile than the average students in Mexico, and are abandoning school not necessarily for the same reasons. Although reports on school abandonment point to income constraints as the principal reason for dropping out amongst students in Mexico, this was not the main contributing factor for school abandonment amongst delinquents in this study, as both non-delinquent and delinquent groups were similarly income constrained but had dramatically different educational achievements. The data in the study also revealed that participants in the delinquent sample did not perform poorly in school, and instead, dropping out of school was found to be associated with their preference for *'andar en la vagancia'* in addition to not finding the material being taught at school as useful.

These initial findings call for research to be conducted exclusively for at risk youth in order to understand the underlying mechanisms that are driving them away from school. Initial evidence indicates that the policies that public schools have used to deal with students who are participating (or at risk of participating) in organised crime in Mexico have been to expel them from school, justified under the idea that 'one rotten apple will contaminate the rest' (Rosado, 2015) and in so doing, they have sent them into the open arms of criminal groups. When a SEP

official was directly asked whether there were any measures implemented in schools to prevent children who were at risk of participating in organised crime from abandoning school, she stated that there were a couple of measures that EMS had implemented to address this issue and directed me to another official, who did not get back to me to explain what these measures consist of. Although this does not necessarily mean that no such measures exist, it is one plausible explanation for her non-response.

Focus on quality of education: emphasize and reward quality of teachers. Many problems remain with the public education system, particularly concerning the quality of education. High quality schooling has been found to contribute to school continuation beyond secondary school. In a study of rural public schools in Mexico that scored particularly high on the National Evaluation for the Academic Achievement in Schools (ENLACE) national exam[157], Castillo-Castro (forthcoming) found that the quality of teachers (measured as their ability to engage students) was a crucial factor promoting the positive performance of students in under resourced schools. The quality of education (determined largely by educators), should therefore not be underestimated.

A recent controversial education reform in Mexico has pushed for teacher evaluation, a necessary requirement for improvements in the quality of education.[158] Unfortunately, the teachers' syndicate in Mexico wields enormous power with former presidents (including Felipe Calderon), conceding to the likes of Elba Esther Gordillo (the syndicate's ex-leader). The reform, which calls for the evaluation of teachers, is widely opposed by the syndicate and the educators who are members (more than 1.4 million) because it would remove teachers who are unqualified to teach from classrooms (they would be moved to administrative positions). Many teachers who have inherited their permanent positions (or even purchased them) are afraid of the implications of the reform, failing to recognize that the principal victims of their incompetence are the students in their classrooms.

Expand health care access and provide psychological treatment. Further research is needed to explore the effects of deprivation in access to health and its link with delinquent behaviour. Although efforts in Mexico are underway for universal health care access through the program

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[157] ENLACE is the national equivalent of the PISA exam administered in OECD countries. For the ENLACE exam, students in public and private schools in Mexico are tested on the subjects of Math and Reading. It was administered to 14,125 schools, covering a population of 1,028,956 students in 2014 (SEP, 2014).
[158] According to a report on school abandonment in Mexico, over 30% of students who dropped out of school mentioned that they had problems understanding their teachers. In addition, the same report found that trusting teachers reduces the chance of school abandonment by 8% (SEP, 2012b).

Seguro Popular (originally implemented during the Calderón administration), many (almost 20% in 2014) in Mexico are still deprived in this dimension (CONEVAL, 2014a). In the state of Chihuahua, the corresponding figure is almost 15%, only slightly lower than the national average. In addition, the current initiative does not address psychological treatment. In one of the interviews conducted with offenders, Fidel pointed to some of the shortcomings with current government efforts to steer youth away from crime:

> P: I think that first, the government should implement some courses, right? To provide some advice for parents on how to talk to their children, on how to prevent them from using drugs. They [the parents] should be informed that violence does not work; on the contrary, it will make them [the children] more rebellious. And for young people who have already begun their delinquent career, I think there are a lot of centres [to potentially treat them], but they are not, how can I explain? They are not really prepared to work with young people.

> CC: What do you think of these centres?

> P: I have heard the talks [that are delivered] and they do not really go in depth, into what is really the problem. They [the counsellors] think that the main problem is the addiction and that everything originates there...yes, that they start to use [drugs[and that this where the problem lies. And I think that this is not the case. I think the problem originates before that. Since, I don't know, maybe from the family, maybe since childhood. So, I think that they should really go in depth to really understand the problem, whether there is some kind of resentment, or psychological trauma. Maybe some kind of sexual abuse, or other types of abuse. I think that the government is doing its job, but it is not doing what is necessary and more than anything, I think that working with parents, with children and parents, or with whoever is closest [to the children]. Yes, to work with them, no? To understand what happened...and to make them see, that this not the kind of life that they should be living because in the end, I think that the majority of young people *do* realise that this is not the right way, but once they do, it is often too late. Until they find themselves in an institution like this one, or locked away in some prison, or maybe even a psychiatric ward [emphasis added].

No, to hard-line policies within the prison system. Federal prisons, along with some local prisons in Mexico (including Ciudad Juárez), have been seeking out accreditation from the United States-based American Correctional Association (ACA). Along with this accreditation, which requires fulfilment of all mandatory standards[159] on aspects of operations of the prison including safety, security, order, amongst others (ACA, 2017), the government has also sought to privatize the prison system. This, despite a condemning United States Department of Justice report that made it explicitly clear that the privatization of the prison system would be to the detriment of offenders.[160]

In order to receive ACA accreditation prison directors in Mexico boast about, prisons in the country have had to invest significantly in improving security protocols. These measures to beef up the security apparatus of the prisons have also been accompanied by hard-line policies, where there is a clear distancing between prison staff and inmates, where human rights

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[159] We don't know what those standards specifically are because "ACA standards are not available online and must be purchased in a print version" (SEP, 2014).

[160] An investigative report found that federal prisons in the United States were more unsafe, had fewer resources and were cost ineffective. As a consequence, the Obama administration declared an end to the federal government's use of private prisons (Swaine, Laughland, & Kasperkevic, 2016).

are often not respected (although this came way before accreditation), and where resources for rehabilitation programmes for the inmates are practically non-existent (especially when they are compared with security costs). The latter has produced visible improvements in the infrastructure of the prisons (especially the federal facilities)[161], but has not been accompanied by either a more humane treatment of offenders nor with genuine efforts to ensure their successful reinsertion. As Rodrigo, an interview participant, made clear regarding the recently ACA-accredited prison in Ciudad Juárez[162]:

> P: The point is the authorities don't care...that is why one leaves the prison and... What re-adaptation?[163] You do not readapt at all, at all. They just take you in and 'in you go, this is where you are going to live, this is where you can move, and that's it'. No, I mean on the contrary [to re-adaptation], they come and they beat you, so what re-adaptation? The only thing they achieve is that you hate them more and more. Later, you run into them in the street and you want to kill them, you want to run your car over them, or I don't know.
>
> CC: So you are saying this generates more hate?
>
> P: The truth, you even end up hating the doctors...you end up hating everybody because everybody treats you badly. Everyone wants to look down on you because you are an inmate. I think they feel superior to you because they have a career and a good job.
>
> CC: But that doesn't mean anything...
>
> P: But I think they see it that way...well, I see it that way. In my opinion, this is how they see it. In my opinion, they see you as below them: 'ah, this *wey,*[164] he is worthless, he is locked up here. I have a good job, I have my car, my family, I have a career, and this *wey*, he is useless, he is worth nothing.' *This is how I see it because that is how they make you feel* [emphasis added].

This interview makes the consequences of hard-line policies within the prison very clear. They generate more hate and ill feelings that result in retaliatory measures once offenders are released from the prison system. Rather than the prison constituting an effective institution for successful reinsertion, the combination of hard line policies along with greater securitisation and less investment in rehabilitation programs is directly contributing to the perpetuation of violent behaviours. In response to this trend, colleagues in Mexico and myself are searching for funding to implement the Cambridge-based Learning Together program in prisons in Mexico.

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[161] In a personal visit to one federal centre in Guanajuato and one local centre in Mexico City, the differences were obvious. The first had a robust security apparatus, where several filters with sophisticated technology to check for explosives, metal detectors, iris recognition software, amongst others, had to be passed prior to access to the inmates. In the latter, no such security protocols existed; the infrastructure was deteriorated, the walls were scorched, and the living conditions of the inmates were deplorable. There were however, differences in the relationship between prison staff across both centres; the first was military-like and degrading for inmates, the second still reflected vertical undertones, but was much less pronounced.

[162] When the prison was visited in October 2014, ACA accreditation had just taken place.

[163] The term re-adaptation is derived from the central objective of prisons, known as 'social rehabilitation centres' in Mexico. The intended purpose of these centres is that once offenders serve their sentence, they are rehabilitated and can successfully 're-adapt' to society.

[164] Term used colloquially in Mexico, which varies in definition depending on the context in which it is used. The correct spelling is actually 'buey', which means ox, but when pronounced it sounds like 'guey' or 'way'. It could be used in a negative way to mean 'fool', but can also be a term of endearment like 'dude' ("Urban Dictionary," n.d.).

The basic idea of the program is to bring tertiary education to offenders through a unique model in which seminars are delivered by university professors, and university students along with offenders learn together inside the prison setting.

8.4 Policy Conclusions

This research subscribes to the idea that explanations for organised crime participation correspond to a host of factors that have been organised into different levels of analysis in this thesis. The policies suggested in this chapter have been organised under this logic, and call for addressing this issue along multiple fronts. At the individual level, the policies suggested call for managing aspirations of former delinquents and at risk-youth, in addition to channelling frustration away from crime towards transformative actions. The research also calls for a revaluation of class and race relations in what is still a highly discriminatory and elitist society. At the micro level, greater support for working mothers, but also a re-evaluation of gender roles, emphasising greater involvement and participation from fathers is necessary. Counselling and therapy for those dealing with experiences of loss and grief and for those who have been victims of domestic violence have also been proposed. An adequate assessment of gangs and the extent of their cooperation with organised crime in Mexico is also suggested. At the macro level, the research calls for a more comprehensive strategy for poverty reduction, in addition to specialised policies to prevent school abandonment amongst youth at risk of criminal participation. Employment opportunities targeting idle youth as well as former participants of crime who have been released from prison and are at high risk of recidivism, in addition to an expansion of health care access and psychological treatment, are also necessary.

Chapter 9. Conclusions

At the beginning of this study, I mentioned that young people represent a 'window of opportunity' for the country. In Mexico, the youth bulge brings with it enormous energy and potential, but if channelled incorrectly, also great risks. The government so far has been unsuccessful in harnessing that great potential by providing genuine opportunities for youth. Instead, what we are witnessing is that an increasing number of young people aspire to join the ranks of organised crime as narco-traffickers, hired assassins, or a host of other criminal 'professions'. Before policy makers continue to address these issues by vehemently defending *mano dura,* or hard line policies, as Calderon did throughout his entire presidency, I would like to point out that this exploratory study looking at *why young people have engaged in organised crime*, represents an initial effort from the academic front to generate adequate corrective measures. Only by 'untying the blindfold' and looking back at what has taken place can we hope for a better understanding, and consequently, accurate policies in the right direction.

As the first analysis chapter made clear, material items constitute an important part of a good life for delinquent participants and opportunity constraints to access highly valued items were found to be important in explaining why young men participated in organised crime. The findings challenge the Western literature that assumes a common aspirational framework, but also challenges the idea that young men are adapting to not having access to highly valued material items. A luxury car, brand clothing and access to illicit substances, were some of the items that surfaced as constituting part of a good life amongst study participants. Individuals don't aspire to these things merely for the sake of ownership, they aspire to these items for what they represent. In highly unequal and hierarchical societies, where the upper classes constantly remind those in lower positions on the social scale of their 'place', material possessions and the pecuniary power associated with them acquire new meaning. As Raphael (2014) reminds us, they constitute a 'passport' to higher social classes. A passport that brings with it, amongst other things, respect.

Alongside social class, there is also a racial aspect that explains who wields respect in Mexico. It is no surprise that wealth and whiteness in Mexico are correlated, and that those at the lower end of the social scale are often not white. It is also no coincidence that the images that the media depict, the ideal to aspire to, is often white, explaining why material possessions associated with 'whiteness' (such as brand clothing) become so desirable. These findings call for specialized attention for young people to co-create and manage their aspirations with counsellors, but also requires important changes in the way class relations are managed. Changing a culture of discrimination based on social class and skin colour, as the one that exists in Mexico, needs time and a critical view of the way society functions and the way class

relations are structured (wealthy, white individuals and those who pass as 'white' due to their wealth constantly strive to differentiate themselves from poor, darker skinned individuals). Under this system, changing dichotomies and discourses that reinforce these class differentiations, and which justify highly materialistic aspirations amongst those at the lower end of the social scale, becomes imperative. A special emphasis should be made to recognize the racist undertones that drive discourse and aesthetics in Mexican society and greater efforts should be made for the media to incorporate ethnically representative individuals; dissolving rather than reinforcing current class and racial differentiations.

In terms of micro level factors, the analysis found that experiences of abandonment and living in a single-headed household were significant in explaining criminal participation. Lack of support in the family environment was also found to be a significant predictor of criminal participation. The evidence calls for greater involvement of paternal figures in the policies designed to prevent youth delinquency, rather than a focus on the role of single mothers in the development of criminal behaviour in their sons. Findings on domestic violence in this research also call for questioning assumptions that have been made about delinquent populations in Mexico, as one of the often assumed factors is that the presence of violence in the household is common amongst offending youth populations (Scherer, 2013). The present analysis found that domestic violence was not a significant factor explaining organised crime participation; as the presence of violence was similar for both delinquent and non-delinquent samples. Further studies are needed to tease out whether this finding is a common phenomenon amongst low-income households more generally, rather than exclusive to delinquent populations. Lastly, qualitative evidence found that interview participants had been through significant episodes of loss, often of a parent, or of a father like figure. Experiences of loss came up in the interviews, and should be considered in future work looking at individuals who participate in organised crime.

In terms of the community environment, the analysis confirmed the importance of families as the reference group; a finding that challenges the Western literature contending that deviant groups are often more inclined to consider peers and friends as the reference group in place of their parents. In Latin America, where family ties are prominent, this is simply not the case. However, spending time with people who were involved in a gang and/or illegal activity was found to be a significant factor in explaining organised crime participation. Further analysis found that while belonging to a gang increases the likelihood of participation in activities of this nature, it is not always the case that those who form part of a gang will participate in organised criminal activity. A gang constitutes a gateway to organised crime, but is not forcefully conducive to it.

Moreover, because gangs have not been properly assessed in Mexico, the knowledge to determine how deep cooperation between organised crime and gangs really is, is lacking. Fragmentary evidence indicates that Ciudad Juárez is one of the locations in Mexico where gangs and organised criminal groups work together, but further research is necessary to understand the dynamics of cooperation between these two entities. Moreover, the data indicates that when older participants join a gang that is already involved in organised crime, the likelihood that they will participate in organised criminal activity increases. While joining a gang at an earlier age may not necessarily be conducive to organised crime participation, due to the nature of offenses committed by younger members (petty crime), this changes as members get older and are involved in more serious forms of crime. Finally, education is a mitigating force to both participation in organised crime as well as association with gangs, as there are large differences across educational achievement groups in regard to regularly spending time with people who were involved in a gang (those with no education agreed more that they carried this out).

From these findings at the micro level, greater support for a high proportion of working mothers that have had to raise children alone, often with detrimental consequences, is pressing. Furthermore, fathers, and not mothers, need to take a more active role in bringing up their children. Programs should be designed in a way that they prevent the continuation of a gendered system of care, and rather represent a break with that system. Counselling and therapy for those dealing with experiences of loss and grief and those who have been victims of domestic violence (irrespective of its lack of significance in explaining delinquency in this study) should be provided. To address the problem with gangs, there is much to learn from programs implemented in the United States. Special focus should be made first to assess the phenomenon of gangs in Mexico, with particular emphasis on prevalence, characteristics, and cooperation between gangs and organised crime. An adequate assessment would lead to the implementation of appropriate measures, which according to existing programs, should include a combination of suppression and community methods, rely on data collection, and should be periodically evaluated to determine their effectiveness.

The results from the macro chapter show that in contrast to the main economic argument explaining organised crime participation (that individuals participate in activities of this nature for economic reasons), participation decreases income poverty only marginally, as the proportion of participants who are vulnerable due to deprivation in social indicators is higher in the delinquent group. The analysis showed that, for the most part, those participants surveyed and interviewed were still poor, and whatever economic benefits participation in organised crime brought, they were spent on fulfilling conspicuous material consumption, a subject that

is addressed in depth in **Chapter 5**. This finding confirms that most individuals who participate in organised crime remain poor, confirming that those who make it to high positions in the organised crime hierarchy are very few and often it is these individuals occupying high positions who manage to avoid the confines of the prison system. This is an important message to communicate to young children who are aspiring narco-traffickers (this life is often not as glitzy as they would think).

Data from the surveys reveals that one of the largest and most significant differences between the delinquent and non-delinquent group is educational lagging. Findings along this indicator challenge Western empirical findings which show that youth who drop out of school due to poor educational achievement are more at risk of participating in delinquent acts, and also challenges the finding that those who quit school to assume adult roles (for example, those who become parents) are less likely to go into crime. Data on school abandonment in Mexico has shown that the main reason for abandonment is income related. However, a comparison of the delinquent and non-delinquent sample showed that despite facing similar income constraints, there were significant differences in the educational achievement of both groups, leading to the conclusion that the reason educational achievement in the delinquent sample is notoriously lower in comparison to the non-delinquent group is not necessarily income-driven. Rather, a preference for *'andar en la vagancia'* and the belief that the material learned in school was not useful explain school abandonment and lower educational achievement amongst delinquent sample participants.

In addition, those who dropped out in the delinquent sample were not necessarily performing poorly in school, challenging the findings of the literature on the United States, which argues that poor educational achievement that leads to abandonment will result in participation in delinquent activities. Rather, in this study, those who agreed that the material learned in school was not useful were more likely to abandon school but also to participate in organised crime. This shows that educational abandonment in Mexico amongst offenders merits a study on its own; it is highly complex and does not correspond with the findings in the Western literature, nor with the findings on Mexico more generally. While the study on school abandonment in Mexico produced by the Secretariat of Public Education (SEP) and the National Institute for the Evaluation of Education (INEE) is necessary, looking specifically at why the subpopulation of at risk youth who later step into delinquency have abandoned school merits attention on its own. This is especially pressing in order to enact improved prevention strategies so that teachers can adequately deal with those who are at risk of abandoning and pursuing delinquent careers. Lastly, significantly lower educational achievement in the delinquent group indicates that the proceeds of crime were not used to access education

although there is a strong desire for a professional career, something that could have developed throughout the period of incarceration.

In terms of access to recreation, the analysis reveals that those who have more free time are at greater risk of participation in organised crime, especially where the opportunity structure exists for activities of this nature. However, the income derived from criminal participation could also have an effect on access to leisure and recreation, as the extra income could be used to access recreational activities, explaining why the proportion of those deprived in access to recreation is higher in the non-delinquent group. Finally, in terms of access to health, it is not clear in what direction the effect of the association between deprivation in access to health and criminal participation runs. There is initial evidence that poor health could drive criminality, and there is evidence in this study that participants in the delinquent sample had more issues related to physical, but especially emotional health. They were also more deprived in access to health care than non-delinquents which means that they were not receiving attention for physical or psychological problems. On the other hand, participation in criminal acts could be having an effect on participants, as participation in organised crime related activity increases the risk of damaging physical and emotional health, explaining why they are more deprived in the health dimension. Despite this, it is clear that the proceeds of organised crime were not used to access health care amongst participants; rather, as addressed previously, they were invested in things that brought about short term gains.

At the macro level, policy implications indicate a revision of current strategies for poverty and inequality reduction. In particular, the country requires a much more progressive fiscal system, higher salaries, and an improved version of the largest CCT program in the country, *Prospera*, which focuses on reducing poverty not just amongst the poorest of the poor. These should be coupled with strategies of counter-advertisement to effectively communicate that *narco* does not constitute an effective path out of poverty. Furthermore, specialised research to understand why delinquent youth abandon school is recommended, as the reasons they drop out do not correspond to the reasons of the general student population, who cite income constraints as the main driver for school abandonment. Focus needs to be directed towards the provision of quality education, particularly towards effectively engaging students with the material taught in school, which requires education reform targeting teachers. Lastly, the consequences of hard-line policies in the prison system also need to be reconsidered, including the recent inclination towards obtaining ACA accreditation and privatising the prison system in Mexico. Instead, greater efforts need to be channelled for prisoner rehabilitation in order to decrease high recidivism rates as well as to provide legitimate opportunities for social reinsertion.

The findings derived from the present study indicate that adequate policies to address youth participation in organised crime should aim to address factors at multiple levels, which in the present study have been identified as individual, micro and macro levels. In so doing, this thesis has attempted to provide a deeper insight into a significant problem that has deeply marked Mexico's contemporary history, a country where, as the Mexican writer Juan Villoro described, 'carnival and apocalypse' co-exist side by side (Hevia, 2012). It has argued that the reasons why young men participate in crime are multifactorial and in so doing, has challenged Western notions and approaches to explaining criminality. It has worked with a population that is extremely difficult to access and has provided valuable insights to explain why young men participate in organised crime by combining theoretical approaches from the fields of criminology, sociology and development. It is hoped that in addition, this exploratory study has provided some useful policy guidelines for addressing a reality that is still far from being properly understood.

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Annex: Chapter 4. Research Methods

A.4.1 Semi-Structured Interview Questionnaire

INDIVIDUAL LEVEL FACTORS
For the module on individual level factors, participants were asked to describe what would have deterred them from participating in crime. They were also asked to consider alternative constraints in opportunities that were not included in the survey.

-Which opportunities did you feel were lacking the most in your life? Did you feel constrained in opportunities in all areas of your life, or was there a specific domain where you felt the constraints were stronger?

-In what ways could your life have been different if you'd managed to avoid participation in delinquent activities?

-What would you use the profits derived from your activities for?

-In regards to politics, do you believe that politicians have a duty towards the people to provide certain basic needs, or is each individual responsible for fending for their self?

-Do you think that if politicians did a better job of providing these things, crime would not be so high?

-Have you ever participated in a political protest? Would you ever protest to obtain the opportunities you think are lacking in your life?

-If you dropped out of school, are there certain things about your school setting that could have motivated you to stay in school?

MICRO LEVEL FACTORS
Additional questions on the relationship with parents, and peers as well as friends and neighbours were considered. For example, if the survey questions on family environment revealed that violence was present in the household, the interview would go into details of that particular dynamic, addressing how often it would take place, what particular situations would lead to its manifestation, who would be the person perpetrating it, etc.

Family environment
-If you grew up in a single parent household, would you say that this had a negative effect on you? How?

-Did someone take the place of the parent not present (e.g. another family member)? If so, who?

-Do you know what happened to the parent who abandoned the household or why they left? Did you maintain any kind of relationship with the parent who left?

-Were you often left at home on your own?

-If you lived with your parents, were they aware of the people you associated with, or were they completely disengaged from the people you were surrounded by? If so, why do you think this was the case?

-What was your relationship with your parents like?

-If physical violence in the household was present, how often would it take place? Under what circumstances would it occur? Who was the main perpetrator, and who was the main victim?

-If your parents were involved in criminal activity, did you ever take part or participate with them, or was your incursion into delinquency completely independent? If separate, were your parents aware?

School environment
-Did you have any professional aspirations when you were growing up? Can you remember what you would say you wanted to be in the future? How and why did this change? What made it implausible? If you had the opportunity, would you still pursue it?

-If you dropped out of school, can you tell me why?

Local community
-If there was distrust in your community, why do you think this was the case? Was this always the case, or did a particular event cause distrust among members of the community?

-Was there someone in your community that you particularly looked up to? Can you describe the person and the reasons that you looked up to her/him?

-If you associated with a gang, can you tell me how you initially got involved?

-What was the main factor that motivated you to join?

-How did it make you feel?

MACRO LEVEL FACTORS
Individuals were asked to elaborate on their economic conditions as they were growing up and to elaborate (if relevant) on their experiences of poverty to understand the nature of deprivations suffered.

-Please describe what economic conditions you grew up in. What were the main deprivations you experienced?

-What policies can be enacted, from your point of view, to prevent other young people from participating in crime?

-Prior to participation in crime, what kind of employment did you have? What was your salary?

-What kind of jobs did your parents have?

A.4.2 Consent Form

This consent document was read to participants prior to survey administration.

Purpose of the research study: Understand the causes behind relevant social problems in present day Mexico.

Nature of the research: The data for this research will be collected through the implementation of 180 surveys among inmates in the state of Chihuahua. These surveys will be administered by four research assistants and myself and include questions on subjective and psychological well-being as well as more personal inquiries related to the family, school and local community environments in which you developed. An additional survey on basic needs will also be administered.

Rights of the participants:

- I understand that my participation is voluntary and that I am free to withdraw at any time, without my rights being affected in any way. I understand that if I choose to withdraw there will be no negative impacts, and the information will be permanently deleted from the pool of data collected.
- I understand that the researchers will hold all the information and data collected securely and in confidence and that all efforts will be made to make sure that I cannot be identified as a participant in the study (except as might be required by law).
- If I feel that any of the questions put me in a condition of risk, I can decline providing an answer.
- I understand that if audio-recording is permitted by the authorities, it will be carried out. If used, I have the right for the recording device to be switched off at any time that I consider necessary.
- I understand that if I need any clarification on the questions derived from the study, I have a right to raise these questions at any time.

Who to contact if you have questions about the study:

Cirenia Chávez, Centre of Development Studies, cc744@cam.ac.uk

A.4.3 Delinquent Sample Survey

Name _____

Assigned number _____

Date _____:_____
      (D D : M M)

BASE SURVEY (Delinquent Sample)

GENERAL QUESTIONS

EDA. What is your age?

[_____] Years

DOB. Date of birth

_____ / _____ / _____
(dd / mm / yy)

IDIO. In addition to Spanish, do you speak any other language?
SURVEYOR: MARK ALL RELEVANT ANSWERS.

1) English
2) French
3) Other (specify) _____
4) No
77) Does not know
99) Does not respond

IDIO1. Do you speak any indigenous language(s) or dialect?

1) Yes
2) No **(GO TO ITEM RES.)**
77) Does not know
99) Does not respond

IDIO2. Which indigenous language(s) do you speak?
SURVEYOR: MARK ALL RELEVANT ANSWERS.

1) Náhuatl
2) Maya
3) Mixteco
4) Zapoteco
5) Other (specify)_____
77) Does not know
99) Does not respond

ETN. Would you say that you belong to an indigenous group?

1) Yes
2) No
77) Does not know
99) Does not respond

FOR THE ITEMS RES AND RES1., WRITE DOWN THE CORRESPONDING CODE LISTED IN THE TABLE BELOW. DO <u>NOT</u> WRITE THE COMPLETE NAME.

NOTE: WRITE DOWN THE NAME OF THE AREA IF PARTICIPANT MENTIONS AN AREA THAT IS NOT INCLUDED IN THE LIST BELOW.

RES. In what area of the city did you reside in prior to your arrest?

_____

77) Does not know
99) Does not respond

RES1. Which area of the city do you consider the least safe?

_____

77) Does not know
99) Does not respond

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1. 1 de Mayo	33. Desarrollo Salvacar	65. Linda Vista	97. Praderas del Sur
2. 1 de Septiembre	34. Durango	66. Lisboa	98. Revolución Mexicana
3. 1 de Septiembre Amp.	35. Eco 2000	67. Los Alcaldes	99. Ricardo Flores Magón
4. 6 de Enero	36. El Fortín	68. Los Alpes	100. Rinconada de las Torres
5. 16 de Septiembre	37. Emiliano Zapata	69. Lucio Blanco	101. Rinconada de las Torres IV
6. Águilas	38. Enríquez Guzmán M.	70. Lucio Blanco II	102. Rincón del Sur
7. Agustín Melgar	39. Felipe Ángeles	71. Luis Echeverría	103. San Antonio
8. AltaVista (Centro)	40. Fernando Baeza	72. Medanos	104. San Felipe el Real
9. AltaVista (Valle)	41. Francisco I. Madero	73. Mirador	105. Santa María
10. Allende Ignacio	42. Francisco Villa	74. Monterrey	106. Santa Rosa
11. Americano	43. Gregorio M. Solís	75. Morelos I	107. Servicios/Equipamiento
12. Anáhuac	44. Granjas de Chapultepec	76. Morelos II	108. Servicios Generales (Poniente)
13. Arroyo Colorado	45. Granjas los Alcaldes	77. Morelos III	109. Servicios Generales (Sur)
14. Azteca	46. Granjas Unidas	78. Morelos IV	110. Solidaridad
15. Barrio Alto	47. Hermenegildo Galeana	79. Niños Héroes	111. Telegrafistas
16. Bella Provincia	48. Ignacio Aldama	80. Nuevo México	112. Tiradores del Norte
17. Bella Vista	49. Independencia II	81. Oasis Revolución	113. Toribio Ortega
18. Benito Juárez	50. Industrial	82. Obrera	114. Torreón
19. Bosque Bonito	51. Infonavit Juárez Nuevo	83. Paseo Cipreses	115. Torres del PRI
20. Buendía "San Antonio"	52. Infonavit Salvarcar	84. Panteón Colinas de Juárez	116. Universidad
21. Burócrata Municipal	53. Infonavit Solidaridad	85. Paraguay	117. Usos Mixtos (Centro)
22. Cazadores Juarenses	54. Insurgentes	86. Parque Industrial AltaVista	118. Usos Mixtos (Poniente)
23. Centro	55. Ixtapa	87. Parque Industrial Henequen	119. Vallarta
24. Chaveña	56. Josefa Ortiz de Domínguez	88. Paseo del Castillo	120. Valle Alto
25. Ciudad Moderna	57. Juárez	89. Perú	121. Valle de Santiago
26. Corregidora	58. La Cementera	90. Paso del Norte	122. Valle Sur
27. Col. del Maestro	59. Ladrilleros y Caleros	91. Pino Alto	123. Vicente Guerrero
28. Col. División del Norte	60. La Mesita	92. Pino Suárez José María	124. Zacatecas
29. Colinas del Sol	61. Las Dunas	93. Popular	125. Otro (especificar)
30. Colinas del Sur	62. Las Flores	94. Porfirio Silva	
31. Consumidor	63. Las Torres I y II	95. Postal	_____
32. Del Carmen	64. Leyes de Reforma	96. Praderas de los Oasis	

EDAD1. At what age did your involvement in criminal activity begin?
ASK FOR AN APPROXIMATION IF RESPONDENT DOES NOT RECALL EXACT AGE.

_____

66) Has not been involved in criminal activity
77) Does not know
99) Does not respond

SUBJECTIVE WELL-BEING: GOALS, ASPIRATIONS AND PERCEPTION OF OPPORTUNITIES

While you respond to the following questions, I would like you to reflect on your life and your personal conditions prior to participation in illicit activities.

ASP. Would you say that at the time, you had a clear goal, or a clear idea of what you wanted to do with your life?

1) Yes
2) No
77) Does not know
99) Does not respond

ASP1. In order of importance, could you please indicate 5 goals that you wanted to achieve in your life?
DO NOT SUGGEST POSSIBLE ANSWERS. PROBE UNTIL THE RESPONDENT MENTIONS AT LEAST THREE.

  ASP11. _____

  ASP12. _____

  ASP13. _____

  ASP14. _____

  ASP15. _____

77) Does not know
99) Does not respond

QUESTION FOR SURVEYOR:

ASP2. **ON A SCALE OF 1 TO 10, WHERE 1 IS 'VERY SLOW' AND 10 IS 'VERY FAST', HOW LONG DID THE RESPONDENT TAKE TO ANSWER THE PREVIOUS QUESTION?**

WRITE DOWN THE NUMBER._____

Again, I am going to ask you to reflect on your life and the opportunities that you had in the period prior to participation in criminal activities and before your arrest. I will read out a list of different items and I would like you to tell me which elements from the list, if any, are part of what you considered to be a good life at that time. I will then ask you to indicate whether you believe you had opportunities to access those items that you mentioned were part of a good life.

INDICATE 'YES' OR 'NO' IN THE COLUMN 'PART OF A GOOD LIFE'. INDICATE 'YES' OR 'NO' IN THE COLUMN 'OPPORTUNITIES TO ACCESS ITEMS PART OF A GOOD LIFE' ONLY WHEN IT IS RELEVANT.

ITEMS	Part of a good life		Opportunities to access items part of a good life			
	Yes	**No**	**Yes**	**No**	**Does not know**	**Does not respond**
ASP3. To be wealthy	1	2	1	2	77	99
ASP4. To afford luxury goods	1	2	1	2	77	99
ASP41. To have a tablet (iPad)	1	2	1	2	77	99
ASP42. To have a smartphone	1	2	1	2	77	99
ASP43. To have a laptop	1	2	1	2	77	99
ASP44. To have brand clothing	1	2	1	2	77	99
ASP45. To own a luxury car	1	2	1	2	77	99
	Part of a good life		**Opportunities to access items part of a good life**			
	Yes	**No**	**Yes**	**No**	**Does not know**	**Does not respond**
ASP46. To buy cigarettes	1	2	1	2	77	99
ASP47. To buy alcohol	1	2	1	2	77	99
ASP48. To buy drugs	1	2	1	2	77	99
ASP49. To dine in fancy restaurants	1	2	1	2	77	99
ASP50. To access posh nightclubs	1	2	1	2	77	99
ASP51. To buy jewellery	1	2	1	2	77	99
ASP5. To have a regular income	1	2	1	2	77	99
ASP6. To have a good education	1	2	1	2	77	99
ASP7. To have a formal job	1	2	1	2	77	99
ASP8. To have a family	1	2	1	2	77	99
ASP9. To be respected and accepted by others	1	2	1	2	77	99
ASP10. To have status and prestige in your community	1	2	1	2	77	99
ASP11. To have a happy and balanced life	1	2	1	2	77	99
ASP12. To have a professional career	1	2	1	2	77	99
ASP13. To help others	1	2	1	2	77	99
ASP14. To be a good Catholic, Christian (or follower of any religion to which you subscribe)	1	2	1	2	77	99
ASP15. To feel safe in your community	1	2	1	2	77	99
ASP16. To have a long and healthy life	1	2	1	2	77	99
ASP17. Other (specify)_____	1	2	1	2	77	99

ESC. Changing the subject, we could say that in any society, there are people who occupy the top positions in society and others located in lower positions. On this sheet, there is a scale that runs from bottom to top, from 0 to 10.
Where would you place yourself on this scale?

SHOW CARD 1. INDICATE NUMBER SIGNALLED BY RESPONDENT.

10	<u>Top of Society</u>
9	
8	
7	
6	
5	

4	
3	
2	
1	
0	

77) Does not know
99) Does not respond

REMOVE CARD 1!

SUBJECTIVE WELL-BEING: DIFFERENT DIMENSIONS

Again, I am going to ask you to reflect on your life prior to participation in illicit activities and your arrest. I will ask you to answer some questions, by indicating how satisfied you felt in different aspects of your life. We will be using a scale from 1 to 5, where 1 is "very satisfied" and 5 is "very dissatisfied".

EMPHASIZE THAT THESE ANSWERS SHOULD REFLECT THEIR CONDITIONS AND SATISFACTION PRIOR TO PARTICIPATION IN ILLICIT ACTIVITIES.

EC1. We will begin with questions related to economic conditions of your family, meaning the income and resources of your family. Would you say that the members of the household where you resided could meet basic needs, such as clothing, food, access to health, schooling, etc.? Please respond with 'Yes', 'No', or 'Do not know'.

1) Yes
2) No
77) Does not know
99) Does not respond

EC1A. Using a scale of 1 to 5, how satisfied would you say you were with your family's standard of living?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

EC2. Did you ever seek out employment, formally or informally? Please respond with 'Yes', 'No', or 'Do not know'.

1) Yes
2) No **(GO TO ITEM EC4.)**
77) Does not know
99) Does not respond

EC2A. Using a scale of 1 to 5, how satisfied would you say you were with the job opportunities available at the time?
SURVEY, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

EC3. Did you have a legal job prior to your arrest and arrival at this centre? Please respond with 'Yes', 'No', or 'Do not know'.

1) Yes
2) No **(GO TO ITEM EC4.)**
77) Does not know
99) Does not respond

EC3A. Using a scale of 1 to 5, how satisfied would you say you were with the income you received from your last legal job?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

EC4. Prior to your arrest and arrival at this centre, in cases where there was need, did you have access to health services (for ex., to medical attention when you felt ill)? Please respond with 'Yes', 'No', or 'Do not know'.

1) Yes
2) No **(GO TO ITEM POL1.)**
77) Does not know
99) Does not respond

EC4A. Using a scale of 1 to 5, how satisfied would you say you were with access to health services?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

POL1. Changing the subject, were you ever a beneficiary of a government social program (for ex., Progresa/Oportunidades or Seguro Popular)? Please respond with 'Yes', 'No', or 'Do not know'.

1) Yes
2) No **(GO TO ITEM POL2.)**

77) Does not know
99) Does not respond

POL1A. If you were a beneficiary, using a scale of 1 to 5, how satisfied would you say that you were with the benefits you received from the program?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

POL2. In general, would you say politicians are corrupt? Please respond with 'Yes', 'No', or 'Do not know'.

1) Yes
2) No
77) Does not know
99) Does not respond

POL2A. Using a scale of 1 to 5, how satisfied would you say you were with the strategy of the previous administration of Felipe Calderon to reduce corruption?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

POL2B. Using a scale of 1 to 5, how satisfied would you say you were with politicians in the country in general?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

SOC1. Moving on to the subject of education, did you finish secondary school? Please respond with 'Yes', 'No', or 'Do not know'.
SURVEYOR, IF THEY ONLY STUDIED PRIMARY, INDICATE 'NO'.

1) Yes
2) No **(GO TO ITEM SOC3.)**
77) Does not know
99) Does not respond

SOC1A. Using a scale of 1 to 5, how satisfied would you say you were with what you were taught in secondary school?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

SOC2. Did you attend a private or a public school?

1) Public
2) Private
3) Mixed- public and private
77) Does not know
99) Does not respond

SOC2A. Using a scale of 1 to 5, how satisfied would you say you were with the quality of the education in the schools you were enrolled in?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

SOC3. Prior to your arrival at this centre, did you consider it important to participate in recreational activities (for ex., in sports, art, etc.)? Please respond with 'Yes', 'No', or 'Do not know'.

1) Yes
2) No **(GO TO ITEM GRAL.)**
77) Does not know
99) Does not respond

SOC3A. Using a scale of 1 to 5, how satisfied would you say you were with opportunities that you had outside this centre to practice recreational activities (for ex. a sport)?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

GRAL. In general, and using the same scale, how satisfied would you say you were with your life prior to your involvement in crime?
SURVEYOR, SHOW METRIC 1.

1) Very satisfied
2) Satisfied
3) Neither satisfied nor dissatisfied
4) Dissatisfied
5) Very dissatisfied
77) Does not know
99) Does not respond

REMOVE METRIC 1!

PSYCHOLOGICAL WELL-BEING: AFFECTIVE STATE

Again, please think back to before your involvement with delinquent activity. I am going to ask you some questions about your feelings. Please indicate how often you recall experiencing these emotions during that period using a scale of 1 to 5, where 1 represents "very often or every day" and 5 represents "very rarely or never".

PROVIDE METRIC 2. ASK: How often would you say you felt...?

POSITIVE	Very often or every day	Often	From time to time	Rarely	Very rarely or never	Does not know	Does not respond
PA1. Positive emotions	1	2	3	4	5	77	99
PA2. Good feelings	1	2	3	4	5	77	99
PA3. Pleasurable emotions	1	2	3	4	5	77	99
PA4. Pleasure	1	2	3	4	5	77	99
PA5. Happiness	1	2	3	4	5	77	99
PA6. Satisfaction	1	2	3	4	5	77	99
PA7. Accomplishment/success	1	2	3	4	5	77	99
PA8. Esteem/respect	1	2	3	4	5	77	99
PA9. Affection	1	2	3	4	5	77	99
PA10. Trust	1	2	3	4	5	77	99
PA11. Relaxation	1	2	3	4	5	77	99
PA12. Compassion	1	2	3	4	5	77	99
PA13. Hope	1	2	3	4	5	77	99

How often would you say you felt...?

NEGATIVE	Very often or every day	Often	From time to time	Rarely	Very rarely or never	Does not know	Does not respond
NA1. Negative emotions	1	2	3	4	5	77	99
NA2. Bad feelings	1	2	3	4	5	77	99
NA3. Unpleasant emotions	1	2	3	4	5	77	99
NA4. Pain	1	2	3	4	5	77	99
NA5. Sadness	1	2	3	4	5	77	99
NA6. Frustration	1	2	3	4	5	77	99
NA7. Failure	1	2	3	4	5	77	99
NA8. Shame/humiliation	1	2	3	4	5	77	99
NA9. Negligence	1	2	3	4	5	77	99
NA10. Distrust	1	2	3	4	5	77	99
NA11. Stress/anxiety	1	2	3	4	5	77	99
NA12. Hate	1	2	3	4	5	77	99
NA13. Fear	1	2	3	4	5	77	99

REMOVE METRIC 2!

REFERENCE GROUP

GR1. Moving on to another subject, I am now going to ask you some questions regarding your life as you were growing up. Would you say that you had a closer relationship with your parents (or principal caretaker), your peers and/or friends or with your neighbours?

SELECT ONLY ONE, ALTHOUGH MULTIPLE ANSWERS ARE ALLOWED.

1) Parents
2) Peers and/or friends
3) Neighbours
4) Other (specify) _____
77) Does not know
99) Does not respond

GR2. Considering your parents, peers and/or friends, or your neighbours, whose opinion would you say was most important for you?
SELECT ONLY ONE, ALTHOUGH MULTIPLE ANSWERS ARE ALLOWED.

1) Parents
2) Peers and/or friends
3) Neighbours
4) Other (specify) _____
77) Does not know
99) Does not respond

GR3. From these three groups, who were you most afraid of disappointing?
SELECT ONLY ONE, ALTHOUGH MULTIPLE ANSWERS ARE ALLOWED.

1) Parents
2) Peers and/or friends
3) Neighbours
4) Other (specify) _____
77) Does not know
99) Does not respond

FAMILY ENVIRONMENT

FAM. Would you say that you grew up in a single parent family?

1) Yes
2) No
77) Does not know
99) Does not respond

I want you to think about the family environment that you grew up in. Please indicate to what extent the following statements describe your situation using a scale of 1 to 5, where 1 represents "highly disagree" and 5 represents "highly agree". If you did not grow up with your parents, think about these questions reflecting on the person who raised you.

PROVIDE METRIC 3. CIRCLE THE NUMBER PROVIDED BY RESPONDENTS. IF HE DID NOT HAVE PARENTS AND WAS RAISED BY GRANDPARENTS, UNCLES, OR OTHERS, THEY WILL BE CONSIDERED AS PARENTS.

	Highly disagree	Disagree	Neither agree nor disagree	Agree	Highly agree	Does not know	Does not respond
FAM1. The relationship with your parents lacked communication.	1	2	3	4	5	77	99
FAM2. Your parents were not very supportive in the decisions that you made.	1	2	3	4	5	77	99
FAM3. Your parents did not show you affection	1	2	3	4	5	77	99
FAM4. At least one of your parents often used offensive words or insulted you.	1	2	3	4	5	77	99
FAM5. At least one of your parents used physical violence as a form of punishment.	1	2	3	4	5	77	99
FAM6. Very often problems in your family, either between your parents, or between yourself and your parents were solved through violent means.	1	2	3	4	5	77	99
FAM7. At least one of your parents has spent time in jail.	1	2	3	4	5	77	99
FAM8. At least one of your parents has been involved in illicit activities.	1	2	3	4	5	77	99

SCHOOL ENVIRONMENT

Moving on, I want you to think about the school environment at the secondary level. Using the same scale, where 1 represents "highly disagree" and 5 represents "highly agree", please indicate to what extent the following statements describe your situation.
CIRCLE THE NUMBER PROVIDED BY RESPONDENTS

NOTE: IF RESPONDENT ONLY COMPLETED PRIMARY SCHOOL, ASK THESE QUESTIONS REFERRING TO THAT PERIOD.

	Highly disagree	Disagree	Neither agree nor disagree	Agree	Highly agree	Does not know	Does not respond
ED1. In school, I was often a victim of bullying.	1	2	3	4	5	77	99
ED2. My grades at school were usually low.	1	2	3	4	5	77	99
ED3. I would often get involved in fights with other classmates at school.	1	2	3	4	5	77	99
ED4. My peers from school usually had problems with the law.	1	2	3	4	5	77	99
ED5. In general, I would describe my teachers as impatient and distant with their students.	1	2	3	4	5	77	99
ED6. When my classmates or I would get into trouble at school, my teachers would react with violence, with insults and/or physical violence.	1	2	3	4	5	77	99
ED7. In general, I would say that my teachers did not motivate me to continue learning.	1	2	3	4	5	77	99
ED8. In general, I would say that the environment at school did not encourage learning and creativity.	1	2	3	4	5	77	99
ED9. The things I was taught in school were not very useful.	1	2	3	4	5	77	99

	Highly disagree	Disagree	Neither agree nor disagree	Agree	Highly agree	Does not know	Does not respond
ED10. Having an income is more important than staying in school.	1	2	3	4	5	77	99
ED11. I considered the idea of dropping out of school.	1	2	3	4	5	77	99

ED12. Before continuing, did you ever voluntarily abandon school at any point in time?
INDICATE 'YES' IF THEY ABANDONED SCHOOL AT ANY LEVEL

1) Yes
2) No **(GO TO ITEM COM1.)**
77) Does not know
99) Does not respond

FOR THOSE WHO INDICATED THAT THEY ABANDONED SCHOOL ONLY

	Highly disagree	Disagree	Neither agree nor disagree	Agree	Highly agree	Does not know	Does not respond
ED13. I decided to leave school because I was more interested in making money.	1	2	3	4	5	77	99
ED14. I decided to leave school because I did not feel that the things I was learning were useful.	1	2	3	4	5	77	99
ED15. I decided to leave school because I did not like the environment.	1	2	3	4	5	77	99
ED16. I decided to leave school because my grades were low.	1	2	3	4	5	77	99
ED17. If I had had the opportunity to receive a better education, I would not have abandoned school.	1	2	3	4	5	77	99

COMMUNITY ENVIRONMENT

Lastly, I want you to think about the neighbourhood that you grew up in. Using the same scale, where 1 represents "highly disagree" and 5 represents "highly agree", please indicate to what extent the following statements describe your situation.
CIRCLE THE NUMBER PROVIDED BY RESPONDENTS

	Highly disagree	Disagree	Neither agree nor disagree	Agree	Highly agree	Does not know	Does not respond
COM1. If there was a problem in my family, there were few people in my neighbourhood or no one that we could count on.	1	2	3	4	5	77	99
COM2. In general, there was a lot of distrust in the neighbourhood.	1	2	3	4	5	77	99
COM3. I did not know my neighbours very well and we rarely spent time together.	1	2	3	4	5	77	99
COM4. Fighting between people in the neighbourhood was common.	1	2	3	4	5	77	99
COM5. I knew several people from the neighbourhood that were in gangs and/or involved in illicit activities.	1	2	3	4	5	77	99

COM6. I regularly spent time with people from the neighbourhood that were involved in gangs and/or illicit activities.	1	2	3	4	5	77	99
COM7. I knew several people in the neighbourhood who had a strong dependency to alcohol and/or drugs.	1	2	3	4	5	77	99

ENTR. One last question, would you be willing to participate in an interview to go into the details of some of the questions of this survey?

1) Yes
2) No
77) Does not know
99) Does not respond

REMOVE METRIC 3!

Name _____

Assigned number _____

Date _____:_____
     (D D : M M)

BASIC NEEDS SURVEY (Delinquent Sample)

MULTIDIMENSIONAL POVERTY MEASUREMENT

POVERTY INDICATORS: INCOME

NUM. Yourself included, how many people resided in the household where you lived prior to you arrest?

WRITE NUMBER.

[_____]

ING. Approximately, what was the monthly income of your household?

NOTA: CLARIFY THAT THIS FIGURE REPRESENTS THE TOTAL INCOME OF THE HOUSEHOLD, THAT IS, OF ALL MEMBERS, NOT JUST THE INDIVIDUAL. INDICATE THE RANGE AS SIGNALED BY RESPONDENTS. IF THEY CANNOT ESTIMATE, SHOW CARD 2.

1) Below MXN $2,332.00
2) Between MXN $2,332.00 and $5,244.00
3) Between MXN $5,244.00 and $7,971.00
4) Between MXN $7,971.00 and $11,856.00
5) Between MXN $11,856.00 and $20,337.00
6) Between MXN $20,337.00 and $44,334.00
7) Above MXN $44,334.00
77) Does not know
99) Does not respond

POVERTY INDICATORS: EDUCATIONAL LAGGING

BE. Did you complete primary school?

1) Yes
2) No **(GO TO ITEM BE2.)**
77) Does not know
99) Does not respond

BE1. Did you complete secondary school?

1) Yes
2) No
77) Does not know
99) Does not respond

BE2. Were you enrolled in any school prior to your arrest?

1) Yes
2) No
77) Does not know
99) Does not respond

POVERTY INDICATORS: ACCESS TO HEALTH SERVICES

SAL. **(ADULTS ONLY)** Were you enrolled in any medical service associated to any distributing institution, including the Seguro Popular, public institutions of social security (IMSS, ISSSTE federal or state, PEMEX, Army or the Marine) or private medical services?

1) Yes
2) No
77) Does not know
99) Does not respond

POVERTY INDICATORS: ACCESS TO SOCIAL SECURITY

SEG. **(ADULTS ONLY)** Were you enrolled in the Instituto Mexicano del Seguro Social, IMSS?

1) Yes
2) No
77) Does not know
99) Does not respond

SEG1. **(ADULTS ONLY)** Did you have access to the Sistema de Ahorro para el Retiro (SAR) or the Administradoras de Fondos para el Retiro (Afore)?

1) Yes
2) No
77) Does not know
99) Does not respond

SEG2. **(ADULTS ONLY)** Did you have access to any pension through a relative with access to social security?

1) Yes

2) No
77) Does not know
99) Does not respond

POVERTY INDICATORS: QUALITY AND SPACES OF THE DWELLING

HOG1. In the dwelling of residence prior to incarceration, what was the main material of the floor of the dwelling?

SPECIFY THAT REFERENCE IS BEING MADE TO THE RESIDENCE OF RESPONDENT PRIOR TO ARREST. INDICATE ANSWER AS SIGNALLED.

1) Earth
2) Cement
3) Wood, mosaic, or other material
4) Other (specify) _____
77) Does not know
99) Does not respond

HOG2. And the main material of the roof of the dwelling?

INDICATE ANSWER AS SIGNALLED.

1) Waste
2) Cardboard
3) Metallic plates
4) Asbestos
5) Palm leaves or straw
6) Wood
7) Terrado beams
8) Tile
9) Concrete slab
10) Other (specify) _____
77) Does not know
99) Does not respond

HOG3. What was the main material of the walls of the dwelling?

MARCAR RESPUESTA INDICADA.

1) Waste
2) Cardboard
3) Asbestos or metallic plates
4) Reed, bamboo or palm tree
5) Adobe or bajareque
6) Wood
7) Adobe
8) Thin wall, bricks, blocks, stone, stone quarry, cement or concrete
9) Other (specify) _____
77) Does not know
99) Does not respond

HOG4. Were more than two people sharing the same room at some point during your residence?

1) Yes

2) No
77) Does not know
99) Does not respond

POVERTY INDICATORS: ACCESS TO BASIC SERVICES

SB. In the household where your previously resided, how did you have access to water? Through...

READ OUT LIST OF OPTIONS.

1) Piped water inside the household?
2) Piped water outside the household, but on your property?
3) Piped water from a public source (or hydrant)?
4) Piped water that you bring from another household?
5) Piped water?
6) Water from a well, river, lake, stream or other?
77) Does not know
99) Does not respond

SB1. In this same household, did you have access to a drainage system connected to...?
READ OPTIONS.

1) The public system?
2) Septic tank?
3) A tube that leads to slope or crevice?
4) A tube that leads to a river, lake or ocean?
5) The household did not have a drainage?
77) Does not know
99) Does not respond

SB2. In this same household, what was the source of electricity?
READ OPTIONS.

1) The public system?
2) A private plant?
3) A solar panel?
4) From another source?
5) The household did not have electricity?
77) Does not know
99) Does not respond

SB3. The fuel most often used for cooking was…?
READ OPTIONS.

1) Firewood
2) Carbon
3) Gas from a tank
4) Natural or piped gas
5) Electricity
6) Another source of fuel
77) Does not know
99) Does not respond

POVERTY INDICATORS: ACCESS TO FOOD

ALIM. In the last year you resided in your household, did you ever worry that you would run out of food?

1) Yes
2) No
77) Does not know
99) Does not respond

ALIM1. In the last year you resided in your household, did you have a diet based on a small variety of food stuffs?

1) Yes
2) No
77) Does not know
99) Does not respond

ALIM2. In the last year you resided in your household, due to a lack of resources, did you ever feel hungry but could not eat?

1) Yes
2) No
77) Does not know
99) Does not respond

ALIM3. In the last year you resided in your household, due to lack of resources, did you ever eat only once a day or go a whole day without eating?

1) Yes
2) No
77) Does not know
99) Does not respond

ADDITIONAL QUESTIONS

GENERAL QUESTIONS

ECIV. Marital status:

1) Single
2) Married
3) Widowed
4) Divorced
5) Separated
6) Cohabitation
66) Under 16 years of age[165]
77) Does not know
99) Does not respond

FAM. Do you have any children?

1) Yes

---

[165] Legal age of marriage for the state of Chihuahua.

2) No **(GO TO ITEM NEDUC.)**
77) Does not know
99) Does not respond

FAM1. How many children do you have?

WRITE DOWN NUMBER.

[_____]

EDUCATION

NEDUC. What is the highest level of education that you have completed? **(INDICATE THE LAST LEVEL COMPLETED. IF FOR EXAMPLE, THE RESPONDENT IS CURRENTLY COMPLETING SECONDARY SCHOOL, MARK THE OPTION FOR PRIMARY.)**

1) Primary
2) Secondary
3) Technical career with a secondary degree
4) High school
5) Technical career with a high school degree
6) Teachers' college
7) University
8) Postgraduate (Master's o Doctorate)
77) Does not know
99) Does not respond

PUB. If you carried out primary or primary and secondary level schooling, were these in a public or a private institution?

1) Public
2) Private
3) Both
77) Does not know
99) Does not respond

INCOME

EMP1. If you were employed, what kind of job did you have prior to your participation in illicit activities? **LIST ALL THAT ARE MENTIONED.**

EMP11. _____

EMP12. _____

EMP13. _____

EMP14. _____

EMP2. Was there a period in your life in which you neither studied nor worked?

1) Yes
2) No **(GO TO ITEM EMP4.)**
77) Does not know

99) Does not respond

EMP3. If so, what was the reason?
INDICATE ANSWER, MULTIPLE ANSWERS ARE ALLOWED.

1) You were expelled from school, sought out work actively but found nothing
2) You voluntarily left school, sought out work actively but found nothing
3) Finished school, sought out work actively but found nothing
4) Chose not to work or study
5) Had to care for someone in the household
6) Health reasons
7) Other (specify) _____
77) Does not know
99) Does not respond

EMP4. What is the main occupation of your mother and father?
WRITE DOWN THE NAME OF THE OCCUPATION IN THE SPACE AND INDICATE ONE OF THE OPTIONS LISTED.
EMP41. Mother _____

1) Informal job, part time
2) Informal job, full time
3) Formal job, part time
4) Formal job, full time
5) No occupation
77) Does not know
99) Does not respond

EMP42. Father _____

1) Informal job, part time
2) Informal job, full time
3) Formal job, part time
4) Formal job, full time
5) No occupation
77) Does not know
99) Does not respond

HOUSEHOLD

In the household you resided prior to your arrest, did you have access to the following appliances and services?
INDICATE 'YES' OR 'NO'.

APPLIANCES AND SERVICES	Yes	No	Does not know	Does not respond
ADOM1. Electricity	1	2	77	99
ADOM2. Radio	1	2	77	99
ADOM3. Television	1	2	77	99
ADOM4. DVD, Blu-ray or other device	1	2	77	99
ADOM4. Computer	1	2	77	99
ADOM6. Videogames: Wii, PlayStation, Xbox, others	1	2	77	99
ADOM7. Internet	1	2	77	99
ADOM8. Landline	1	2	77	99
ADOM9. Refrigerator	1	2	77	99
ADOM10. Gas or electric stove	1	2	77	99
ADOM11. Microwave	1	2	77	99

ADOM12. Toaster	1	2	77	99
ADOM13. Washing machine	1	2	77	99
ADOM14. Mobile phone	1	2	77	99
ADOM15. Smartphone (iPhone, etc.)	1	2	77	99
ADOM16. Air conditioner	1	2	77	99
ADOM17. Heating	1	2	77	99
ADOM18. Shower	1	2	77	99

RECREATION

RECR. Can you tell me if you are interested in any of the following activities?
READ OPTIONS AND INDICATE MORE THAN ONE IF RELEVANT.

1) Dancing of any kind
2) Singing or playing an instrument
3) Writing music
4) Writing stories or poetry
5) Performing in plays
6) Painting, drawing or sculpting
7) Photography or film-making
8) Reading for pleasure
9) Practicing any sport
10) Other (specify) _____
11) I was not interested in any recreational activity
77) Does not know
99) Does not respond

RECR1. Prior to you arrest, would you say you had the opportunity, and by this I mean the time and resources, to practice any of the activities you mentioned you were interested in?

1) Yes
2) No **(GO TO QUESTION RECR2.)**
77) Does not know
99) Does not respond

RECR2. Do you think it would have made a significant difference in your life to have had this opportunity?

1) Yes
2) No
77) Does not know
99) Does not respond

THESE ARE ALL THE QUESTIONS, MANY THANKS FOR YOUR VALUABLE TIME!

WOULD YOU LIKE TO ADD ANY INFORMATION ON ANY OF THE SUBJECTS WE JUST DISCUSSED?

_____

_____

_____

_____

_____

_____

_____

_____

OBSERVATIONS

A.4.4 Differences in Non-Delinquent Sample Survey

Note: The survey for the non-delinquent sample was not included due to space constraints. The contents of the survey are almost identical; however, small differences exist in the phrasing of questions, where relevant. Illustrative examples of differences between the delinquent and non-delinquent sample surveyed are signaled in this document. The complete survey is available upon request.

EDAD 1. was not included in the control sample survey

While you respond to the following questions, I would like you to reflect on your life and personal conditions at *this present moment*. [phrased in the present tense]

ASP. Would you say that you *have* a clear goal or idea of what you want to do with your life? [phrased in the present tense]

ASP1. Could you please indicate, in order of importance, 5 goals that you *want* to achieve in your life? [phrased in the present tense]

EC1A. Using a scale of 1 to 5, how satisfied would you say you *currently are* with your family's standard of living? [phrased in the present tense]

EC3. Have you had or do you currently have a formal, legal job? Please respond with 'Yes', 'No', or 'Do not know'.

EC3A. Using a scale of 1 to 5, how satisfied would you say you were with the income you received from your last legal job?

SOC3. Would you say that it is important to participate in recreational activities (for ex., in sports, art, etc.)? Please respond with 'Yes', 'No', or 'Do not know'. [removed reference to prior incarceration]

SOC3A. Using a scale of 1 to 5, how satisfied would you say you *are* with opportunities to practice recreational activities (for ex. a sport)? [phrased in present tense and removed reference to prior incarceration]

GRAL. In general, how satisfied would you say you are with your life? [phrased in present tense and removed reference to prior involvement in crime]

SB. In your *current household*, how do you have access to water? Through... [phrased in present tense]

ALIM. In the last year, did you ever worry that you would run out of food? [removed reference to period prior to arrest]

ALIM1. In the last year, did you have a diet based on a small variety of food stuffs? [removed reference to period prior to arrest]

ALIM2. In the last year, due to a lack of resources, did you ever feel hungry but could not eat? [removed reference to period prior to arrest]

ALIM3. In the last year, due to lack of resources, did you ever eat only once a day or go a whole day without eating? [removed reference to period prior to arrest]

Annex: Chapter 5. Individual Level Factors: Aspirations, a Good Life, and Crime

A.5.1 List of Aspirations Cited by Respondents

1. **Employment / Job**
   a. To work (1.1)
   b. To find a job (1.2)
   c. To have a better job (1.3)
   d. To have a better salary (1.4)
   e. To get a promotion (1.5)
   f. To have a good job (1.6)
   g. To have a stable job (1.7)
   h. To have a formal job (1.8)
   i. To have a respectable job (1.9)
   j. To have an honest job (1.10)
   k. To work in the field (1.11)
   l. To have an enjoyable job (1.12)
   m. To have a job with more opportunities (1.13)
   n. To be a good employee (1.14)

2. **Family**
   a. To have a partner (2.1)
   b. To have a family / to get married and have children (2.2)
   c. To get married (2.3)
   d. To have children (2.4)
   e. To have many children (2.5)
   f. To settle down (2.6)
   g. To have a solid family (2.7)
   h. Health for his children (2.8)
   i. For the parents to be present (2.9)
   j. To be reunited with family (2.10)
   k. To spend more time with family (2.11)
   l. To be a good father (2.12)
   m. To be a good son (2.13)
   n. To set a good example for siblings (2.14)

3. **Education**
   a. To study (3.1)
   b. To have opportunities to study (3.2)
   c. To start school (3.3)
   d. To continue studying (3.4)[166]
   e. To return to school (3.5)
   f. To graduate / finish studies (3.6)
   g. Start secondary school / Finish secondary school (3.7)
   h. Finish high school (3.9)
   i. Study a technical career (3.10)
   j. Start university / Finish university studies (3.11)
   k. To study an additional career (3.13)

---

[166] 'Continue studying' might not necessarily imply that they have left school. It could reflect a desire to continue on a path that they are already on. This is different to returning to school, which indicates that they have dropped out and have a desire to go back.

    l. To study a graduate course / Continue with graduate course (3.15)

    m. To study another language (3.16)

4. Professional Career (4.1-4.18)

    a. To have a professional career or profession (4.1)

    b. To have a technical career (4.2)

    c. To excel and be the best in his profession (4.3)

    d. To exercise the profession of his choice (4.4)

    e. To exercise the profession he has studied (4.5)

    f. To be an artist (musician, singer, painter or carpenter) (4.6)

    g. To be the best composer (4.7)

    h. To be a pilot (4.8)

    i. To be an engineer (4.9)

    j. To obtain a B.A. in different fields (education, criminology, veterinarian, nurse, lawyer, graphic design, chef (4.10) [167]

    k. To be an architect (4.11)

    l. To be a doctor (4.12)

    m. To be a sports trainer (4.13)

    n. To be a soldier, federal officer, police, judicial or ministerial officer (4.14)

    o. To be a stylist (4.15)

    p. To work with alternative energy (4.16)

5. Supporting the family financially (5.1-5.8)

    a. To financially support (wife and/or children) (5.1)

    b. To leave his children a patrimony (5.2)

    c. To pay for children's education (5.3)

    d. To financially support parents (mother and/or father) (5.4)

    e. To financially aid his parents (5.5)

    f. To contribute to the household (5.6)

    g. To be present in the family so that nothing will be lacking (5.7)

    h. To offer his family a better life (5.8)

6. Access to privileges (6.1-6.4)

    a. To be someone more important (6.1)

    b. To be someone important (6.2)

    c. To be someone in life (6.3)

    d. To have privileges (6.4)

7. Self-improvement (7.1-7.15)

    a. To improve oneself (7.1)

    b. To improve oneself on the job (7.2)

    c. To improve oneself academically (7.3)

    d. To prosper in life (7.4)

    e. To strive to move forward (7.5)

    f. To leave the assembly plant (7.6)

    g. To live (7.7)

---

[167] In Mexico, there is a difference in the degree you obtain depending on your field of undergraduate studies. The main distinctions in title are between "ingenieras" and "licenciadas". "Ingeniera" is the title assigned to those who graduate from fields like electronics, mechanics, civil engineering, biotechnology, i.e. fields that are more in the hard sciences. Those who graduate from social sciences in fields like politics, international relations, communications and other related disciplines obtain the title of "licenciada". Architects and doctors are independent and cannot be ascribed to either of these two titles.

    h. To be happy (7.8)
    i. To have fun (7.9)
    j. To enjoy (7.10)
    k. To work a lot to be able to retire (7.11)
    l. To achieve something for the future (7.12)
    m. To be independent (7.13)
    n. To be responsible and dynamic (7.14)
    o. To have a better life (7.15)

8. Material belongings (8.1-8.17)
    a. To have luxury goods and many material possessions (8.1)
    b. To buy a television (8.2)
    c. To buy a car (8.3)
    d. To buy a luxury car (8.4)
    e. To buy a house (8.5)
    f. To own a house (8.6)
    g. Build/finish building a house (8.7)
    h. To have a good house (8.8)
    i. To have a better house (8.9)
    j. To travel (8.10)
    k. To have money (8.11)
    l. To own a property / properties (8.12)
    m. To own a farm (8.13)
    n. To own a truck (8.14)
    o. To have a better standard of living (8.15)
    p. To have a good salary (8.16)
    q. To not lack material things (8.17)
    r. To be in a good economic position (8.18)

9. Own a business (9.1-9.4)
    a. Own a business (9.1)
    b. To be an entrepreneur

10. Sports (10.1-10.11)
    a. To be an athlete (10.1)
    b. To continue practicing sports (10.2)
    c. To practice more sports (10.3)
    d. To play football (10.4)
    e. To play professional football (10.5)
    f. To attend a football academy (10.6)
    g. To continue with training at the football academy (10.7)
    h. To play football in different places (10.8)
    i. To play professional basketball (10.9)
    j. To be a boxer (10.10)
    k. To win a sports competition (10.11)

11. Altruism (11.1 – 11.10)
    a. To serve the community (11.1)
    b. To extend access to technology to the general public (11.2)
    c. To be a better person (11.3)
    d. To be a good person (11.4)

e. To serve the church (11.5)
f. To build a nursing home (11.6)
g. To spend more time with people in the community (11.7)
h. Help people progress through music (11.8)
i. Seek out justice for everyone (11.9)
j. Be a health promoter in communities of need (11.10)

12. Addictions (12.1 – 12.5)
a. Leave addictions (12.1)
b. Quit smoking (12.2)
c. Quit drinking (12.3)
d. Quit drugs (12.4)
e. Stop committing crimes (12.5)

13. Others (13.1 – 13.8)
a. Live in the U.S. / obtain legal residence in the U.S. (13.1)
b. Obtain military credentials (13.2)
c. Leave the city (13.3)
d. Start a new life (13.4)
e. To work in organized crime (13.6)
f. Leave prison (13.7)
g. Never return to prison (13.8)

A.5.2 Nested Models with Individual Level Factors on Organised Crime Participation (log-likelihood)

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
ec1a. Dissatisfaction with family's standard of living	-0.39* (0.17)	-0.28 (0.18)	-0.36* (0.18)	-0.40* (0.20)
ec2a. Dissatisfaction with employment opportunities	-0.23 (0.13)	-0.40** (0.14)	-0.33* (0.15)	-0.35* (0.16)
ec3a. Dissatisfaction with income earned	-0.11 (0.12)	-0.25 (0.13)	-0.25 (0.14)	-0.30 (0.15)
matasp1. Material aspirations		-0.05 (0.18)	-0.11 (0.19)	0.01 (0.20)
oport2. Opportunity constraints		0.67*** (0.14)	0.65*** (0.14)	0.63*** (0.14)
Education			-0.95*** (0.20)	-1.11*** (0.22)
Age				0.18*** (0.03)
Number of observations	261	261	261	261

Annex: Chapter 6. Micro Level Factors: Family and Community Environments

A.6.1. Results of Stepwise Regression

```
. stepwise, pr(.05): logit delincuente fam fam1 fam2 fam3 fam4 fam5 fam6 fam7 fam8
                    begin with full model
p = 0.4544 >= 0.0500  removing fam5
p = 0.5521 >= 0.0500  removing fam6
p = 0.3570 >= 0.0500  removing fam3
p = 0.1379 >= 0.0500  removing fam8
p = 0.1721 >= 0.0500  removing fam1
p = 0.2276 >= 0.0500  removing fam4
p = 0.2123 >= 0.0500  removing fam7


Logistic regression                          Number of obs   =        344
                                             LR chi2(2)      =      13.46
                                             Prob > chi2     =     0.0012
Log likelihood = -231.7046                   Pseudo R2       =     0.0282
```

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
fam	-.6441061	.2025123	-3.18	0.001	-1.041023	-.2471894
fam2	.1856253	.0942702	1.97	0.049	.0008591	.3703914
_cons	.6549964	.4096438	1.60	0.110	-.1478907	1.457883

A.6.2 Family Environment Factors on Organised Crime Participation

	Variables	Logistic Regression				OLS Regression	
		Model 1 (no covariates)	Model 2 (with covariates)	Model 3 (binary independent variables)	Model 4 (grouped variables)	Model 5 (no covariates)	Model 6 (with covariates)
Abandonment	FAM. Grew up with only one parent	0.80** (0.23)	0.58* (0.26)	0.71* (0.28)	0.72** (0.23)	0.19** (0.05)	0.11* (0.05)
Communication and affection	FAM1. Lack of communication with parents	-0.15 (0.11)	-0.12 (0.12)	0.00 (0.33)	-0.05 (0.13)	-0.03 (0.02)	-0.02 (0.02)
	FAM2. Lack of support	0.26* (0.12)	0.18 (0.13)	0.83* (0.38)		0.06* (0.02)	0.03 (0.02)
	FAM3. Lack of affection	-0.14 (0.12)	-0.30 (0.14)	-0.61 (0.39)		-0.03 (0.02)	-0.05* (0.02)
Physical and/or emotional violence	FAM4. Use of offensive words or insults	0.15 (0.11)	0.12 (0.12)	0.18 (0.36)	0.16 (0.13)	0.03 (0.02)	0.02 (0.02)
	FAM5. Physical violence as a form of punishment	0.11 (0.13)	0.01 (0.14)	0.15 (0.44)		0.02 (0.03)	0.00 (0.02)
	FAM6. Problems solved through violent means	-0.15 (0.14)	-0.18 (0.16)	-0.22 (0.48)		-0.03 (0.03)	-0.03 (0.03)
Parents in jail	FAM7. Parent(s) spent time in jail	-0.23* (0.11)	-0.14 (0.12)	-0.54 (0.39)	-0.20* (0.11)	-0.05* (0.02)	-0.02 (0.02)

Parents involved in criminal activity	FAM8. Parent(s) involved in criminal activities	0.20 (0.13)	0.23 (0.15)	0.50 (0.46)	0.12 (0.13)	0.04 (0.03)	0.04 (0.02)
Covariates	Age		0.16*** (0.02)				0.03*** (0.00)
	Level of education		-0.71*** (0.12)				-0.12*** (0.20)
Constant		-0.41 (0.36)	-2.08 (0.71)	-0.21 (0.20)	-0.31 (0.35)	0.40*** (0.08)	0.02 (0.14)
Number of observations		344	344	247	344	344	344

Notes: Results exclude missing values (n=344). For model 3, all Likert scale responses coded as 3 (neither agree nor disagree) were removed from the analysis, explaining a reduction in the sample size.

In model 3, the variable FAM. appears to have a positive association because it has been coded as a dummy with (1=yes, grew up with a single parent, 0=no).

For models 1-6 (excluding 4):

*Denotes significant values (p<0.05)

** Denotes significant values (p<0.01)

***Denotes significant values (p<0.001)

For model 4:

*Denotes significant values (p<0.10)

** Denotes significant values (p<0.01)

A.6.3 Output of Stepwise Regression Excluding Innocent

```
. stepwise, pr(.05): logit delincuente fambin fam1 fam2 fam3 fam4 fam5 fam6 fam7 fam8
                   begin with full model
p = 0.4093 >= 0.0500  removing fam5
p = 0.4003 >= 0.0500  removing fam1
p = 0.3071 >= 0.0500  removing fam6
p = 0.2801 >= 0.0500  removing fam4
p = 0.2822 >= 0.0500  removing fam8
p = 0.3415 >= 0.0500  removing fam3
p = 0.1637 >= 0.0500  removing fam7
p = 0.0822 >= 0.0500  removing fam2


Logistic regression                          Number of obs   =        313
                                             LR chi2(1)      =       7.51
                                             Prob > chi2     =     0.0061
Log likelihood = -211.45609                  Pseudo R2       =     0.0175


-------------------------------------------------------------------------
 delincuente |    Coef.   Std. Err.     z    P>|z|   [95% Conf. Interval]
-------------+-----------------------------------------------------------
      fambin |  .6453496  .2366097    2.73   0.006   .1816031   1.109096
       _cons | -.4567584  .1465989   -3.12   0.002  -.7440869  -.1694299
-------------------------------------------------------------------------
```

A.6.4 Output of Logistic Regression Excluding Innocent

```
. logit delincuente fambin c.fam1 c.fam2 c.fam3 c.fam4 c.fam5 c.fam6 c.fam7 c.fam8

Iteration 0:   log likelihood = -215.21221
Iteration 1:   log likelihood = -206.13608
Iteration 2:   log likelihood = -206.10312
Iteration 3:   log likelihood = -206.10312
```

Logistic regression

		Number of obs	=	313
		LR chi2(9)	=	18.22
		Prob > chi2	=	0.0327
Log likelihood = -206.10312		Pseudo R2	=	0.0423

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
fambin	.7576602	.2503433	3.03	0.002	.2669963	1.248324
fam1	-.1045002	.1146018	-0.91	0.362	-.3291156	.1201152
fam2	.2670243	.126669	2.11	0.035	.0187575	.5152911
fam3	-.1243565	.1313443	-0.95	0.344	-.3817865	.1330735
fam4	.1286247	.1132087	1.14	0.256	-.0932601	.3505096
fam5	.1115209	.135166	0.83	0.409	-.1533996	.3764413
fam6	-.1780217	.1532694	-1.16	0.245	-.4784242	.1223809
fam7	-.24135	.1237864	-1.95	0.051	-.4839669	.0012669
fam8	.2022538	.1437319	1.41	0.159	-.0794556	.4839632
_cons	-.6559434	.3772065	-1.74	0.082	-1.395255	.0833677

A.6.5 Results of Stepwise Regression

```
. stepwise, pr(.05): logit delincuente com1 com2 com3 com4 com5 com6 com7
                     begin with full model
p = 0.6524 >= 0.0500  removing com2
p = 0.5050 >= 0.0500  removing com1
p = 0.2700 >= 0.0500  removing com3
p = 0.1849 >= 0.0500  removing com5
```

Logistic regression

		Number of obs	=	344
		LR chi2(3)	=	19.53
		Prob > chi2	=	0.0002
Log likelihood = -228.67661		Pseudo R2	=	0.0410

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
com6	.3494823	.1001479	3.49	0.000	.153196	.5457685
com7	-.2187135	.1035432	-2.11	0.035	-.4216545	-.0157725
com4	-.2476992	.0957737	-2.59	0.010	-.4354122	-.0599863
_cons	.5659288	.4042492	1.40	0.162	-.2263851	1.358243

A.6.6 Community Environment Factors on Organised Crime Participation

Category	Variable	Logistic Regression				OLS Regression	
		Model 1 (no covariates)	Model 2 (with covariates)	Model 3 (binary independent variables)	Model 4 (grouped variables)	Model 5 (no covariates)	Model 6 (with covariates)
Reference group	GR1. Closer relationship with friends	-0.60* (0.30)	-0.71* (0.34)	-0.66* (0.34)	-0.61* (0.30)	-0.13* (0.07)	-0.12* (0.06)
	GR2. Friends' opinion was more important	-0.40 (0.40)	-0.30 (0.45)	-0.53 (0.48)	-0.37 (0.40)	-0.09 (0.09)	-0.06 (0.08)
	GR3. Most afraid of disappointing friends	0.30 (0.38)	0.05 (0.43)	0.29 (0.45)	0.27 (0.37)	0.06 (0.08)	0.00 (0.07)
Social cohesion	COM1. Few people in the neighbourhood to count on	0.09 (0.09)	0.06 (0.11)	0.41 (0.29)	0.24 (0.14)	0.02 (0.02)	0.01 (0.02)
	COM2. Distrust in the neighbourhood	0.08 (0.10)	0.12 (0.11)	-0.00 (0.29)		0.01 (0.02)	0.02 (0.02)
	COM3. Did not know neighbours very well	0.08 (0.10)	0.08 (0.12)	0.10 (0.30)		0.01 (0.02)	0.01 (0.02)
Violence in the community	COM4. Fighting was common	-0.26* (0.10)	-0.28* (0.11)	-0.30 (0.28)	-0.60*** (0.14)	-0.05* (0.02)	-0.05* (0.02)
	COM5. Knew people involved in gangs and/or involved in illicit activities	-0.12 (0.11)	-0.03 (0.12)	-0.60 (0.36)		-0.02 (0.02)	-0.01 (0.02)
	COM6. Regularly spent time with people involved in gangs and/or illicit activities	0.42*** (0.11)	0.41** (0.12)	0.99** (0.32)	0.43*** (0.10)	0.09*** (0.02)	0.07*** (0.02)
	COM7. Knew people with a strong dependency to alcohol and/or drugs	-0.23* (0.12)	-0.37** (0.13)	-0.49 (0.36)		-0.05 (0.02)	-0.06** (0.02)
Covariates	Level of education		-1.10*** (0.18)				-0.20*** (0.03)
	Age		0.18*** (0.03)				0.03*** (0.00)
Constant		0.32 (0.50)	-1.41 0.83	0.46 (0.31)	0.32 (0.49)	0.57*** (0.11)	0.21 (0.16)
Number of observations		339	339	250	339	339	339

Notes: Results exclude missing values (n=339). For model 3, all Likert scale responses coded as 3 (neither agree nor disagree) were removed from the analysis, explaining a reduction in the sample size.
*Denotes significant values (p<0.05)
** Denotes significant values (p<0.01)
***Denotes significant values (p<0.001)

A.6.7 Output of Stepwise Regression Excluding Innocent

```
. stepwise, pr(.05): logit delincuente gr1 gr2 gr3 com1 com2 com3 com4 com5 com6 com7
                    begin with full model
p = 0.9146 >= 0.0500  removing com5
p = 0.5757 >= 0.0500  removing com3
p = 0.2805 >= 0.0500  removing com1
p = 0.1802 >= 0.0500  removing gr3
p = 0.2345 >= 0.0500  removing gr2
p = 0.0969 >= 0.0500  removing com2
```

```
Logistic regression                         Number of obs   =        307
                                            LR chi2(4)      =      26.55
                                            Prob > chi2     =     0.0000
Log likelihood = −197.9524                  Pseudo R2       =     0.0629
```

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
gr1	−.5939142	.2831966	−2.10	0.036	−1.148969	−.0388591
com6	.4801291	.1094272	4.39	0.000	.2656558	.6946024
com4	−.205489	.1024069	−2.01	0.045	−.4062029	−.0047751
com7	−.2565117	.1133418	−2.26	0.024	−.4786576	−.0343659
_cons	.1472187	.4395237	0.33	0.738	−.714232	1.008669

A.6.8 Output of Logistic Regression Excluding Innocent

```
. logit delincuente gr1 gr2 gr3 c.com1 c.com2 c.com3 c.com4 c.com5 c.com6 c.com7
```

```
Iteration 0:   log likelihood = −211.22837
Iteration 1:   log likelihood = −194.21262
Iteration 2:   log likelihood = −194.17123
Iteration 3:   log likelihood = −194.17123
```

```
Logistic regression                         Number of obs   =        307
                                            LR chi2(10)     =      34.11
                                            Prob > chi2     =     0.0002
Log likelihood = −194.17123                 Pseudo R2       =     0.0808
```

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
gr1	−.4999607	.3197329	−1.56	0.118	−1.126626	.1267043
gr2	−.7738133	.4567003	−1.69	0.090	−1.66893	.1213029
gr3	.5683088	.4024388	1.41	0.158	−.2204568	1.357074
com1	.0902282	.1045995	0.86	0.388	−.1147831	.2952396
com2	.1595041	.1127388	1.41	0.157	−.06146	.3804682
com3	.0646155	.1143159	0.57	0.572	−.1594395	.2886704
com4	−.2601704	.1105489	−2.35	0.019	−.4768424	−.0434985
com5	.0137635	.1283713	0.11	0.915	−.2378396	.2653666
com6	.4945774	.1153143	4.29	0.000	.2685655	.7205893
com7	−.3330762	.1299534	−2.56	0.010	−.5877801	−.0783724
_cons	−.3997174	.5361354	−0.75	0.456	−1.450523	.6510887

Annex: Chapter 7. Macro Level Factors: Multi-Dimensional Poverty and Organised Crime Participation

A.7.1 Results of Stepwise Regression

```
. stepwise, pr(.05): logit delincuente depriving resedu accsal socsec espviv accalim servvivadj accrec
                  begin with full model
p = 0.9652 >= 0.0500  removing servvivadj
p = 0.7226 >= 0.0500  removing socsec
p = 0.6925 >= 0.0500  removing espviv
p = 0.6770 >= 0.0500  removing accalim
```

```
Logistic regression                          Number of obs  =        244
                                             LR chi2(4)     =      71.56
                                             Prob > chi2    =     0.0000
Log likelihood = -133.14208                  Pseudo R2      =     0.2118
```

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
depriving	-1.355045	.3671601	-3.69	0.000	-2.074666	-.6354249
resedu	1.811231	.3619999	5.00	0.000	1.101724	2.520738
accsal	1.562813	.3781982	4.13	0.000	.8215579	2.304067
accrec	-1.069103	.4219228	-2.53	0.011	-1.896057	-.2421497
_cons	.4627074	.3259132	1.42	0.156	-.1760707	1.101486

A.7.2 Multidimensional Poverty Indicators on Organised Crime Participation

Category	Variables	Model 1	Model 2	Model 3	Model 4
	Income	-0.99** (0.32)	-1.13** (0.34)	-1.31*** (0.36)	-1.33*** (0.37)
Health	Access to health services		1.36** (0.42)	1.50** (0.46)	1.66** (0.47)
	Access to social security		0.20 (0.39)	-0.14 (0.43)	-0.15 (0.44)
	Access to food		-0.05 (0.28)	-0.24 (0.30)	-0.15 (0.32)
Education	Educational lagging			1.92*** (0.36)	1.84*** (0.37)
Living standard	Quality and spaces of the household				0.13 (0.30)
	Access to basic services and household appliances				-0.02 (0.46)
	Access to recreational activities				-1.06* (0.42)
Constant		0.85** (0.28)	0.61* (0.31)	0.39 (0.33)	0.46 (0.35)
Number of observations		244	244	244	212

A.7.3 Output of Stepwise Regression Excluding Innocent

```
. stepwise, pr(.05): logit delincuente depriving resedu accsal socsec espviv accalim servvivadj accrec
                        begin with full model
p = 0.9095 >= 0.0500  removing socsec
p = 0.7502 >= 0.0500  removing accalim
p = 0.7703 >= 0.0500  removing espviv
p = 0.6875 >= 0.0500  removing servvivadj
p = 0.0576 >= 0.0500  removing accrec
```

```
Logistic regression                             Number of obs   =        212
                                                LR chi2(3)      =      65.12
                                                Prob > chi2     =     0.0000
Log likelihood = -113.24453                     Pseudo R2       =     0.2233
```

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
depriving	-1.43872	.3925671	-3.66	0.000	-2.208137	-.6693026
resedu	1.952802	.3853652	5.07	0.000	1.1975	2.708104
accsal	1.750761	.3849614	4.55	0.000	.9962505	2.505272
_cons	-.0715496	.3380743	-0.21	0.832	-.7341631	.5910639

A.7.4 Output of Logistic Regression Excluding Innocent

```
. logit delincuente depriving resedu accsal socsec espviv accalim servvivadj accrec
```

```
Iteration 0:   log likelihood = -145.80364
Iteration 1:   log likelihood = -111.29655
Iteration 2:   log likelihood =  -111.1487
Iteration 3:   log likelihood = -111.14844
Iteration 4:   log likelihood = -111.14844
```

```
Logistic regression                             Number of obs   =        212
                                                LR chi2(8)      =      69.31
                                                Prob > chi2     =     0.0000
Log likelihood = -111.14844                     Pseudo R2       =     0.2377
```

delincuente	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
depriving	-1.407752	.4044852	-3.48	0.001	-2.200529	-.6149759
resedu	1.917113	.3962708	4.84	0.000	1.140437	2.69379
accsal	1.833583	.4909658	3.73	0.000	.8713081	2.795859
socsec	.0519325	.4568306	0.11	0.909	-.8434391	.9473041
espviv	.1162521	.3444338	0.34	0.736	-.5588257	.79133
accalim	-.1075099	.3576081	-0.30	0.764	-.808409	.5933891
servvivadj	-.1880838	.5184957	-0.36	0.717	-1.204317	.828149
accrec	-.841531	.4568222	-1.84	0.065	-1.736886	.053824
_cons	.0514153	.3879587	0.13	0.895	-.7089697	.8118004

```
.
end of do-file
```