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# A Study on Spatial Distribution of Criminals Residence and Their Behavioral Aspects in Coimbatore City

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**ABSTRACT:** Differential development, low income and non availability of employment gave rise in origin of criminals in Coimbatore city. More than 70% of the criminals live in slum areas in central, west and eastern part of the city. Only few originate outside the Coimbatore city. Criminals commit crimes at short distances from the places of their residences. Criminals usually commit crimes at high income residential and commercial areas in core area of the city and isolated residential locations. The commuting places such as bus stands, railway station and market places also provides more opportunity for the commission of crimes in Coimbatore city. The present paper analysis the spatial locations of criminal residences and behavioral aspects in Coimbatore city.

**KEYWORDS**: Spatial – Criminal - Commuting place – Behavioral aspects.

# I. INTRODUCTION

Crime offences in city differ from area to area due to differential development of the city. The heterogeneity in culture, varied social and economic background and unequal distribution of the resources provides more opportunity to commit crime offences in Coimbatore city. For future planning and prevention of crime, there is a need to study the residential location of criminals, their socio economic characteristics and behavioral aspects of the criminals. Hence an attempt has been made in the present paper to examine the spatial distribution of criminals residences and their behavioral aspects in Coimbatore city.

# II. STUDY AREA

The study area Coimbatore city is located in the western part of Tamil Nadu. It extends between 10°55'4" North 11°5'11" North latitudes and 76°49'16" East to 77°6'46" East longitudes. Coimbatore city, the study area consists of 15 Police Station Jurisdiction areas and divided into 4 Sub-Divisions. It covers an area of 141.1 sq.km and has a population of 14.5 lakh as per census 2011.

# **III. OBJECTIVES OF THE STUDY**

The main aim and objectives of the study is to analysis the spatial distribution of crimes in Coimbatore city. The objectives are

- 1. To study the spatial location of criminals residences in Coimbatore city
- 2. To locate the places of occurrence of crime and
- 3. To study the spatial aspect of the criminals.



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#### Fig.1 Study Area Map

## **IV. METHODOLOGY**

The data pertaining to the places of residence of criminals, the places of occurrence of crimes, the socio-economic data such as age, sex, family size, religion, literacy, occupation and income have been obtained for all detected cases during 2014 from Crime Bureau Records maintained by the Police Commissioner Office and Police Stations in Coimbatore city. The collected information were processed and analyzed by using simple statistics of percentages and results were mapped by using Arc GIS 10.3 software. The spatial pattern of criminals location and the places of occurrence of various crimes were brought out through dot maps.

#### V. RESULTS AND DISCUSSION

## A. SPATIAL PATTERN OF CRIMINALS RESIDENCE

Most of the criminals have their residences within the city limit. Only few criminals have their residences from outside the city. 32% of the criminals originates from outside the city limit and 68% of the criminals have local residences within the city itself. Offenders involved in automobile theft including two wheeler and four wheelers have their residences outside the city.

### **B. RESIDENCE OF THEFT AND HOUSE BURGLARS**

The criminals detected under theft and burglary offenders were having their location of residences within short distance and commits crime in nearby commercial and residential areas. Nearly 33% of the criminals have their residential locations within the city limit mainly in western part of the city which includes Ukkadam, Chetty Street, Ponnaiyarajapuram and Thadagam road. About 22% of the criminals live in the eastern parts of the city include the areas of Peelamedu and Singanallur. About 17% of the criminals have their residences in Kavundampalayam, Rathinapuri in central and 17% have residences in southern part of the city, which includes Ramanathapuram, Podanur and Kuniyamuthur area. Most of the slums in Coimbatore city are located in these areas. Poor standard of living, low income and unemployment among the people provides opportunity to commit crimes in nearby distance areas. The ordinary theft such as theft by servant, cell phone theft and chain snatching offenders have their residence within the city and commit crimes within a short distance places. Opportunity plays a vital role in committing this kind of theft i.e. commuting places and isolated residence and parking areas is the target of the criminals. Fig.2



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Fig.2 Criminals Residence

# C. PICK POCKETEERS

The total number of offenders detected under pickpocket crime were 71. About 38% of the offenders from out the city limit and 62% have their residences within the city itself. Pick pocketeers was mostly from slum areas located on the banks of Noyal river and Sanganur pallam and on the outskirts of the city. Both male and female pick pocketeers commits crime within short distance places, mostly at commuting places in Lanka corner, Town hall, Railway station, Flower market, etc. They also commit crimes at market places in Ramanathapuram, Ukkadam and Singanallur.

## D. VEHICLE THIEVES

Out of the total number of offenders detected under vehicle theft about 28.5% of the offenders have their location of residences outside the city limits and 61.57% of them have their residence within the city limits. Most of the two wheeler theft offenders have their residence within the city and where as four wheeler theft offenders have their location of residence outside the city. Most of the outside offenders are from Uttar Pradesh and Bihar and also in neighboring states of Kerala and Karnataka. About 31% of the offenders originate from the western parts of the city includes, Ukkadam, Chetty Street, R.S.Puram and Vadavalli areas. Nearly 26% of the offenders are from east areas includes Peelamedu and Singanallur. Only 8% of the offenders originate from south and south west area and 6% are from central parts include Rathinapuri, Kavundampalayam and Gandhipuram.

## E. CHAIN SNATCHERS

About 32% of the offenders have their residential location from outside of the city limit and 68% live within the city limits. About 9% of the chain snatchers have their residence in southern part of the city and are from Podanur, Kuniyamuthur and Sundrapuram areas. Nearly 91% of the chain snatchers have their residences in east, central and western part of the city which include Peelamedu, Singanallur, P.N.Palayam in the east, Ukkadam, Chetty street, Range Gounder street, Big Bazaar street and DB road in the west and Kannappa nagar, Kavundampalayam and Rathinapuri areas in the central part of the city. These areas include both new and old commercial and residential areas. The high traffic congestion with high floating population in these areas provides more opportunities to the criminals.

To conclude that very small number of offenders have their residences from outside the city limit. By comparing the different type of criminals, the most of the criminals are from the outskirts of the city. In the case of four wheeler vehicle theft, most of the offenders have their residences outside the city. All other type of criminals have their residences within the city limit and concentrated in low income working population areas of slums in the central, west and southern part of the city.

# D. PLACES OF OCCURRENCE OF CRIMES

Spatial location of the frequent occurrence of crimes in Coimbatore city is analyzed by using the data obtained from statement of criminal records/First Information Register maintained in each police station. The occurrence of theft and burglary crimes were more in western part of the city. The presence of commercial and old residential areas in the west



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divisional provides more opportunity for occurrence of theft and burglary. Nearly 42% of the theft and burglary offences in Coimbatore city were occurred in Chetty Street, Oppanakara Street, Big Bazaar Street, Ukkadam and R.S.Puram areas. About 33% of the theft and burglary crime were occurred in central parts of the city particularly in Kannappa nagar, Rathinapuri, Gandhipuram and Race Course areas. 25% of theft and burglary crimes were occurred in the eastern parts includes the areas of Peelamedu, Singanallur and Pappanaickenpalayam. Only few cases of theft and burglary were reported in south and south west. In general the occurrence of theft and burglary offences are more in Ukkadam, Oppanakara street, Big Bazaar, Range Gounder street, R.S.Puram and old commercial streets of the core of the city in the west, Gandhipuram, Rathinapuri, Saibabacolony and Race course in the central and Peelamedu and Singanallur in the eastern part of the city. Fig.3



Fig. 3 Place of Crime Occurrences

The chain snatching and gold theft are mostly occurred in commuting places particularly in Gandhipuram and Ukkadam bus stand areas, Oppanakara street, Town Hall, Peelamedu, Singanallur, Mettupalayam road and Ramanathapuram areas. Most of the chain snatching crimes were committed in buses, bus stand areas, Railway station and in the commercial shopping areas of Oppanakara Street, Raja street and Chetty street in the city.

The occurrences of chain snatching and gold thefts in houses by house servant are more (38%) in eastern part of the city. About 31% of this type of crime is occurred in Rathinapuri, Kannappa nagar, NSR road, Saibabacolony and Gandhipuram areas in the central and 26% cases in Ukkadam, Oppanakara Street, Chetty Street and Mettupalayam road in western part of the city. Occurrences of chain snatching and gold theft are comparatively low in the southern part of the city. Only few cases were reported in Podanur, Kuniyamuthur and Sugunapuram bus stops. These areas are located on the peripheral areas of the city and has more open spaces with mixed landuse provides only less opportunity in these areas.

The occurrence of vehicle theft are more in Ukkadam, Oppanakara street, DB road in R.S.Puram and Vadavalli areas in the west divisions. 22 cases of vehicle theft including two wheeler and four wheeler vehicles were occurred in these areas. There are 18 vehicle thefts in Mettupalayam road, Sivananda colony and Race course area in the central, 12 cases in Peelamedu, Pappanaickenpalayam and Singanallur in the east and only 3 cases in Ramanathapuram, Podanur and Madukkari areas in southern part of the city were reported during 2014.

In total 19 pick pocket crime were detected in 2014. The occurrences of pick pocket crime were noticed mostly in central and western part of the city. These two areas have well developed commercial areas, cinema theatres and form the core of the present Coimbatore city. The commuting place with high floating population in these areas provides more opportunity for pick pocketing. Gandhipuram, Crosscut road, Mettupalayam road and Saibaba colony in the central and Ukkadam bus stand, Chetty street and Edayar street in the west are the most pick pocket prone areas in the city.

# E. BEHAVIOUR ASPECTS

The heterogeneity and differential life style of the people, unemployment and low income in highly congested unhygienic areas have more criminal concentrations in Coimbatore city. This may be due to social life they live.



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Knowledge on the socio-economic status of the criminals is essential for police administration to prevent and take appropriate measures to tackle the crime in future.

To assess the causes and reasons behind the occurrence of offences in Coimbatore city, the information on the socio economic status such as sex, age structure, family size, income, literacy and occupation of the criminals were gathered from the statement obtained by the police officials in each police station. The offender detected under different crimes during 2014 have been taken as a sample representative of the criminals and the information obtained from the statements given by the criminals were used to bring out the spatial behaviour of the criminals in Coimbatore city. Table I

It has been observed that the offenders who were arrested during 2014 include both male and female criminals. The male offenders outnumber the female offenders in Coimbatore city. The age structure of criminals revealed that more than 50% of the criminals are in the age group of 20 - 30 years. (Table 1) Only 9% of the criminals are in the age group of less than 20 years. 37% of criminals are above 30 years age group and mostly involved in house burglary and vehicle thefts in the city.

S.No.	Age structure	Number	(%)
1	Less than 20	52	9.3
2	20 - 30	302	54
3	30 - 40	131	23.4
4	More than 40	75	13.3

Table1. Age Structure of Criminals

The size of the family of the criminals varies from 2 to more than 8 persons. (Table 2) About 86% of the criminals have more than 4 persons in their family and out of which 30% of the criminals have more than 6 persons. Only 14% of the criminals are with 2 to 4 persons.

Family size	Number	(%)
2	11	2
2 - 4	67	12
4 - 6	314	56
More than 6	168	30
	2 2 - 4 4 - 6	2 11 2 - 4 67 4 - 6 314

Table 2. Family Size of Criminals

The large sizes of family with illiteracy are the main reasons among the criminals to commit more crimes in the city. Educational level determines the economic status and standard of living of the people. (Table 3) It has been observed that only 12% of the criminals are illiterate. Nearly 80% of the criminals are having education up to XII<sup>th</sup> standard (plus 2) and only 8% of them are graduates. This low literacy level also one of the main reasons among the criminals for committing various offences in the city.

S. No.	Education	Number	(%)
1	Illiterate	67	12
2	Upto V std	67	12
3	V - XII std	377	67.3
4	Graduates	49	8.7

Table 3. Educational Level of Criminals



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In the case of occupational structure among the criminals given in Table 4 show that most of them belong to coolies and house servants. Nearly 35% of the criminals are collies who engaged in loading and unloading of the commodities in commercial areas and also engaged in residential construction works. 20% of the criminals are working as labour in workshops and also as goldsmiths. 11% are drivers and 10% are salesmen and saleswomen. About 7% of the criminals are students and most of them are engineering college students. Only 12% of the criminals have theft, as a main occupation in the city. The unemployment and low income from their occupation are the main causes for the commission of crimes in the nearby commercial and residential areas.

S.No.	Types	Number	(%)
1	Coolie	157	28
2	Driver	64	11
3	Workshop/goldsmith	112	20
4	Salesmen/women	56	10
5	Thieves	67	12
6	Student	41	7
7	House servant	37	7
8	Business	26	5

Table 4. Occupational Structure

It has been noticed that nearly 77% of the criminals have their residences within the city limits. Only 23% of the offenders have their residences outside the city limit. The most of the outside offenders are from North India especially from Uttar Pradesh and Bihar and also from Southern part of Tamil Nadu and Kerala. Outside offenders were mostly constructional workers and acting lorry drivers, who migrated from North India in recent years. It has found that the number of years involved in criminal activity varies from 1 year to more than five years. About 53% of the criminals were involved in 2 to 4 years of committing various offences of crimes in the city. 38% of the offenders have involved more than 5 years in criminal activity. Only 9% of the offenders are involved 1 year in criminal activity and mostly they are students, studying in colleges in the city.

The offenders were grouped on the basis of the types of crime committed. Out of the total crimes reported and detected during 2014, nearly 58% of the offenders were thieves, burglars and chain snatchers. About 23% of the offenders were vehicle thieves. 10% of the total criminals are pocket picketers and 5% are dacoity and robberers. (Table 5)

S. No.	Туре	Number	(%)
1	Thieves and burglars	172	31
2	Chain snatchers and gold theft	153	27
3	Vehicle thieves	130	23
4	Economic offenders	19	3.3
5	Dacoity and robbers	26	5
6	Pocket picketers	56	10
7	Riot	4	0.7

Table.5 Category of Criminals

Economic offences committed criminals shares 3% of the total criminal. It has been observed that the main reason for the commission of offences in Coimbatore city by the criminals was thirst for leading a luxury life. More than 50% of the criminals committed crimes only to lead luxury life. Most of these offenders want to enjoy luxury life by way of drinking, entertainment and spending on prostitution. The low income and unemployment among the people in low and medium income group of people living in slums, congested residential and commercial areas, plays a vital role for the criminals to commit more crimes in neighbouring areas in the city.

Out of the total criminals who were arrested during 2014, about 32% of the criminals committed offences to maintain their family and to meet the family expenditure. The unemployment among the 14% of the criminals is another main



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reason for the commission of various offences in the city. Only 1% of the criminals committed offences to overcome the debt barrowed from various sources. (Table. 6)

S.No.	Reasons	Number	(%)
1	Drinking + luxury life	295	52.7
2	Maintenance	179	32
3	Debt	8	1.3
4	Unemployment	78	14

Table.6 Reasons for Committing of Crimes

It has been observed that nearly 75% of the criminals are Hindus. Muslim offenders (19%) and Christians accounts for 6% of the total offenders in 2014. (Table. 7).

S. No.	Religion	Number	(%)
1	Hindus	418	74.6
2	Muslims	108	19.4
3	Christians	34	6

Table.7 Religion wise Criminals

#### VI. CONCLUSION

To conclude, in general the spatial pattern of location of residences of criminals revealed that most of the criminals have their residences within the city limit and the spatial location of occurrence of crimes are with short distance from the criminals location of the residence. More than 90% of the criminals are in the age group of 20 years and above. About 9% of the criminals are below 20 years of age and mostly students. More than 86% of the criminals have more than 4 members in their family, out of which 30% of them have more than 6 persons in their family. Nearly 12% of the criminals were illiterates. About 80% of the criminals were educated up to XII<sup>th</sup> level (plus 2) and 8% are graduates. 38% of the criminals were involved in more than 5 years in criminal activity. 35% of the criminals are coolies who engaged in loading and unloading the goods in commercial areas and also in construction works and servants. 15% of the criminals are saleswomen and men and working in commercial areas. About 12% of the criminals were thieves and remaining are labourers, drivers and students. To lead luxury life, drinking and family maintenance are the main causes for the commission of offences in Coimbatore city. Unemployment, low medium income and lack of space for living in Coimbatore city are the reasons for occurrence of various offences in Coimbatore city.

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