UNIVERSITÁ CATTOLICA DEL SACRO CUORE MILANO

Dottorato di ricerca in Criminologia Ciclo XXVII S.S.D: SPS/12

TESTING AND EXPLAINING CRIME CONCENTRATIONS OUTSIDE THE U.S.: THE CITY OF MILAN



INTERNATIONAL PH.D. IN CRIMINOLOGY DOTTORATO INTERNAZIONALE IN CRIMINOLOGIA

Cycle XXVII

TESTING AND EXPLAINING CRIME CONCENTRATIONS OUTSIDE THE U.S.: THE CITY OF MILAN

TABLE OF CONTENTS

List of Tables.	9
List of Figures	11
Abstract	13
Introduction	15
CHAPTER I. Micro units of geography and the criminology of place	17
I.1 The geographical approach in the criminological tradition: from the nine	teenth
century until today	17
I.2 The shift from an offender-based to a place-based approach	22
I.2.1 Routine Activity Theory	25
I.2.2 Rational Choice Theory	26
I.2.3 Crime Pattern Theory	27
I.2.4 Situational Crime Prevention	28
I.3 The development of computerised techniques and the hot spot analysis	30
I.4 How crime at place has been studied in the last few decades: A review of resear	rch 34
I.4.1 Different unit of analysis in crime and place studies	34
I.4.2 Different types of crime in crime and place studies	36
I.4.3 Multi-victimization and crime prevention in crime and place studies	38
I.5 Conclusions	40
CHAPTER II. The street segment analysis in the criminology of place	42
II.1 Street segments as unit of analysis	44
II.2 The Seattle Study and the law of crime concentrations	48
II.2.1 The street segments grid	48
II.2.2 Crime incident data	49
II.2.3 A law of crime concentrations	50
II.3 The Seattle Study and the explanation of crime concentrations	52
II.3.1 Opportunity Theory	56
II.3.2 Social Disorganization Theory	58
II.3.3 Most important findings and limitations	59
II.4 Testing the presence of crime concentrations outside the US	61
II.5 Conclusions and research problem	63

CHAPTER III. Data and Methodology	68
III.1 Objective 1: testing the presence of crime concentrations and its stability	68
III.1.1 The city of Milan	70
III.1.2 The construction of the street segment network	75
III.1.3 Crime data and the geocoding process	78
III.2 Objective 2: testing the effect of opportunity and social disorganization theories.	81
III.2.1 Dependent variables	83
III.2.1.1 Burglaries	83
III.2.1.1 Robberies	84
III.2.2 Explanatory variables	85
III.2.2.1 Variables to measure opportunity theory	86
III.2.2.2 Variables to measure social disorganization theory	10
III.3 Conclusions1	25
CHAPTER IV. Presentation of the results	27
IV.1 Objective 1: crime concentrations and their stability in the city of Milan 1	27
IV.1.1 Crime concentrations	27
IV.1.2. Stability of the crime concetrations	41
IV.2 Objective 2: effects of opportunity and social disorganization factors on crime	at
street segments	43
IV.2.1 Results of the negative binomial regression models for burglary 1	44
IV.2.2 Results of the negative binomial regression models for robbery 1	49
IV.3 Conclusions	53
CHAPTER V. Discussion	54
V.1 Confirming or discarding the working hypothesis	54
V.2 Advantages and limitations of the study	63
V.3 The present study and its main contributions to the criminological research 1	66
Conclusions	68
Appendix I	70
References	72
Acknowledgments	87

Abstract

There is a strong evidence that crime is tightly concentrated in a small number of micro places in urban areas. Indeed, studies conducted in different U.S. cities show how 50% of crime events are concentrated in about 3% to 6% of street segments. Moving from these findings, Weisburd, Groff and Yang raise the issue as to whether there is a law of crime concentrations, applicable across different cities and stable over time. Indeed, despite the general decrease of crime trends in Seattle, the authors find that almost an equal number of street segments in the city produce the same proportion of crime in the 16-year period under study. These results were confirmed in Tel Aviv-Jaffa (Israel), suggesting the presence of a sort of "normal level of crime" among cities at micro level.

This study aims at testing the presence of crime concentrations outside the U.S., in a different context, where this hypothesis has not yet been tested and quantitative studies at street segment level have not yet been developed. In particular, a street segment analysis was conducted in Milan (Italy) and the presence of crime concentrations was confirmed. In addition, in order to understand the main determinants of crime concentrations in Milan, a set of negative binomial regressions models were run. Findings show how social disorganisation factors seem to have stronger influence on crime at street segment level, compared to opportunity factors.