

## **Inequities in Social Determinants of Health Factors and Criminal Behavior: A Case Study of Immigrant Ex-Offenders**

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**S. Jack Olszewski<sup>1</sup>**

**C. Jerome Fore<sup>2</sup>**

### **Abstract**

When immigrants arrive in a new country, they often discover that being an immigrant does not allow them to integrate easily into the new society. Immigrant offenders are more likely to engage in criminal behaviors due to inequities in social determinants of health factors as a source of strain. This study was focused on utilizing the personal experiences of immigrant offenders to discover the various circumstances that contributed to their criminal behavior. General Strain Theory has been shown to be a useable theoretical model in explaining the relationship between race/ethnicity and criminal behavior. The participants in this study were adult immigrant ex-offenders in the province of Alberta, Canada. The results of the study indicated a consensus among ex-offenders that there are social determinants of health factors such as stress, income problem, education issues, employment issue, and health risk behaviors that have led them to commit crime. The recommendations presented below are divided into three groups. Recommendations include: (a) future research in federal, provincial and territorial correctional systems, (b) identification of multiple risk factors that lead an individual to commit crime, (c) crime prevention strategies that help prevent criminal behavior for immigrants.

### **Introduction**

Migrating into a new society can lead to increased levels of stress and thus affect an immigrant's health. Adjusting to a new country, immigrants are subject to both external and internal stress. Immigrants in the country of destination face social determinants of health factors related to stress, income problem, education issues, employment with job security, as well as a number of mental health and health risk behaviors (Raphael, 2009). Using General Strain Theory, this qualitative study focused on utilizing methods that captured in-depth information about feelings, experiences and perceptions as experienced by participants.

### **Canadian Immigration**

The majority of Canadians, excluding Aboriginals, are Canadians who can trace their origins to immigration during the period of British and French colonization and the waves of immigration that followed (Statistics Canada, 2003). Canada has long been a traditional immigrant host nation. For a long

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<sup>1</sup> [drsjackolszewski@gmail.com](mailto:drsjackolszewski@gmail.com)

<sup>2</sup> [drcfore@yahoo.com](mailto:drcfore@yahoo.com)

period, up to the late 20th century, most immigrants coming to Canada hailed from either European nations or the United States. New regulations were brought in to reduce perceived discrimination towards countries that were not major sources of immigrants in 1962, and in 1967; Canadian immigration policy was amended (Citizenship and Immigration Canada, 2009). Subsequently, a new system was introduced for accepting immigrants and currently, over 200,000 new residents arrive every year in Canada (Citizenship and Immigration Canada, 2012). There are three main reasons for accepting permanent residents in Canada: humanitarian efforts for refugees and other individuals granted protection, family reunification through sponsorship, and economic development by accepting skilled and educated individuals (Chui et al., 2007).

## Strain Theories

Robert K. Merton (1938) presented the first criminological strain theory by providing the argument that crime results from disconnect between culture and structure. Durkheim described the breakdown of societal norms (anomie) as leading to the elimination of mechanisms which would prevent negative behavior. Strain theory largely builds off the work Durkheim, who suggested that crime is a result of the inability or failure to achieve accepted goals (Cloward & Ohlin, 1960; Cohen, 1955; Merton, 1938). The American sociologist Robert Merton presented the structural strain theory as the deviant phenomenon by focusing on ideas such as cultural goals, anomie as well as institutional norms. Merton's (1938) work was expanded upon by Cohen (1955) who suggested that the denial of status was a major cause of strain, and in turn, a cause of criminal delinquency. The major departure point of Cloward and Ohlin (1960) from Merton's work was positing that most serious forms of crime/delinquency were in fact based on a desire for monetary achievement, rather than status as suggested by the latter research (Akers & Sellers, 2009).

*General Strain Theory.* Agnew's introduction of General Strain Theory (GST) was a reaction to the criticism and lack of empirical support for many early strain theories (Agnew, 2000; Akers & Sellers, 2009). The GST theory as presented by Agnew allows for the examination of individual behavior on the micro-level, contrary to previous macro-level investigations. Agnew first introduced GST in 1992 and since then it been revised numerous times, in 1996, 2001, 2002, and 2004. At the core, it has remained the same, claiming that crime is for the most part caused by negative feelings, including aggression and frustration, that result from strain that individual experiences (Card et. al., 2008). Whether or not a person undertakes to commit criminal acts is dependent on various personality factors (Agnew, 1992, 2006; Agnew et al., 1986; Agnew et al., 1996; Agnew et al., 2002; Cullen, 1994; Cullen et al., 2003; Froggio et al., 2007; Land et al., 1990; Parker et al., 1999; Paternoster et al., 1994; Sampson et al., 1993; Seccombe, 2000; Warner et al., 2003). Strain, as a general concept, is defined by Agnew (1992) as the condition felt by individuals who do not believe they are being treated the way they should be treated. Agnew (1992) states that there are three main types of strains that are responsible for the development of individuals' strain feelings:

- (1) *Failure to achieve positively valued goals (such as money, status, or autonomy).* Strain occurs when obstacles are encountered by an individual reaching for positively valued goals. Individuals who fail to achieve, among other things, economic goals such as money but also more immediate goals such as status and respect in the country of origin or destination will experience strain. For certain individuals, for example, such accepted values as physical attractiveness or high intelligence may be impossible to achieve. The gap between expectations and actual achievements is another type of strain. Agnew (1992) states that when actual achievement by an individual does not meet their initial expectations of achievement, the individual experiences increased strain. Strain indicates that each individual has different expectations, and this type of strain is not necessarily embedded in society's culture in the country of origin or destination.

Expectations of income are largely a result of reference groups that can cause a divide between expectation and achievement. Not all life outcomes are fair, and this can be a type of strain. Such a situation occurs in individuals who believe that the actual outcome was not fair or just in the country of origin or destination.

- (2) *Removal of positively valued stimuli (something that a person values).* This type of strain occurs when the results individual experiences are not as just and fair as they imagined they would be (Agnew, 1992). An example could be an individual expecting to receive a good salary at a job after demonstrating good work ethic. All three sources of strain should be taken into account when measuring strain according to Agnew (1992) and that a cumulative effect would be the best solution for measurement (Agnew, 2006). Individuals can experience strain when they lose contact with an agent or institution that provided positive stimuli in the country of origin or destination. Such a loss can manifest itself in numerous ways in an individual's life. As Agnew (1992) describes, when such an experience occurs, an individual may engage in criminal behavior for a number of reasons.
- (3) *Confrontation with negative stimuli.* Strain can be the result of individuals facing negative situations without the possibility of escaping them in the country of origin or destination (Agnew, 2001). Negative stimuli can include child abuse and criminal victimization among others (Agnew, 1992; Moon, Hays & Blurton, 2009). Poor relationships with family may lead adolescents to cope with the strain by joining a gang. In addition, it is significant to note that individuals may attempt to eliminate strain by seeking revenge on those who they perceive have caused said strain (Agnew, 1992; Rocque, 2008).

Agnew's general strain theory is unique in that it consider negative emotion as an affective variable. Agnew (2006, p.35) states, "the experience of strains increases the likelihood that individuals will experience a range of negative emotional states." Such emotions include anger, frustration, jealousy, and fear among others (Agnew, 2006). By putting pressure on an individual to take remedial action(s), these negative emotions reduce the ability to use coping methods that are legal (Agnew, 2006; Rocque, 2008). Contrary to previous strain theories, Agnew suggests that an individual's definition of strain is individually created, not based on culturally or socially oriented goals. This allows strain theory to expand to all gender, race, and class demographics as well as personal differences among individuals which may mediate the effect of strain (Adams, 2010; Card et. al., 2008; Higgins & Gabbidon, 2009; 2008; Hoskin, 2011).

### **Immigrants in the New Country**

*Immigrants' Social Determinants of Health.* Immigrants in their new countries meet new and often unexpected strains and negative life events which are antecedents to anger and other negative emotions (Rodriguez & Bashaw, (2010). Literature on the topic suggests that multiple variables affect new immigrants' causing them health issues and a sense disillusionment:

*Stress.* Coming to a new country, new immigrants face the process of adjusting to a new and foreign society and thus are subject to both internal and external stress. Future uncertainty can also play a factor in coping with strains. High levels of everyday stress increase anxiety and hopelessness and the lack of a strong social support network can add to the increasing burden of strain. Immigrants may view

their lives as unpredictable and meaningless and thus experience higher than regular levels of negative emotion. Such emotions are dealt with through unhealthy coping behaviors such as the use of alcohol, smoking or at the extreme, violent behavior (Brunner et al., 2006; Raphael, 2009). Kaufman and colleagues (2008) in their study indicated that African-Americans have a higher chance of experiencing unique strains as compared to Whites and these strains lead to an increased predisposition to committing criminal acts.

*Income.* Income can be considered to be one of the most accurate determinants of health. Wealth shapes living conditions and can influence both mental and physical functioning and well-being. It affects such behaviors as drug and alcohol use as well as the impact the extent of physical activity in individuals. Low income leads to individuals being deprived of material goods and social support networks (Auger & Alix, 2009; Curry-Stevens, 2009; Wilkins, 2007; Wilkinson & Pickett, 2009).

*Education.* Education is a strong factor in determining health, and typically individuals who have a higher education are healthier than those with a lower level of education. Thus, education can be correlated to other social determinants of health factors such as income, employment, and working conditions. As well, higher levels of education allow individuals to have stronger skills in evaluating their behaviors and how such behaviors affect their health (Ronson & Rootman, 2009; Ungerleider et al., 2009). These are strong predictors of negative emotions, various behavioral problems, as well as school dropout and gang participation. Also, the isolation and lack of social support that these younger immigrants face can lead to both psychological and emotional stress.

*Employment, Job Security and Working Condition.* Employment provides income for individuals and creates a sense of structure in day-to-day life. Lack of employment conversely can lead to social and material deprivation and greater psychological and physiological stress (Bartley, 2006; Tremblay, 2009). A lack of employment or poor job security can have negative effects on personal relationships as well as the effectiveness of parenting. It is associated with both physical and mental problems, including depression and anxiety, as well as such problems as sleep deprivation and heart disease (Tremblay, 2009). Even when individuals have steady employment, when employees think their efforts have not been appropriately rewarded they may also suffer a wide range of physical and mental problems (Bartley, 2006; Tremblay, 2009; Jackson, 2009; Tompa, Polanyi & Foley, 2009). Older immigrants faced other problems, most significantly, with employment due to a lack of education or appropriate language skills. Though many immigrants are highly educated and have professional skills, as a result of their language deficiency or professional accreditation they find themselves unemployed or forced to seek other means of employment unrelated to their history (Oznobishin & Kurman 2009).

*Housing.* Housing is a basic necessity in order to have an acceptable quality of life and living in an unsafe, or unaffordable housing situation increases the probability for health issues (Bryant, 2009). Immigrants, in their countries of origin, may have been exposed to violence (Jaycox et al., 2002; Maimon & Gideon, 2007) or victimization (Sherer, 2009), and moving to their new country may be living in crime-prone neighborhoods (Jaycox et al., 2002).

*Social Exclusion.* Social exclusion occurs when certain groups of individuals, in this case, groups of immigrants, are not able to participate in the daily life in their new country. This is often the case for new immigrants who may not be able to participate in civil affairs, are denied social goods and services, cannot contribute to social production as well as economic exclusion (Galabuzi, 2009). In Canada, social exclusion is present in higher than normal unemployment rates for immigrants as well as lower labor force participation as compared to their Canadian-born counterparts. Social exclusion creates a variety of social problems for an individual and can increase hopelessness and other mental health problems (Galabuzzi, 2005; White, 2005).

*Social Safety Net.* Social safety nets play an important role in providing benefits and programs for citizens who are dealing with life changes. Such changes can often have strong effects on health and include life transitions such as having children, attaining education, or reaching retirement (Hallstrom, 2009). Other unpredictable events such as accidents, family break-ups or the development of physical or mental health problems can affect the well-being of an individual by increasing economic insecurity and creating psychological stress (Langille, 2009). One of the more notable ones was Kaufman (2005) who concluded that being a witness and victim of crime were strains that could cause a greater chance of criminal involvement. This was particularly apparent among Latinos and Blacks who lived in disadvantaged environments.

*Mental Health.* Even though they experience similar levels of distress, immigrants and refugees are not as likely to seek mental health services for their problems as their Canadian-born counterparts. In many countries, such services are only acceptable for the most severe ill or psychotic patients and thus many immigrants have a stigmatized perspective of such services. The stigma of a mental health diagnosis extends not only to an individual but also to that individual's social support network, including friends and family (Kirmayer et. al., 2011).

*Health Risk Behavior.* Activities which increase mental or physical health risk can be considered health risk behaviors and in combination with a risky lifestyle. These include the use of tobacco, alcohol and drug abuse, lack of physical activity and risky sexual practices among others (Gray, 1993). It has been found that such behaviors can impact quality of life (Hawkins & Anderson, 1996).

## **Research Method**

The purpose of this research was to examine possible explanations for immigrants' criminal behavior in the context of social determinants of health factors. The study increased the understanding of strain theory and the existing relationship between criminal behavior and immigrant ex-offenders. Using case study research, the authentic experiences of 10 immigrant ex-offenders was examined for data relating to the questions posed in the study:

*Q1.* What are the perceptions of immigrant offenders about their experience of social determinants of health factors (i.e. stress, income problem, education issues, employment with job security, housing, social exclusion, social safety net, mental health and health risk behaviors) in Canada?

*Q2.* What are the perceptions of immigrant offenders regarding the relationship between inequities in social determinants of health factors as a source of strain and criminal behavior?

### *Research Methods and Design*

This research study used a qualitative case study research design. In this research framework, a problem was stated that required the use of an inductive research strategy to determine the significance of a particular situation or phenomena that involved a rich description of life experience. The qualitative approach to analysis by the researcher is best accomplished through a continuous dialog between the researcher and the participant. By finding a meaning, the research is able to make sense of the lived experiences of others.

### *Materials/Instruments*

The researcher used face-to-face interviews with specific questions related to inequalities in social determinants of health factors based on samples of ten (10) participants. The content of interviews was related to the immigrant's adversities such as social determinants of health factors that conditioned negative events in their life in the country of destination. Real time interviews require that data be processed by the interviewer and that appropriate follow-up questions be formulated (Opdenakker, 2006; White & Drew, 2011).

### *Participants*

The participants in this study were adult (18 and up) immigrant ex-offenders in the province of Alberta (Canada). Ex-offenders had to be 18 years of age or older, not have been incarcerated at the time of the study, and had fully served any sentences imposed. The participants in this study were 10 adult (18 and up) immigrant ex-offenders in the province of Alberta (Canada) who already served their sentence and who were no longer under parole supervision/were past their WED (warrant expiry date). Each participant took part in an individual interview and completed open-ended responses. (See Table 1 on Next Page)

Table 1: Demographic Profile of Ex-Offenders

Participants	Country	Age during Immigration	Present Age	Offence	Sentence served
Participant 1	Pakistan	5	37	Drug and weapon-related offenses	6
Participant 2	Philippines	13	35	Possession of an instrument to copy and falsify credit card data and the unauthorized use of a stolen credit card	2
Participant 3	Somalia	14	31	Drug related offenses	2.5
Participant 4	China	9	27	Possession of drugs for the purpose of trafficking	3
Participant 5	Mexico	7	23	Trafficking, Possession for the purpose of trafficking, possession of illegal substance and possession of stolen property	6.5
Participant 6	Romania	10	33	Robberies	4
Participant 7	Ethiopia	21	31	Robberies with a weapon and drug-related offenses	7
Participant 8	Lebanon	17	43	Drug related offenses	3.5
Participant 9	Tanzania	31	45	Drug related offenses	9
Participant 10	Salvador	3	39	Second-degree murder	21

### Data Collection and Analysis

The relationship between strain theory, inequities in social determinants of health factors and crime can be understood better if it is possible to analyze the phenomena from an individual perspective while seeking the meaning behind each specific situation. This will allow for a richly descriptive end product as a result of the analytical strategy used. Through a variety of methods such as in-depth interviews and reflections by ex-offenders, the validity of the study can be strengthened based on the participants' experiences. Triangulation was utilized to increase the validity of this research study by examining individual interview data as compared to the reflections of those individuals (Stake, 1995; Yin, 2009).

The data was investigated with qualitative data to assist in systematically coding and analyzing data gathered from immigrant ex-offenders' descriptions. This study provided detailed information for each participant in regards to the time demands, the purpose of the study and what the data would be used for, a written guarantee for the participant allowing the freedom to choose which questions to answer, as well as a breakdown of the methods that would be used to make sure the data collected stayed secure and confidential.

In the first interview conducted in Calgary (Alberta), the researcher combined two types of interviews: conversational and structured-question interviewing. These two different methods created data sets that complemented one another. The second interview, conducted on Skype, followed up on questions and relied on previous answers. The researcher used probes, by returning to topics previously discussed, to elicit accurate, detailed data from the participants. Where contradiction appeared, falsehoods can be easily identified by the researcher and a decision can be made whether to keep or discard the data in question. Another possibility is for the researcher to present the discrepancies and attempt to offer explanations for any apparent contradictions. The Dedoose software system was used to analyze and categorize the data collected. Common themes were identified to explore the experiences of participants.

### **Evaluation of Findings**

This qualitative case study led the researcher to gather qualitative data from subjects through interviews and notes, encouraging free, open-ended inquiry into the questions at hand. Interviews were presented through the seven stages of an interview investigation including thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting (Creswell, 2013; Yin, 2009).

*Research Question 1. What are the perceptions of immigrant offenders about their experience of social determinants of health factors in Canada?*

Table 2. Descriptive Results RQ 1

Themes	% of theme discussion	Subordinate Themes
Stress related to the adjustment process	70	Acculturation in new country Language issues Income issues
Income problems faced after immigration	50	Need of money Income difference Quick money
Difficulty obtaining education	90	Poor attendance at school Language barrier at school Foreign credentials not recognized
Lack of employment opportunities	60	Lack of experience Desire for secure employment No work history
Social exclusion encountered in the community	60	Racism No friends No community connections
Engagement in health risk behaviors	80	Substance addiction Alcohol addiction Drugs trafficking

*Research Question 2. What are the perceptions of immigrant offenders regarding the relationship between inequities in social determinants of health factors as a source of strain and criminal behavior?*

Table 3. Descriptive Results RQ 2

Themes	% of theme discussion	Subordinate Themes
Life circumstances causing stress	50	Languages Racism
Language barriers creating issues with successful education	80	Language barriers No employment income
Income problem creating financial difficulties	70	Addiction Unemployment
Exclusion from labor market leading to unemployment	80	Problem with employment No secure employment
Isolation resulting in the lack of social safety net	50	Lack of parental supervision Parental abuse

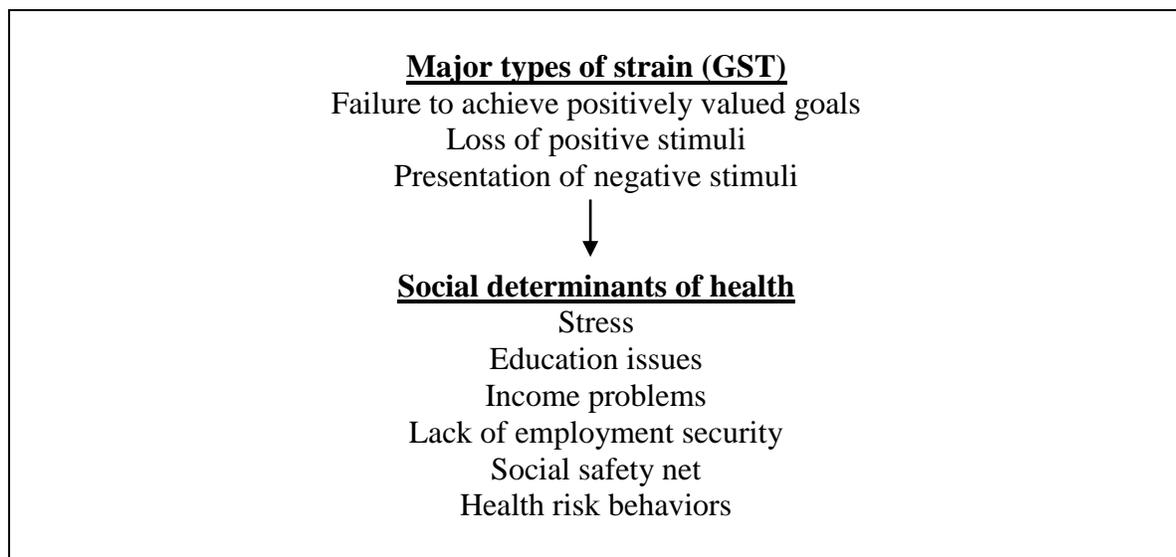
The Dedoose software program was used to code data, identify word similarities, and identify common word patterns. As patterns were noted, common themes were identified (Smith et al., 2009) regarding the study constructs. These themes were categorized into major and secondary themes according to the responses indicated by each participant. If the theme identified was consistent with both research questions 1 and 2, with a result of 65% or higher, it was considered a major theme (Stake, 2010). If the theme identified was consistent with either research question 1 or research question 2 independently, with a result of 65% or higher, it was considered a secondary theme. Six themes emerged from data analysis were consistent with research questions 1 (Stress related to the adjustment process, Income problems faced after immigration, Difficulty obtaining education, Lack of employment opportunities, Social exclusion encountered in the community and Engagement in health risk behaviors) and five themes emerged from question 2 (Life circumstances causing stress, Language barriers creating issues with successful education, Income problem creating financial difficulties, Exclusion from labor market leading to unemployment and Isolation resulting in the lack of social safety net). Additionally, the study constructed subordinated themes and related patterns. Tables 2 and 3 displayed the data from each research question.

Immigrants and minorities, who are frustrated by a lack of opportunity and facing various strains, resort to criminal activity. Prior research has shown the unequal realities that immigrants and racial

minorities face (Fleras & Elliott, 2006; Ngo, 2009). In order to better understand the connection between crime and immigration, it is possible to utilize General Strain Theory (GST) which builds upon the classic strain theories of Durkheim, Merton, and Cohen. GST presents three major types of strain: failure to achieve positively valued goals, loss of positive stimuli, and presentation of negative stimuli. During the analysis phase, five social determinants were identified: (a) stress, (b) education issues, (c) income problems, (d) lack of employment security, (e) social safety net, and (e) health risk behaviors.

*Evaluation of Findings related to General Strain Theory is provided in Figure 1.*

Figure 1: Evaluation of Findings Related to General Strain Theory



### **Implications and Recommendations**

Analysis of the data collected for each of the two research questions revealed the following:

*RQ1.* What are the perceptions of immigrant offenders about their experience of social determinants of health factors in Canada?

*Theme: Stress related to the adjustment process.* This theme caused a source of strain and criminal behavior among immigrant ex-offenders. There is a greater probability for crime to result as a violent reaction to stress that result from various stressors immigrants face. Many immigrants have to deal with the loss of family, displacement, and various types of violence in their country of origin. Immigrant families have to deal with resettlement, as well as acculturative stressors including lack of English skills and discrimination within Canada. These stressors can cause additional threats to emotional and behavioral health among children and adolescents. Interviewed participants stated a link between past

exposures to traumatic events and coping with difficulties they face in the present. Immigrants' past trauma can contribute significantly to problems in the present that they respond to with criminal activity.

*Theme: Social exclusion encountered in the community.* This theme caused a source of strain and criminal behavior among immigrant ex-offenders. There are a number of challenges that immigrants can face in the resettlement process. One of these challenges is the social exclusion they experience. Many immigrants are socially excluded leading to decreased social and economic opportunities, in turn, leading to fewer life experiences. There are various factors that can contribute to social exclusion, including the language barrier as well as different social and cultural practices that immigrants are not accustomed to. Social exclusion can result from the vast change that immigrants experience in coming to a modern, industrialized society. This leads to a sense of risk and uncertainty in their new country of destination and social disconnection.

*Theme: Engagement in health risk behaviors.* This theme caused a source of strain and criminal behavior among immigrant ex-offenders. When immigrants assimilate more into the mainstream Canadian culture, changes in health-related attitudes can occur including accepting the existing cultural values that relate to health behaviors.

*RQ2.* What are the perceptions of immigrant offenders regarding the relationship between inequities in social determinants of health factors as a source of strain and criminal behavior?

Data analysis resulted in seven major themes consistent with research question 1 and 2: Stress, Income problems, Lack of employment security, Education issue, Lack of social safety net, Social exclusion and Health risk behaviors.

*Theme: Income problem is creating financial difficulties.* This theme caused a source of strain and criminal behavior among immigrant ex-offenders. For immigrants with low incomes, it can be a challenge to find the time or money to participate in recreational behaviors. Income is a strong determinant of health, as well as proper mental and physical well-being. Low levels of income can lead to individuals to be deprived of necessary material goods, and social support networks.

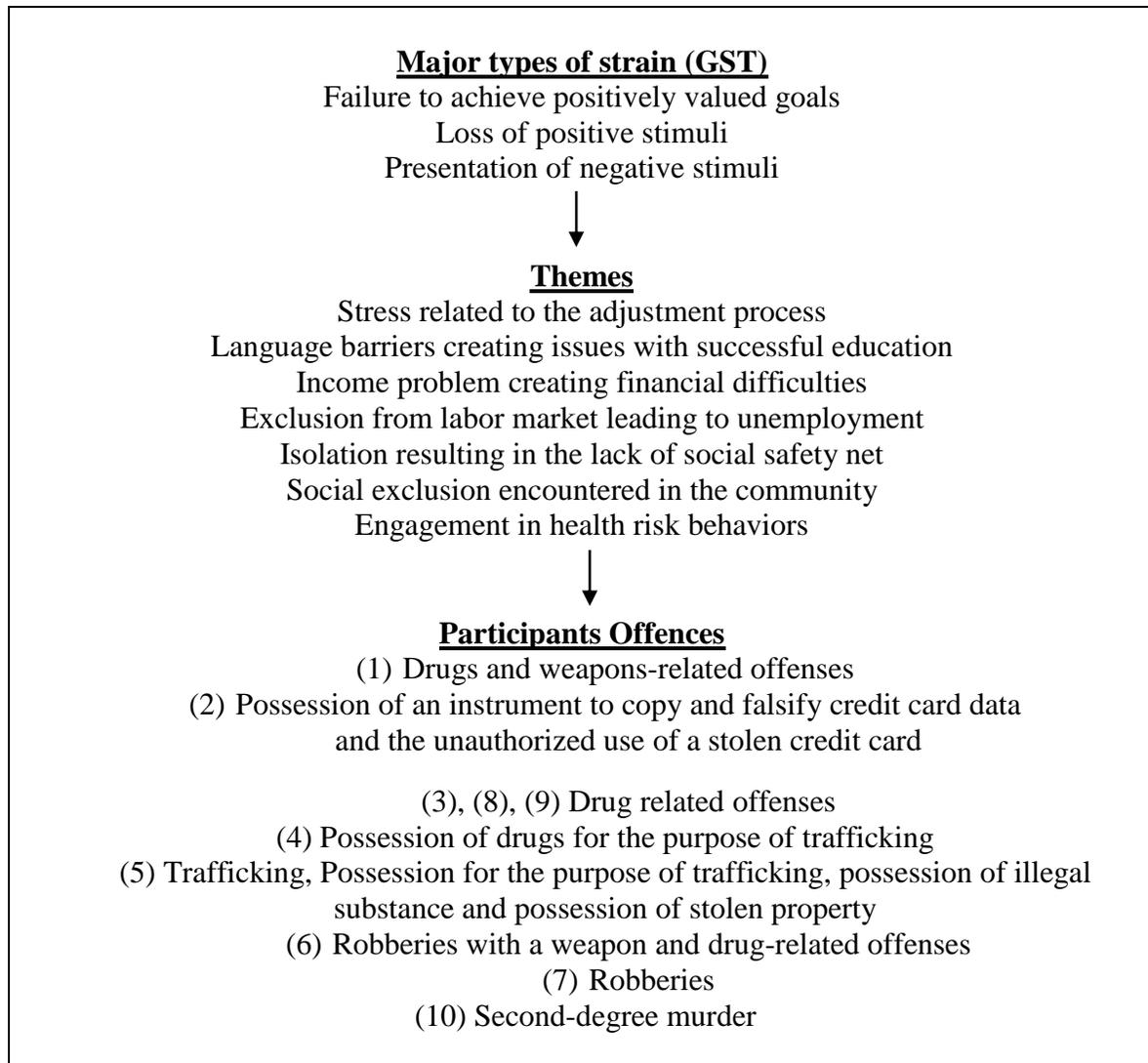
*Theme: Exclusion from labor market leading to unemployment.* This theme caused a source of strain and criminal behavior among immigrant ex-offenders. Employment creates income for individuals and a sense of structure in everyday life. On the other hand, a lack of employment can create social and material deprivation and stress for immigrants. With no employment, immigrants face negative effects within their personal relationships and potential physical and mental problems. Older immigrants can face problems in finding employment due to a lack of education and lacking language skills. Even though they may be educated or have professional skills in their country of origin, they find themselves unemployed in their new country of destination where these qualities are not recognized.

*Theme: Language barriers are creating issues with successful education.* This theme caused a source of strain and criminal behavior among immigrant ex-offenders. A lack of education is a strong predictor of negative emotions and stress. In addition, the isolation resulting from social support can lead to psychological and emotional stress.

*Theme: Isolation is resulting in the lack of social safety net.* This theme caused a source of strain and criminal behavior among immigrant ex-offenders. Immigrants experience numerous benefits if they have a strong social safety net to help deal with life changes. These changes, such as the birth of children or attaining an education, can have strong effects on health. Numerous events that are unpredictable, including accidents or family breakups, can lead to physical and mental health problems that affect immigrants and create stress. This is exacerbated for immigrants who live in disadvantaged environments.

Data Analysis of Ex-Offenders' Inequities in Social Determinants of Health Factors and Criminal Behavior in relation to General Strain Theory is provided.

Figure 2: Data Analysis of Ex-Offenders' Inequities in Social Determinants of Factors and Criminal Behavior (GST)



### **Discussion of the Results in Relation to Literature**

Failure to achieve positively valued goals (such as money, status, or autonomy) is a general concept defined by Agnew (1992) as the condition felt by individuals who do not believe they are being treated the way they should be treated. Individuals who fail to achieve certain goals, among them economic goals involving or more immediate goals such as status and respect will experience strain. Ex-offenders often describe their criminal behavior as a result of the unequal socioeconomic realities that minority populations face. Low income leads to individuals being deprived of material goods and social support networks (Auger & Alix, 2009; Curry-Stevens, 2009; Wilkins, 2007; Wilkinson & Pickett, 2009). Education is a strong factor in determining health, and typically individuals who have a higher education are healthier than those with a lower level of education. Thus, education can be correlated to other social determinants of health factors such as income, employment, and working conditions. As well, higher levels of education allow individuals to have stronger skills in evaluating their behaviors and how such behaviors affect their health (Ronson & Rootman, 2009; Ungerleider et al., 2009). The lack of educational opportunities and limited employment opportunities can foster feelings of marginalization among immigrants, as well as cause disillusionment over time. Achieving a certain level of education has been argued to be one mean of achieving economic success within society (Farnworth and Leiber, 1989). As well, the strain has been often described as stemming from dissatisfaction with monetary status, actively predicting future crime and drug use (Agnew, 1996). Employment provides income for individuals and creates a sense of structure in day-to-day life. Lack of employment conversely can lead to social and material deprivation and greater psychological and physiological stress (Bartley, 2006; Tremblay, 2009). A lack of employment or inadequate job security can have adverse effects on personal relationships as well as the effectiveness of parenting. A large percentage of immigrant ex-offenders have limited access to employment opportunities as a result of inadequate language skills, limited education and training, or lack of recognition of foreign credentials and experience by employers. These decreased opportunities create stress on both immigrants and their families. Though many immigrants are highly educated and have professional skills, as a result of their language deficiency or professional accreditation they find themselves unemployed or forced to seek other means of employment unrelated to their history (Oznobishin & Kurman 2009).

Removal of positively valued stimuli (something that a person values) occurs when the results individual experiences are not as just and fair as they imagined they would be (Agnew, 1992). All sources of the strain should be taken into account when measuring strain according to Agnew (1992) and that a cumulative effect would be the best solution for measurement (Agnew, 2006). Several ex-offenders stated that the process of immigration can cause family conflict and tension. Coming to a new country, new immigrants face the process of adjusting to a new and foreign society and thus are subject to both internal and external stress. Future uncertainty can also play a factor in coping with strains. High levels of everyday stress increased anxiety and hopelessness, and the lack of a strong social support network can add to the increasing burden of strain. Immigrants often do not identify with the professional support or services that are offered in communities (Agnew, 1992). Immigrants are susceptible to criminality during their process of adjusting to a new country (Agnew, 1992).

Confrontation with negative stimuli may occur in response to strain depending on the magnitude of the strain as well as the perception of an individual as well as their social control (Adams, 2010). While certain specific strains can increase the possibility of criminal activity, simultaneous strains raise the probability much higher as a result of an individual's inability to cope with strain in a safe, legitimate way (Agnew, 2006; Rocque, 2008). Ex-offenders may view their lives as unpredictable and meaningless and thus experience higher than regular levels of negative emotion. Such emotions are dealt with through unhealthy coping behaviors such as lack of a secure base for living a productive life. (Brunner et al.,

2006; Raphael, 2009). Social safety net refers to different life changes in immigrants' life in a new country of destination such as attaining education or new employment (Gray, 1993). It has been found that such behaviors can impact the quality of life (Hawkins & Anderson, 1996). Ex-offenders report incidents where new immigrants cannot understand the complicated legal procedures inherent in the Canadian system, as well as the nuances of law enforcement in Canada. Ex-offenders have reported that the possibility or reality of homelessness is a stressor that can lead to engaging in criminal behavior. Unexpected life changes increase security and provoke emotional stress and continue to be divisive factors within communities, and incidents of racism can cause invisible cultural divides within Canadian society as a whole (Agnew, 1992; Moon, Hays & Blurton, 2009).

### **Limitations**

There were limitations encountered in this study. The primary focus was on the experiences of ex-offenders, whose insight may be valuable and offer insight into criminal behavior but may not be entirely bias-free. This study did not assess any economic, social or political problems of immigrant ex-offenders from their country of origin that could have impacted their predisposition to problems in their country of destination. Immigrants from certain countries, with their own particular political, social, and economic status, can have vastly different reactions to acculturation within Canada as compared to others. There are also differences in immigrant status due to the differences in the country of origin and ethnic background.

This study was comprised of all male participants. Since 90 percent of those incarcerated in Canada's correctional system are male, it was difficult to include female immigrant ex-offenders in this study. The participation of female ex-immigrants would have potentially portrayed a complete picture from the female perspective as related to social determinants of health factors and their relationship to criminal behavior. The sample size of the study was small and the limited time of the study did not allow for the recruitment of focus group participants.

### **Recommendations**

*Recommendations for future research in Canada.* There is a lack of official statistics from Canadian provincial and territorial correctional systems in regards to the criminal involvement of demographically diverse populations. The federal correctional system, which is responsible for a small percentage of offenders within Canada, publicizes statistics in relation to race and religion annually. Therefore, future research may be useful for not only the federal correctional system, but also for the provincial system. Further research, using intersectional modes of inquiry into the social determinants of health, must be encouraged. In this way, a complete picture will be shown related to immigrants and criminal behavior.

*Recommendations for identification of other risk factors that lead to crime.* There are multiple risk factors that can lead to an individual committing a crime. In the context of immigrant offenders, inequalities of social determinants of health factors such as stress, education issues, income problems, employment issues and health risk behaviors play a significant role as risk factors. Other such strain factors can include those related to the experience related to family functioning in the country of destination (adaptation stress, family poverty, lack of family and social support, intergenerational gaps), challenges (cultural, linguistic and academic barriers), individual experiences (trauma in the country of origin, learning disabilities, risky behaviors, poor decision making and interpersonal skills, violence to solve problems, lack of personal and cultural identity), and community life (access to role models, intra-cultural differences and conflicts, inappropriate and inaccessible service programs).

*Recommendations for crime prevention strategies.* A number of factors were identified by ex-offenders are protective factors that help prevent criminal behavior from immigrants: family support and other social support (including immigrant communities), participation in the community, and access to social services. Taking this into consideration, preventive strategies for new immigrants as well as for ex-offenders must focus on support from social networks, including families and immigrant communities, as well as easier access to educational and economic opportunities. Strategies should emphasize access to culturally appropriate services, including availability of the ethnocultural community and development of responsive programs that involve family and community-based support.

## Conclusions

This study explored the relationship between inequities in social determinants of health factors as a source of strain and criminal behavior among immigrant ex-offenders. Immigrants who have specific social determinants of health negatively impacting their life in their new country can contribute significantly to understand this topic better. Their perspective unveiled in-depth information about existing inequities in social determinants of health factors in their country of destination that contributed to their criminal behavior. The results of the study indicate that there was a general consensus among ex-offenders that there are social determinants of health factors such as stress, income problem, education issues, employment issue, social safety net and social exclusion that have led them to commit crime.

## References

- Adams, G. (2010). Social stressors and strain among Police Officers. *Criminal Justice and Behavior*, 37 (9), 1030-1040.
- Agnew, R., Matthews, S. K., Bucher, J., Welcher, A. N., & Keyes, C. (2008). Socioeconomic status, economic problems, and delinquency. *Youth & Society*, 40, 159-181.
- Akers, R. A., & Sellers, C. S. (2009). *Criminological theories: Introduction, evaluation, and application* (5th ed.). New York, New York: Oxford University Publishers.
- Akins, S., Smith, C., & Mosher, C. (2010). Pathways to alcohol abuse across racial/ethnic groups: an application of general strain and social learning theories. *Journal of Drug Issues*, 10(2), 321-352.
- Auger, N., & Alix, C. (2009). *Income, Income Distribution, and Health in Canada*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 61-74). 2nd edition. Toronto: Canadian Scholars' Press.
- Banting, K., G., Courchene T. J., Seidle, F. L. (2007). *Belonging? Diversity, recognition, and shared citizenship in Canada*. Montréal: Institute for Research on Public Policy.
- Bartley, M. et al. (2006). *Health and Labor Market Disadvantage: Unemployment, Non-Employment, and Job Insecurity*. In Marmot, M. G. and Wilkinson, R. G. (Eds.). *Social Determinants of Health*. 2<sup>nd</sup> edition. Oxford: Oxford University Press
- Bolt, G., Özüekren, A. S., Phillips, D. (2010). Linking integration and residential segregation. *Journal of Ethnic and Migration Studies* 36(2): 169–86.
- Brunner, E. & Marmot, M. G. (2006). 'Social Organization, Stress, and Health. In Marmot M. G. & Wilkinson, R. G. (Eds.) (2006). *Social Determinants of Health* (pp. 6-30). 2nd edition. Oxford, UK: Oxford University Press.
- Bryant, T. (2009). *Housing and Health: More than Bricks and Mortar*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 235-249). 2nd edition. Toronto: Canadian Scholars' Press.

- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, 79, 1185-1229.
- Citizenship and Immigration Canada. Immigrating to Canada. (2012). Retrieved March 01, 2014, from <http://www.cic.gc.ca/english/resources/statistics/facts2012/index.asp>
- Citizenship and Immigration Canada. (2009). *Citizenship and Immigration statistics archives (1966 to 1996)*. Ottawa, Canada: Citizenship and Immigration Canada; 2009. Retrieved March 01, 2014 from <http://www.cic.gc.ca/english/resources/statistics/index.asp>
- Cloward, R. A., & Ohlin, L. (1960). *Delinquency and opportunity*. Glencoe, IL: Free Press.
- Chui, T, Tran, K., Maheux, H. (2007). Immigration in Canada: A Portrait of the Immigrant Population, 2006 Census. Ottawa: *Statistics Canada – Social and Aboriginal Statistics Division*. Retrieved March 01, 2014 from <http://www12.statcan.ca/english/census06/analysis/immcit/pdf/97-557-XIE2006001.pdf>.
- Cullen, F. T., & Agnew, R. (2011). *Criminological theory: past to present: essential readings* (4th ed.). New York: Oxford University Press.
- Curry-Stevens, A. (2009). *When Economic Growth Doesn't Trickle Down: The Wage Dimensions of Income Polarization*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 41-60). 2nd edition. Toronto: Canadian Scholars' Press.
- Fong, E. and R. Wilkes. 2003. Racial and ethnic residential patterns in Canada. *Sociological Forum* 18(4): 577–602.
- Froggio, G., & Agnew, R. (2007). The relationship between crime and “objective” versus “subjective” strains. *Journal of Criminal Justice*, 35, 81-87.
- Galabuzi, G. E. (2009). *Social Exclusion*. In Raphael, D. (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 252-268). 2nd edition. Toronto: Canadian Scholars' Press.
- Hallstrom, L. (2009). Public Policy and the Welfare State. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 336-349). 2<sup>nd</sup> edition. Toronto: Canadian Scholars' Press.
- Higgins, G.E., & Gabbidon, S.L. (2009). Perceptions of consumer racial profiling and negative emotions: An exploratory study. *Criminal Justice and Behavior*, 36(1), 77-88.
- Higgins, G.E. (2010). *Race, crime, and delinquency: A criminological theory approach*. Boston: Prentice Hall.
- Hoskin, A. (2011). Explaining the link between race and violence with the general strain theory. *Journal of Ethnicity in Criminal Justice*, 9, 56-73.
- Hipp, J. R., George, G. E., & Boggess, L. N. (2009). “Intergroup and Intragroup violence: Is violent crime and expression of group conflict or social disorganization?” *Criminology*, 47(2):521-64.
- Jackson, A. (2009). *The Unhealthy Canadian Workplace*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 99-113). 2nd Edition Toronto: Canadian Scholars' Press.
- Jang, S. J. (2007). Gender differences in strain, negative emotions, and coping behaviors: A General Strain Theory approach. *Justice Quarterly*, 24, 523-553.
- Jang, S. J., & Rhodes, J. R. (2012). General strain and non-strain theories: A study of crime in emerging adulthood. *Journal of Criminal Justice*, 40(3), 176–186.
- Jennings, W. G., Piquero, N. L., Gover, A. R., & Perez, D. M. (2009). Gender and General Strain Theory: A replication and exploration of Broidy and Agnew's gender/strain hypothesis among a sample of southwestern Mexican-American adolescents. *Journal of Criminal Justice*, 37, 404-417.
- Kaufman, J. M., Rebellon, C., J., Thaxton, S., Agnew, R. (2008). A General Strain Theory of racial differences in criminal offending. *The Southwest Journal of Criminal Justice*, Vol. 7 (2), 138-158.
- Kaufman, J. M. (2009). “Gendered responses to serious strain: the argument for a General Strain Theory of Deviance.” *Justice Quarterly* 26(3): 410-435.

- Kubrin, C.E., Stucky, T.D., & Krohn, M.D. (2009). *Researching theories of crime and deviance*. New York: Oxford University Press.
- Langille, D. (2009). Follow the Money: How Business and Politics Shape our Health. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 305-317). 2nd edition. Toronto: Canadian Scholars' Press.
- Maimon, D. and Fishman, G., (2007). "General strain, immigrant youth and juvenile delinquency: Application to the study of immigration and crime within the Israeli setting." Paper presented at the annual meeting of the American Sociological Association, TBA, New York, New York City Online <PDF>. 2011-04-29 from [http://www.allacademic.com/meta/p182272\\_index.html](http://www.allacademic.com/meta/p182272_index.html)
- Mazerolle, P., Piquero, A. R., & Capowich, G. E. (2003). Examining the links between strain, situational and dispositional anger, and crime. *Youth & Society*, 35, 131-157.
- Merton, R. K. (1938). Social structure and anomie. *American Sociological Review*, 3, 672-682.
- Moon, B., Hays, K., & Blurton, D. (2009). General strain theory, key strains, and deviance. *Journal of Criminal Justice*, 37, 98-106.
- Neuwirth, G. (1999) *Toward a Theory of Immigrant Integration*. In: Halli SS, Driedger L, editors. *Immigrant Canada: Demographic, Economic, and Social Challenges*. Toronto: University of Toronto Press; 1999. p. 51-69
- Ngo, H., & Schleifer, B. (2005). Immigrant children and youth in focus. *Canadian Issues*, 29-33.
- Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research*, 7(4), Article 11.
- Oznobishin, O., & Kurman, J. (2009). Parent– child role reversal and psychological adjustment among immigrant youth in Israel. *Journal of Family Psychology*, 23, 405–415.
- Paternoster, R., & Mazerolle, P. (1994). General strain theory and delinquency: A replication and extension. *Journal of Research in Crime and Delinquency*, 31, 235-263.
- Perez, D. M., Jennings, W. G., & Gover, A. R. (2008). Specifying general strain theory: An ethnically relevant approach. *Deviant Behavior*, 29, 544-578.
- Piquero, N., & Sealock, M. (2010). Race, crime, and General Strain Theory. *Youth Violence and Juvenile Justice*, 8(3), 170.
- Raphael, D. (2009). *Social Structure, Living Conditions, and Health*. In Raphael, D. (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 20-36). 2nd edition. Toronto: Canadian Scholars' Press.
- Rocque, M. (2008). Strain, coping mechanisms, and slavery: A general strain theory application. *Crime, Law and Social Change*, 49, 245-269.
- Rodriguez, R. & Belshaw, S.(2010). General Strain Theory: A comparative analysis of Latino & White youths. *Southwest Journal of Criminal Justice*, 7(2). pp. 138-158.
- Ronson, B., & Rootman, I. (2009). *Literacy and Health Literacy: New Understandings about their Impact on Health*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 170-186). 2nd edition. Toronto: Canadian Scholars' Press.
- Sherer, M. (2011). Delinquent activity among Jewish and Arab junior and senior high school students in Israel, *International Journal of Ex-offender Therapy and Comparative Criminology*, 53 (5), 535-555.
- Slocum, L. (2010). General Strain Theory and continuity in offending over time: Assessing and extending GST explanations of persistence. *Journal of Contemporary Criminal Justice*, 26(2), 204.
- Smith, P. & Polanyi, M. (2009). *Understanding and Improving the World of Work*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 114-127). 2nd edition. Toronto: Canadian Scholars' Press.
- Stogner, J., & Gibson, C. L. (2010). Healthy, wealthy, and wise: Incorporating health issues as a source of strain in Agnew's general strain theory. *Journal of Criminal Justice*, 38, 1150–1159.

- Statistics Canada. (2003). Ethnic diversity survey. *The Daily* (September 29): 2–5.
- Statistics Canada. (2011). Population by immigrant status and period of immigration, 2011 counts, for Canada, provinces and territories - 20% sample data. 2009. Retrieved March 01, 2014 from: <http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/hlt/97-557/T403-eng.cfm?Lang=E&T=403&GH=4&SC=1&S=99&O=A>
- Tompa, E., Polanyi, M. & Foley, J. (2009). *Labour Market Flexibility and Worker Insecurity*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 88-98). 2nd edition. Toronto: Canadian Scholars' Press.
- Tremblay, D. G. (2009). *Precarious Work and the Labour Market*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 75-87). 2nd edition. Toronto: Canadian Scholars' Press.
- Ungerleider, C., Burns, T., & Cartwright, F. (2009). *The State and Quality of Canadian Public Elementary and Secondary Education*. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 156-169). 2nd edition. Toronto: Canadian Scholars' Press.
- Wilkins, R. (2007). *Mortality by Neighbourhood Income in Urban Canada from 1971 to 2001*. AMGSeminar, 16 January 2007. Ottawa: Statistics Canada.
- Wilkinson R. G. & Pickett K. (2009). *The Spirit Level - Why More Equal Societies Almost Always Do Better*. London, UK: Allen Lane.