

Crime Families in the Maltese Islands: A Spatial Perspective

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ABSTRACT

This study explores the potential role of spatial factors as crime promoters to intergenerational continuity of offending in the Maltese Islands *. The intergenerational dataset created for the Formosa Pace 2014 study, covering incarcerations between 1950 and 2010 is used to explore such phenomena. The focus here is on the residential location of individuals belonging to the intergenerational cohort using street level analysis to explore potential risks linked to spatial proximity. A spatial analysis is employed to examine the crime families' residential zones vis-a-vis the offender and poverty hotspots identified in the Formosa 2007 study. This explores further the relationship between the location of crime families and the socio-demographic factors in communities that could serve as "activity fields" for crime continuity. Crime runs and concentrates in a relatively small number of Maltese families across 2 to 5 generations, wherein family members act as crime role models. Crime continuity is accommodated by a number of crime promoters that present themselves in the activity field. These include geographical proximity, residing in intersecting poverty and offender hotspots as well as exposure to crime role models within the family and the community. Thus, a series of crime promoters act as direct or indirect transmission risks to crime continuity wherein communities such as Valletta, Bormla and Santa Lucija allow for transgenerational transmission.

Keywords: crime promoters, poverty hotspots, offender hotspots, crime families, intergenerational offending, transmission risks, activity fields.

INTRODUCTION

Intergenerational research show that crime runs and concentrates in families (Bijleveld & Farrington, 2009; Dugdale, 1887; Farrington & Welsh, 2007; Farrington et al., 1996; Farrington et al., 1998; Formosa Pace, 2014; Hjalmarsson & Lindquist, 2009; McCord 1991, 1999; Rowe & Farrington, 1997; Van de Rakt et al., 2008, 2009, 2010) resulting in situations where criminal children are likely to have criminal parents. Also, people's behaviour is influenced by the actions of others and it is expected that one is more crime prolific in a "bad environment" (Glaeser et al., 1996). The relationship between inequality, socio-economic deprivation and crime can be explained using a social disorganisation framework (Shaw & McKay, 1942) that points towards the clustering of families in neighbourhoods laden with socio-economic strain (Agnew, 1992) characterised by social exclusion (Houchin, 2005).

Theoretical frameworks pertaining to the ecological genre have for long explored offending in view of geographical locations. These highlight the importance of neighbourhood influences and structural factors such as socio-economic disadvantage, poverty (Wilson, 1987) and

* The Maltese Islands consist of Malta, Gozo and Comino

concentrations of crime in crime hotspots (Formosa, 2007). Also, crime hotspots and other social scenarios such as poverty and social class, are all factors relevant to “neighbourhood stratification and ecological differentiation” that are significant to crime (Sampson, 2006). However, the influence of the environment and residing in social-disorganised neighbourhoods are under-examined within intergenerational research designs. Ex-inmates could choose to live in these neighbourhoods either because of acquaintances living in the area, family roots or it could turn out to be convenient such as in the case of empty dwellings ideal for squatting. The pronounced presence of offenders, exposure to other crime families facing similar constraints (Van de Rakt et al., 2008) in a geographical context operating as an “activity field” (Wikström, 2009) could allow for the exposure to a series of crime promoters that serve as potential transmission proxies to crime continuity. This paper employs the concept of “crime promoters” (Ekblom, 2010) to examine environmental cues that might influence crime continuity across generations of Maltese families, considering spatial factors in relation to poverty and offender-residence hotspots.

- Research questions: Are there specific areas in the Maltese islands that are more likely to host families with an offending history? Is there a relationship between the residential location of crime families and the distribution offender and poverty hotspots in Malta?

The focus here is on the residential location of individuals belonging to crime families that are referred to the intergenerational cohort pertaining to the prison population. A closer inspection of residence location of convicted relatives within a crime family enables exploration of how many convicted family members lived at the same address using street level analysis. This is used to explore transmission risks related to indirect learning and promotion of behaviours in terms of spatial proximity. A spatial analysis is employed to examine the crime families’ residential zones vis-a-vis the offender/non-offender hotspots and poverty hotspots identified in an earlier Formosa (2007) Malta study. The rationale is to compare visually whether there is a spatial coalescence between the residential location of the family component and the offender in the 2000s. This explores further the relationship between the location of crime families and the socio-demographic composition of these areas, using welfare data used for identification of poverty hotspots.

LITERATURE OVERVIEW

Intergenerational crime research explores the crime patterns of generations of families over a number of decades. This genre of research investigates the similarities and differences between individual offenders who are related to one another by familial ties exploring primarily fathers and sons, and to some extent siblings covering at least two to three generations. It is noted that, criminal career research has served as the foundation for theory and methods to intergenerational crime research, since life-course and intergenerational frameworks of offending merge well (Van de Rakt et al., 2008) and, to a certain extent, overlap. Likewise, a number of intergenerational studies have opted to employ the criminal career methodological framework employing the risk factor approach so as to explore continuity and discontinuity of offending. However, research in the field does fall short of research designs that examine the underlying mechanisms that investigate how and why crime runs in families (Bijleveld & Farrington, 2009; Putkonen et al., 2002; Thornberry et al., 2003). If crime runs across generations of families, then why is this so?

In this study a risk factor is defined as a “promoter” (Ekblom, 2010) to crime; a “characteristic, activity and/or an experience” which increases the probability of crime (Kazdin et al., 1997: pp. 377). A mediating factor could also be a risk factor (Besemer, 2012). A number of risk and/or mediating factors tend to either blend or complement each other. Nonetheless, it is often challenging to explore the “temporal sequence of risk factors” (Besemer, 2012). Also, crime is part of a larger syndrome of anti-social behaviour as shown in various studies (Farrington, 1997). Thus, it is very likely that convicted individuals face a series of disadvantages such as unemployment, living in “bad” neighbourhoods and establishing intimate relationships with partners hailing from similar backgrounds (Kim et al., 2009; Brennan et al., 2002). We are all born in a family setting in a particular country with its own customs, norms and moral standards. The latter serve as building blocks for the initial development of our “activity field”. As one becomes more socially independent and an active societal member, the “activity field” expands, as the neighbourhood plays an important role in the development of the “activity field” (Wikström, 2008). The setting and the nature of criminogenic exposure to which individuals are subjected (Wikström, 2009; Wikström et al. 2010) are equally important.

Wikström (2006) highlights that within an environmental setting a series of social factors present themselves as “causes of causes” (Wikström, 2009) influencing particularly those who are more crime prolific (Wikström et al., 2010). Crime occurs in a setting influenced by moral standards and self-control mechanisms that are accommodated by criminogenic characteristics such as crime opportunities, friction and monitoring levels (Wikström, 2008). Thus, individual and family crime risk factors together with available resources needed to avoid or commit crime (Ekblom, 2010), perceptions emanating from past criminal attempts and readiness, either promote or prevent crime. In other words, does this imply that what Ekblom (2010) defines as the “readiness to offend” is being transferred across generations? “Readiness to offend” is closely linked to emotional and motivational situations, which represent current scenarios and/or experiences in life that activate crime; examples include unemployment history, residing in neighbourhoods laden with problems, exposure to a crime and stress. Similar to the study of risk factors, such causal components are not fundamentally self-determining and may not be specific to crime continuity. Ekblom’s Conjunction of Criminal Opportunities (CCO) adopts an ecological framework and is comparable to aspects of Wikström’s (2006) Situational Action Theory. Consequently, a series of risk and/or mediating factors could be “causes of causes” (Wikström, 2009) in crime transmission. Nonetheless, CCO makes one reflect on adopting the concepts of “crime preventers” and “crime promoters” to understand better continuity and discontinuity of offending. Also, the community could serve as an “activity field” providing one with crime opportunities and/or criminogenic exposure (Wikström, 2009) which act as risk or mediating factors accommodating the “role” of the crime promoter (Ekblom, 2010) and sustaining crime continuity across generations.

Two theoretical frameworks mainly social interactionists (Glaeser et al., 1996) and differential association theorists envisage that people influence each other’s behaviour (Falk & Fischbacher, 2002). The latter claim that criminal behaviour is learnt (Le Blanc, 2008) in intimate groups that encourage law-breaking activities; criminal parents model crime through values, attitudes and techniques transmitted through learning (Sutherland & Cressey, 1978; Sutherland et al., 1992). On the other hand, social interactionists claim that one is more crime prolific in “bad environments” as behaviour is conditioned by the behaviour of others in a social context highlighting that people of similar characteristics choose similar neighbourhoods (Falk

& Fischbacher, 2002; Bottoms, 1995). From a functionalist perspective, it is argued that when the family does not fulfil its functional role in society, stress, conflict and other social drawbacks emerge. The latter include financial struggles, an undesirable home environment and crime (Ou & Reynolds, 2010). Also, unemployment renders families at risk of poverty and social isolation (Linn, 2008). In view of this, unemployment endangers the social fabric in the neighbourhood (Hooghe et al. 2011) since those living in poverty feel frustrated as a result of the perceived social injustice (Blau & Blau, 1982) related to occupying a lower position on the social ladder, disrupting the equilibrium as they choose to commit more crime (Kawachi et al., 1997; Wilkinson, 1997). Consequently, families may be forced to reside in neighbourhoods laden with social-problems because of their economic situation. This in turn generates extra inconveniences and strains (Agnew, 1992) on themselves as individuals and on those families already residing there (Kawachi & Kennedy, 1997; Wilson, 1987). Strain instigates negative feelings that could serve as fertile grounds for crime (Agnew, 1992). These circumstances could mould generations of families (Skardhamar, 2009), whose probability of success in life (Breen, 2005) is restrained by strain (Agnew, 1992), social exclusion (Farrall et al., 2010; Houchin, 2005) and/or choice (Bottoms, 2006).

The relationship between land use and the social components of the environment (Hirschfield, 2008) has also linked to crime in various studies. Socially disorganised neighbourhoods characterised by poor collective efficacy (Sampson & Wikström, 2008) are known to affect crime rates (Sampson, 1986; Veysey & Messner, 1999). Furthermore, this forced residence choice reinforces social exclusion (Houchin, 2005) and negatively affects social cohesion and the establishment of social ties that serve as building blocks to informal social controls (Warner, 2007). Crime is also location-bound as certain geographic areas are criminogenic as a result of “transgenerational transmission” (Shaw & McKay, 1942). These genres of locations are characterised by disorganisation and the absence of social controls (Sampson & Groves, 1989). Thus, criminal attitudes and behaviours are culturally transmitted. Malta, a society where parents enquire about a prospective in-law (Tabone, 1994), and compared to other European countries married life “is society centred” Abela (1991: pp. 42). Children are expected to embrace the values of their parents whilst these values are passed on across generations through the family (Abela, 1991). The size of the islands, its culture and the overlapping geographic boundaries undoubtedly influence partner choice and married life in Malta. Marriage is likely to happen between similar partners who live in close neighbourhoods (Rowe & Farrington, 1997). This links the assortative partner phenomenon to environmental issues; residing in neighbourhoods inhabited by people sharing similar backgrounds (Falk & Fischbacher, 2002). Also, offenders reside in areas characterised by poverty as identified using NNH analysis of poverty and crime (Formosa, 2007). Two particular localities, Valletta and Bormla, are identified by Formosa (2007) as offender-residence hotspots. Since the post-war era both bear witness to dilapidated housing and migration of lower-earning persons. Valletta and Bormla host a significant number of ex-offenders and consequently the residents of both localities feel stereotyped and labelled wherein their children suffer stigmatisation. This stigma has been inherited across generations since the post-war period (Azzopardi, et al., 2013) to date, wherein crime could persist in such neighbourhoods as these areas attract more offenders than law-abiding citizens in their vacant houses. Also, the feeling of *omerta*[†] quite typical of Mediterranean cultures, is a clear indicator of the close-knit community that features in the

[†] *Omerta*[†] refers to the concealment of information about a crime.

Maltese Islands (Azzopardi et al., 2013). In certain locations such as the island of Gozo the expression of *omerta'* is even stronger and this explains the lack of readiness to report a crime. Within any town in the Maltese Islands, esteemed as well as "ill-credited" families are frequently known and quite difficult to go unobserved. This could catalyse labelling but interestingly it could also instigate a stronger sense of loyalty amongst family members. The need to support each other "*fit-tajjeb u fil-ħazin*"[‡] could pave way to legal and illegal activities alike. This is even more so due to the fact that most families reside in one locality for generations when the Malta island are only 28km in length and 14km in width and half the dimensions for Gozo. Thus, rendering it difficult for one to escape from criminogenic exposure unlike in much larger countries. In addition, an accumulation of social disadvantages could support negative scenarios (Abela & Tabone, 2008) which could serve as crime promoters. This could pave way to a situation of "causes of causes" (Wikström, 2009) and the presence of "multiple risks" (Besemer, 2012) that directly or indirectly sustain crime continuity. A significant number of studies have explored the relationship between the environment and crime for decades. However, very few studies have attempted to compare the residential location of crime families vis-à-vis the neighbourhoods. This being said, due to the size of the Maltese islands and spatial proximity, exploring such phenomena is highly relevant to explore continuity of offending across generations.

METHODOLOGY

An intergenerational database was created as part of a PhD study covering all Maltese inmates serving a prison term between 1950 and 2010 (Formosa Pace, 2014). One notes that in the absence of a criminal career database the author had to resort to using the archival files of prison records to create a database that allows for studying for the first-time phenomena related to intergenerational offending in the Maltese islands. This database holds the general prison population comprised of the intergenerational cohort and non-family component over the sixty-year period of data collection. A total of 622 crime families were mapped wherein all restricted and extended family relationships were inputted attesting continuity across 2 (2G) to 5 generations (5G). The family trees representing crime families were individually checked and a set of categories were created based on the number of individuals (incarcerated persons) that could be found in such a *family tree* and identified in the Registration Questionnaire. The geographic location identified in one registration questionnaire administered on entry to prison was considered. Restricted relationships refer to relationships between members within a nuclear family whilst extended relationships refer to relationships with relatives who do not belong to the nuclear family. A decision was taken to include all restricted and extended relatives considering family life in the Maltese islands.

The analytical process carried out was two-fold; examination of the individual inmates within a crime family and the study of the crime family notable by the number of related individuals[§] pertaining to their respective *family tree*. The size of the family was represented by the number of nodes (2+ to 10+) depicting the number of individuals pertaining to a crime family. In this study, a crime family consists of Maltese individual members linked through restricted and extended family relationships who at some point were interned behind bars within the only local prison between 1950 and 2010. More importantly this study accounts solely for Maltese

[‡] In good and bad times.

[§] Number of individuals is represented by nodes within a crime family

inmates since the family life is very much culturally specific. This intergenerational dataset was used in conjunction to the Formosa database that was created as part of a PhD study (2007) in view of offender and poverty hotspots.

The first spatial exercise focused on mapping the residential location, of individuals belonging to crime families to explore their choice of residential neighbourhood at NUTS 5 level^{**}. In addition, census data was used to examine the changing nature of the areas within which crime families lived in contrast to the demographic changes noted over the decades in the 68 councils that constitute the Maltese islands. This was consolidated through an in-depth examination of the residential location employing family size as the main variable. Geographical Information Systems (Mapinfo and ArcGIS), were employed to check whether there was any relationship between the poverty hotspots, the residential hotspots identified by the Formosa (2007) study and the aggregation of the offenders in crime families. These were carried out at NNH1 level of analysis. This method has its limitations such as a number of data points are needed to form a cluster. In addition, the offender-residence was used to create spatial ellipsoids representing poverty and offender hotspots using the software CRIMEStat III (Formosa, 2007). The programme CrimeStat III was employed for the mapping of offender residence locations on the identified offender-residence and poverty hotspots (Levine, 2002). This exercise caters for “hotspot” analysis wherein hotspots are presented as ellipses. The poverty hotspots were created through a study of a dataset that analysed the presence of poverty through the mapping of the UB (Unemployment Benefit)^{††} provided by the welfare department allocated to those who are unemployed and who have no other source of income and thus more likely to fall below the poverty line. More importantly, one notes that the Formosa (2007) had identified a spatial correlation between offender-residence location and poverty hotspots. These phenomena could be directly or indirectly linked to social exclusion in neighbourhoods likely to host a concentration of residents sharing similar backgrounds and constraints (Falk & Fischbacher, 2002). In view of this, such neighbourhoods could fail to prevent crime (Anderson, 1990; Wilson, 1991) and could play a significant role in the development of the activity field (Wikström, 2008) and subsequently act as transmission proxies to crime continuity. Also, the influence of the community on the crime was undertaken through a more in-depth spatial analysis focusing on the geographical proximity by examining two restricted relationships that featured predominantly in the family tree mapping exercise; parents-offspring, and siblings living in the same street.

In another spatial exercise data was examined for the 2000s aimed at studying the potential concentration of families in specific towns on the islands through the Craglia et al. (2000) risk assessment methodology. This exercise is based on a process where the national rate of an activity (whether number of offenders living in a street or zone, number of offences occurring in an area) is acquired as based on a common denominator. Thus, if the number of offences in Malta registered 400 in a year where the population is of 400,000, then the national rate would be that of 1:1000 or a risk of 1 crime per thousand persons. Thus, would translate to 10 expected crimes on a town of 10,000 persons. However, in the latter town, 100 offences were registered, which means that the risk for that town stands at 10 times the national rate. As the model places all towns on the same level, and types of variable can be analysed as long as the

^{**} Nomenclature of terrestrial units for statistics (EUROSTAT): NUTS5 represents the Local Council level

^{††} Unemployment benefit as a surrogate for poverty in the absence of poverty index

denominator is common (whether area of the zones under study, population etc.). In this study the focus was to examine the number of offenders living in the smallest possible zones (NUTS 5 level) which gauged the expected number of offenders residing in that zone. If the observed numbers were larger than the risk assessment renders the relative rate higher than the national norm or smaller should the number of observed offenders be small. The addresses were filtered by street names as such were unlikely to change over the decades unlike door numbers. The data used for this study covers a sixty-year period, thus a significant number of persons were involved in inputting inmates' information in files and registration questionnaires^{‡‡} which were used to create the intergenerational database. Thus, the researcher was not aware of the potential presence of any bias; such as selective deposit^{§§} and selective survival^{***}. However, to counteract for the occurrence of such bias, the author considered only those family members whose physical files were available in the prison vaults and consequently the claimed relationship was cross-checked. In addition, spatial analysis based on the residential location was limited by the fact that the identification of the one address location identified in the prison records.

FINDINGS

Valletta and particularly Bormla serve as the home towns for the relatively larger crime families as represented by the 10+ node structure with a 24.5% of the individuals identified in this structure residing in Valletta and 23.6% in Bormla. These large crime family structures are indicative of continuity of offending persists across two to five generations of families. Interestingly the largest crime family consisting of 54 related offenders attesting continuity over 5 generations through a series of restricted and extended opt to live either in Valletta or in Bormla. This trend confirms the trends identified in the Formosa (2007) findings in that Valletta and Bormla host the largest share of Maltese offenders. In view of the 2-node structure these crime families live in Qormi^{†††} (7.8%), followed by Valletta (6.5%), Birkirkara (6.3%) and Bormla (5.2%). Additionally, Valletta experienced an influx of crime families except for the 1970s-1980s and the 1990s-2000s. One has to consider that the general population for Valletta experienced a decline across all the decades either because people moved out of Valletta because of depilated housing and social stigma triggering an ageing population. A similar trend is also observed for Bormla except for the decrease in the 1960s-1970s which could be linked to the fact that Bormla as a town suffered from a considerable reduction in number of residents since the post-war period to date, particularly due to the closure of the British naval base in 1979 also paving way to an ageing population.

Interesting trends emerge from the analysis of the proportionality of presence of crime families in sixty-eight councils based on national rate calculations employing the Craglia (2001) methodology. Table 1.1 illustrates that Bormla, Valletta and Santa Lucija host a concentration of individuals belonging to crime families as attested by the very high rates (5.6; 4.0; 3.7 x National Rate) for the intergenerational cohort. Noteworthy is the trend for Santa Lucija

^{‡‡} On registration inmates sit for a questionnaire wherein one of the questions enquires about family criminal record

^{§§} Refers to the editing of content.

^{***} Artefacts survive if they are consumed through repeated use.

^{†††} Birkirkara and Qormi are two of the largest localities in the Maltese Islands, whereas Valletta and Bormla tend to be classified as localities hit by the ageing population phenomenon and with their population decreasing gradually across the last four censuses.

considering that the Formosa (2007) study did not identify Santa Lucija as an offender hotspot. In summary, the general population decrease in Valletta and Bormla since the 1985 census (NSO, 2012) to date contrasts with the residential preferences of crime families for the same decades in Valletta and Bormla. In summary, Valletta and Bormla are hometowns for the typical Maltese inmate, for crime families and even more so for the larger crime families (10+ node). Bormla similar to Valletta is characterised by a number of social drawbacks such as delapidated housing, social stigma, socio-economic constraints and labelling. Likewise, these which factors could serve as indirect transmission proxies to crime continuity allowing for the clustering of crime families wherein individual offenders function as crime role models in communities that serve as “activity fields”.

Table 1.1: Residential presence of Intergenerational, Non-Family and the PopGen cohorts

NUTS5_ID	NUTS5_DESP	Population	Intergenerational Offences	Non-Family	PopGen	Intergenerational RISC	Non-Family RISC	PopGen RISC
1	VALLETTA	6295	36	32	68	5.6xNational	2.7xNational	3.7xNational
5	BORMLA	5569	23	29	52	4.0xNational	2.8xNational	3.2xNational
57	SANTA LUCIJA	3136	12	12	24	3.7xNational	2.1xNational	2.7xNational
54	SAN LAWRENZ	600	2	0	2	3.2xNational	0.0xNational	1.2xNational
4	ISLA	3010	9	17	26	2.9xNational	3.0xNational	3.0xNational
18	FLORIANA	2158	6	9	15	2.7xNational	2.2xNational	2.4xNational
29	KALKARA	2863	8	6	14	2.7xNational	1.1xNational	1.7xNational
31	KIRKOP	2229	6	3	9	2.6xNational	0.7xNational	1.4xNational
3	BIRGU	2648	5	9	14	1.8xNational	1.8xNational	1.8xNational
47	PIETA	3835	7	9	16	1.8xNational	1.3xNational	1.4xNational
...	...							
14	BIRKIRKARA	22613	22	35	57	0.9xNational	0.8xNational	0.9xNational
...								
12	ATTARD	10682	3	7	10	0.3xNational	0.4xNational	0.3xNational
...								

An analysis of the presence of siblings living in the same street was run through another spatial query. The parameters of the cohort studied here included all relationships tagged by the presence of siblings filtered by two generations (2G) as the unit of analysis, which would have included the main 2-siblings incidence through to the larger groups which run to six brothers. The analysis shows that 49% lived in the same street. This result signifies that most siblings live in the same location, which requires further study in the future in order to establish their status, and whether or not they moved to another address in the same street. This said, the distance between dwellings in the same street is very small as Maltese streets are rarely more than a few hundred meters in length. This suggests that irrespective of the presence of the same or other dwelling location, the fact that the street level was chosen, demonstrates that the concept of proximity is represented adequately. In the second exercise, the analysis was filtered by restricted relationships tagged by the presence of parent-offspring as represented in the 2G. The analysis shows 31% lived in the same street. This finding indicates that the family incidence occurs early in the lifetime of the offspring, before they move out, which exposure to another offender in dwelling could be influential on the offspring or in some cases on the parent/guardian. In Malta, leaving the dwelling to obtain one's own residence is postponed even to the 30s, with movements occurring on the acquisition of marriage or partnership status.

The map in Figure 1.1 shows the residence location the individuals in the intergenerational cohort for the 2000s whilst Figure 1.2 maps those intergenerational individuals whose residence is within an identified poverty hotspot^{###}.

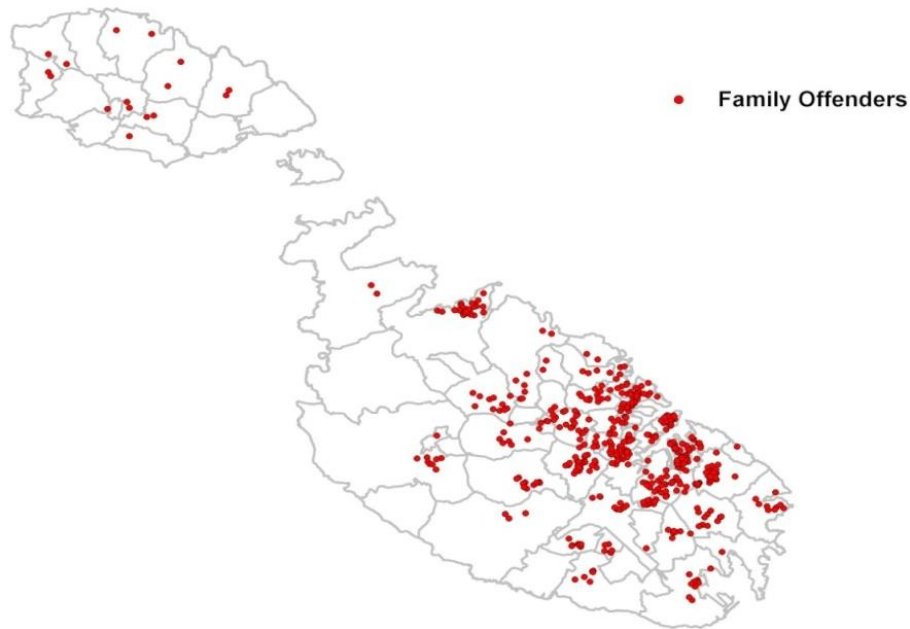


Figure 1.1: Offenders' Residence 2000s – Intergenerational cohort (Adapted from Formosa, 2007)

Another spatial analysis examined the offender and non-offender hotspots and the poverty pockets of Valletta and Bormla down to street level analysis. This said, as offenders belonging to families in crime concentrate in a locality, the dynamics of crime within that locality change in a way that continuity in offending is propagated across generations of families. Also, different families could influence each other since the closeness between residences facilitates networks of crime through vicinity, peer factors and relatively small sized localities. The physical layout of Maltese localities could accommodate labelling of families. These together with factors such as those related to geographical proximity, may possibly ease the “role” of the crime promoter (Ekblom, 2010) even more so for Valletta and Bormla both of which suffer from social stigma.

This initial analysis shows that in the 2000s, 40.79% of the individuals belonging to the intergenerational cohort lived in identified poverty hotspots in the 2000s. Taking a closer look at Figure 1.3, it is clear that in terms of poverty hotspots analyses at local council level, offenders belonging to crime families reside mostly in the poverty hotspots of Valletta (12.6%), followed by Zabbar and Qormi (8% each), Zebbug (Malta) at 7.4%, Sliema (5.1%) and Bormla (4.6%). Housing in Valletta and Bormla is relatively cheaper than in any other locality on the island with such a factor serving as a pull factor for individuals who are unemployed and even more for the offender just released from prison jobless and consequently likely to opt for cheaper dwellings.

^{###} Formosa (2007) study.

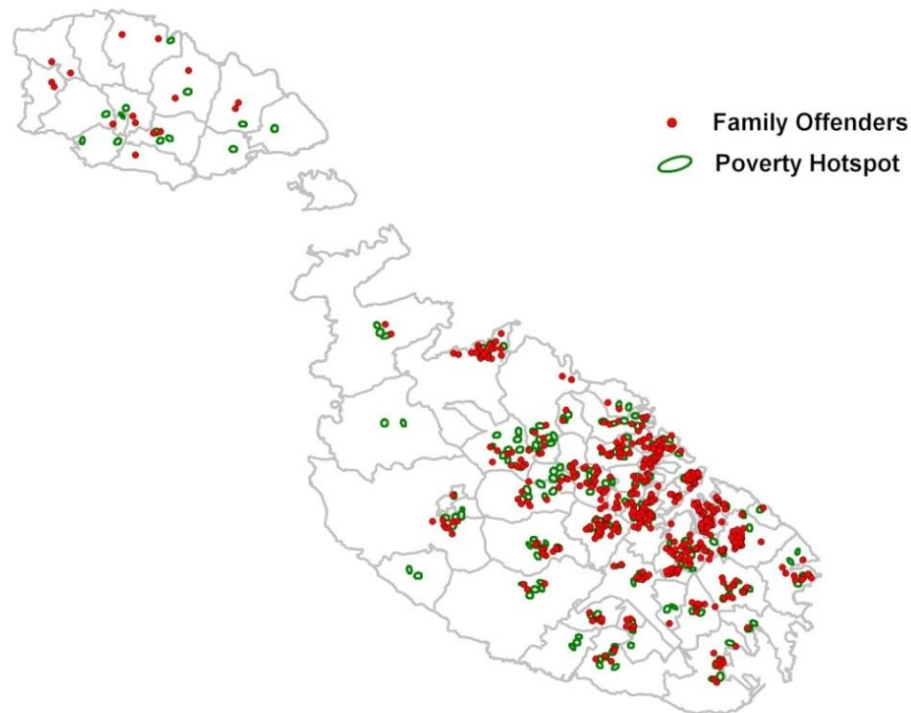


Figure 1.2: Map of Intergenerational Individual Offenders residing in Poverty hotspots.
(Adapted from Formosa, 2007)

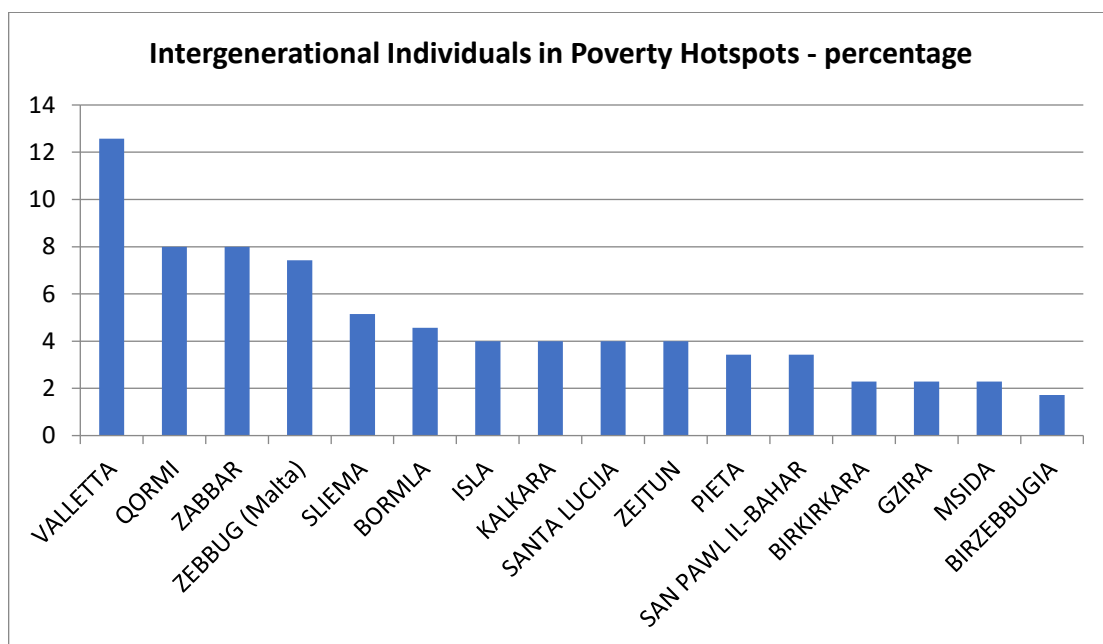


Figure 1.3: Families residing in Poverty hotspots by Locality in the 2000s- NUTS5

This said, one noted that Valletta has the largest concentration of empty dwellings towards the 2000s consequently attracting a number of squatters and this could explain the findings from this spatial inquiry. Also, Bormla and Isla are two of the three cities that constitute the rust belt area; the shipping industry has been discarded leaving the residents with fewer employment opportunities. Interestingly towns like Zebbug (Malta), Sliema, and Zabbar feature for the first

time as localities for offenders belonging to crime families residing within national poverty hotspots which findings require more in-depth analysis. Also, the situation in Qormi could be explained since this locality is home town to offenders in the 2-node structure.

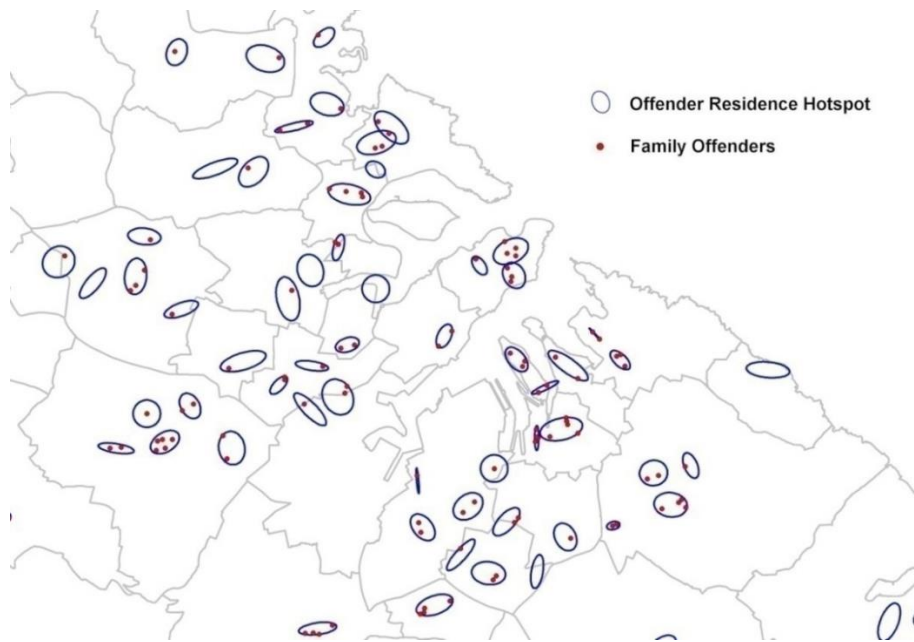


Figure 1.4: Map of Inter-generational Individual Offenders residing in offender Residence hotspots

Figure 1.4 shows the clusters of individuals in crime families who reside in the offender residence hotspots. The offender residence hotspots are based on the proximity analysis of those residential locations pertaining to the offenders. The hotspots are spread over the islands and highlight those ellipsoids that depict those specific areas that host a concentration of offenders who live in proximity to each other. Once the family offenders are mapped, a point-in-polygon analysis was carried to determine which family individuals reside in such offender hotspots so as to visually compare the concentration of crime families in offender hotspots vis-à-vis non-offender hotspots. The offender residents' hotspots were created through the same spatial exercise employed in the poverty hotspot approach.

46.85% lived in the offender residence hotspots (the latter designated using through NNH1) in the 2000s. Valletta (9%) Bormla (7.5%), Qormi (7%) and Zabbar 6% have the highest concentration of offenders in crime families clustering in offender residential hotspots (Figure 1.5). These are followed by Birkirkara and Gzira. The trends here follow same trends identified in the poverty hotspots analysis discussed earlier. Hence, directing attention to the fact that poverty hotspots and offender-hotspots could be closely linked to the quality and standards of housing in an area. The findings for Valletta and Bormla corroborate previous risk variable analyses which identified these two localities as hosting a concentration of crime families. Also, Valletta, Gzira and Qormi have higher than the national rates for concentration of crime families respectively.

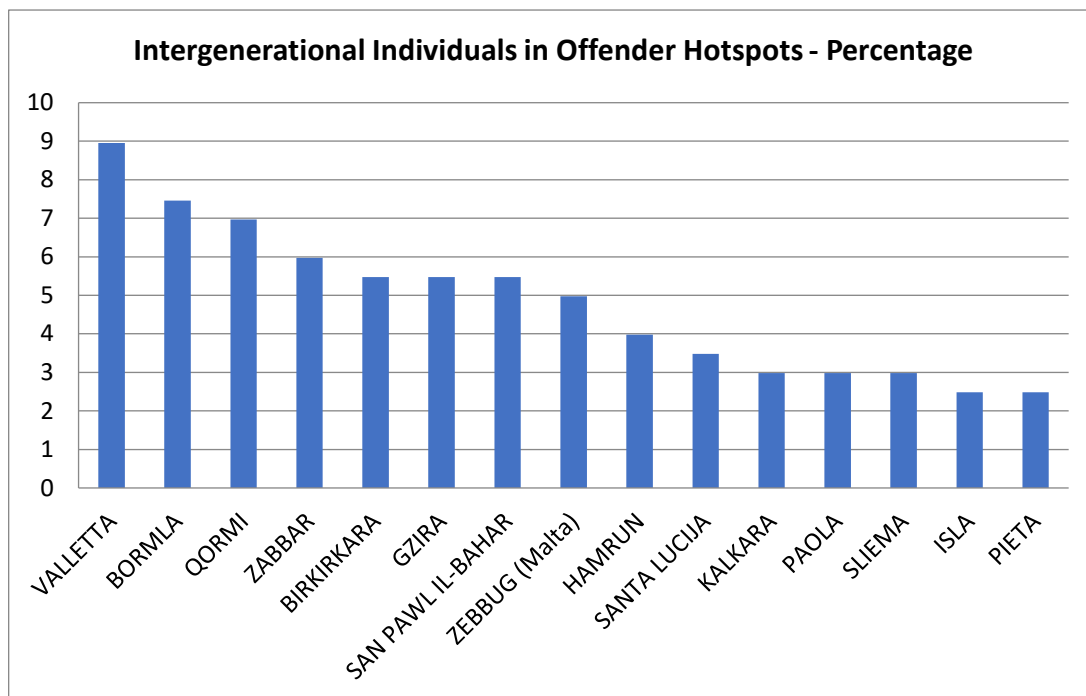


Figure 1.5: Individuals in Offender Hotspots by Locality in the 2000s

24.47% of the intergenerational cohort lived in intersecting offender-residence and poverty hotspots for the 2000s; as shown in Figure 1.6a.

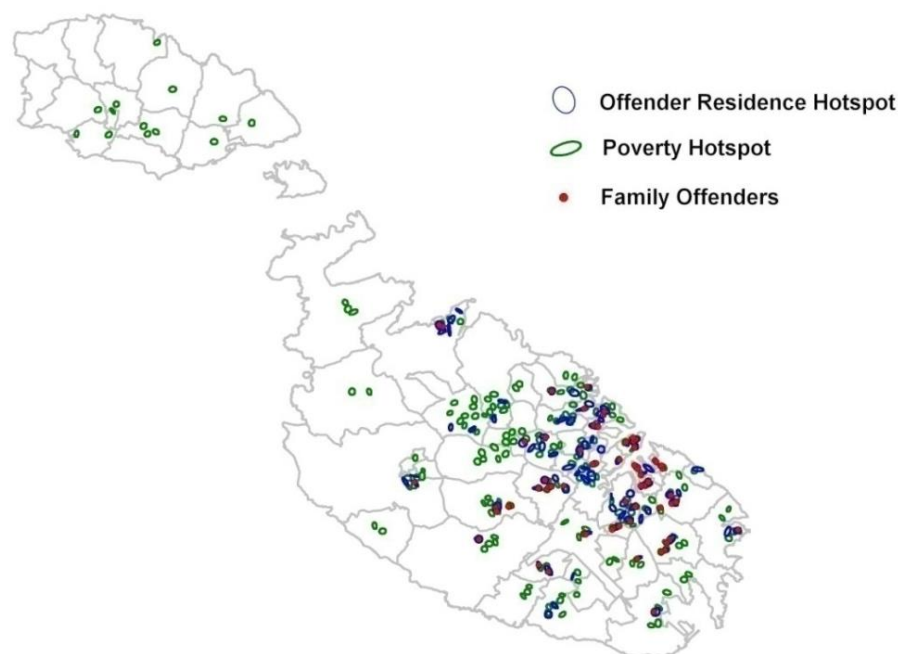


Figure 1.6a: Map of individuals residing in Offender Residence hotspots and poverty hotspots in the 2000s (Adapted from Formosa, 2007)

Figure 1.6b indicates clearly, that the intersecting hotspots are found in the Grand Harbour area mainly in Valletta and Bormla; Zebbug (Malta), Qormi, Zabbar and Santa Lucija. Valletta hosts the largest concentration of empty dwellings and thus attracts squatters on the other hand

Bormla is one of the three rustbelt cities. This said, trends here show that poverty hotspots are convenient as offender residence since housing here is expected to be relatively cheaper than other areas in the Maltese Islands. Interesting are the overlay of poverty and offender-residence hotspots for Zebbug (Malta) and Santa Lucija identified in this study.

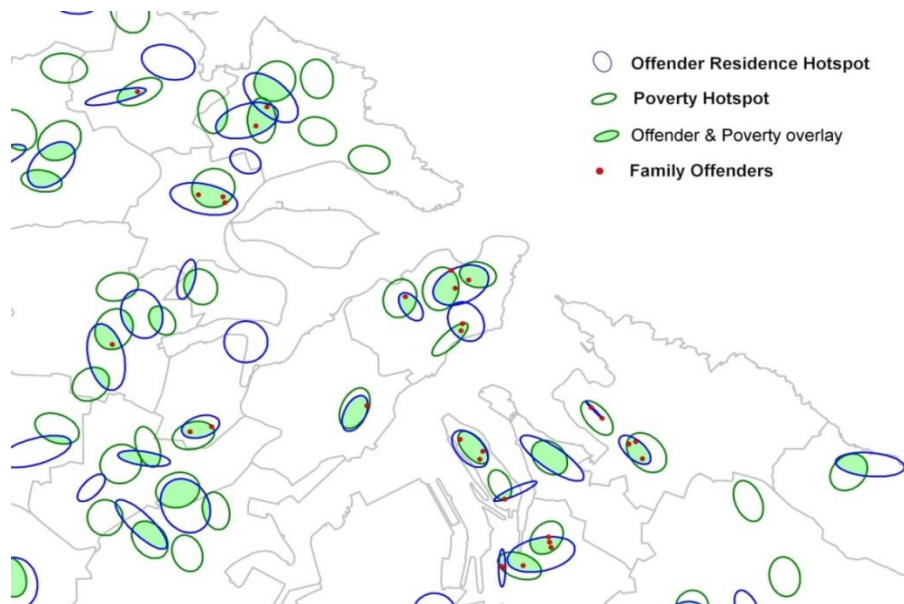


Figure 1.6b: Map of individuals residing in offender residence hotspots and poverty hotspots: detail of the Grand Harbour Area (Adapted from Formosa, 2007)

DISCUSSION AND CONCLUSION

Valletta, Bormla and Santa Lucija could serve as Wikström's (2008) activity field providing one with crime role models on exposure to crime. Consequently, in a "bad environment" which hosts a concentration of crime families sharing similar backgrounds such as in Valletta, Bormla and Santa Lucija one is more crime prolific as a series of constructs within these locations "promote crime" (Ekblom, 2010). Interesting are the findings for Santa Lucija when considering concentrations of crime families in the locality and the analysis in comparison to the identified offender-residence hotspots. In summary, Santa Lucija is an attractor as a residence to the individual offender a phenomenon which has featured for the first time in this particular study.

Taking on the arguments put forward by the social disorganisation framework (Shaw & McKay, 1942), findings here point towards a scenario wherein localities particularly Valletta and Bormla are likely to retain their criminogenic characteristics through "transgenerational transmission". Thus, in the absence of the ability to implement and maintain effective means of social controls they could be classified as socially disorganised neighbourhoods (Sampson & Groves, 1989). On spatially analysing the intersecting hotspots for poverty and offender residence; Valletta, Zebbug (M), Qormi, Zabbar, Bormla and Santa Lucija feature pronouncedly. The likelihood for individuals pertaining to crime families to reside in offender residence hotspot and poverty hotspots could be the result of a number of factors. In view of this, the individual offenders continue to live with their restricted family mainly parents, or if they set up their own residence then they could decide to live in the same locality or get married or is involved in a partnership relationship with someone who lives in the same locality. This could be either a matter of choice as one opts for residing in a locality that suits their needs. On the

other hand, offenders and crime families could opt to settle in localities wherein individuals share similar background since in these neighbourhoods they would feel socially included rather than socially excluded. Also, inmates could find it difficult to rent elsewhere as landlords would be hesitant to do so as they would be renowned as individual offenders and their criminogenic family background renders them unlikeable tenants. However, this could also be linked to affordable housing as in the case of Valletta characterised by squatting and Bormla being one of the three rust belt cities is also characterised by cheap housing and social stigma. Results here direct one's attention to continuity in offending either because of the family environment they share particularly in the case of siblings and parent-offspring, or geographical proximity and/or due to some form of social interaction through which one is exposed to the "crime promoter". Geographical residential proximity could potentially accommodate crime networks within the family and the community. This study can be enhanced through the further investigation of the parent-offspring relation prior-to and post-exit from the family home (family of origin). A series of crime promoters to intergenerational continuity are accommodated by geographical proximity, insularity typical of Mediterranean cultures, closed-knit familial ties and the strong sense of identity in Malta that feature in "activity fields" whether at the family level or at the community level. These stimulate a scenario where "causes of causes" (Wikström, 2008) where the setting does not directly predispose individuals and families to crime but has a significant influence on those with high criminal propensity (Wikström et al., 2010) in this case the individual/s belonging to crime families. Additionally, their effects are expected to influence more those who are prolific, in this case individuals belonging to crime families, rendering it difficult for one to escape from a criminogenic environment. In this respect, crime continuity across generations of Maltese families is related to situations tied to the concept of a transmission of constructs linked to "readiness to offend" (Eckblom, 2010).

Thus, the family serves as a network for crime in a number of ways such as the provision of crime role models, trusted accomplices and a predisposition towards offending as a "routine" activity to meet financial needs. This said, more studies need to be undertaken as the risk/mediating factors identified as potential crime promoters are not exclusively specific to intergenerational transmission of offending but are applicable to offending in general. The spatial analysis does not yield information on potential migratory trends of crime families and/or individuals within crime families to and from the sixty-eight localities in the Maltese islands and neither does it explore the migratory trends vis-à-vis poverty and offender hotspots. Consequently, findings emanating from the spatial analysis offer indications of environmental factors as indirect transmission proxies to crime continuity. This scenario has been greatly influenced by lack of data on internal migration factors over the decades and only data for the 2000s was explored. Future research could take up the study of migratory patterns of crime families and individuals belonging to crime families longitudinally so as to study further the potential influence of environmental factors on criminal propensity at the individual level as well as intergenerational offending. Future work should focus more on studying "what is being transferred across generations". The Conjunction of Criminal Opportunities (CCO) theory put forward by Paul Eckblom (2010) is undoubtedly under-investigated in intergenerational crime research. Are continuities and discontinuities in offending and convictions related directly or indirectly to "readiness to offend"?

ACKNOWLEDGMENTS

The author expresses acknowledgement of assistance acquired from Professor Saviour Formosa from the Department of Criminology, L-Universita' ta' Malta who was instrumental in the spatial analysis process.

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