



# Comparison of distance traveled between expressive and instrumental homicides

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## 1. ABSTRACT

We compared the distances covered by expressive and instrumental single Spanish homicides. We also compared per pairs the variables related with each typology. The main hypothesis was that expressive homicides occur significantly nearer the offender's home than instrumental ones. The sample is formed by 113 Spanish offenders. We classified homicides regarding its principal motivation. Then, we calculated the distance between offender's home and the crime scene. We used non-parametric tests for the comparison. Results corresponded to our hypothesis. Expressive homicides happened significantly closer than instrumental ones ( $r = .48$ ). Concurrently, intimate homicides were closer to offender's home than stranger ones ( $r = .58$ ). Homicides committed with sharp ( $r = .39$ ) and blunt weapons ( $r = .59$ ) also took place closer than those committed with firearms. When the homicide was committed with an opportunity weapon it occurred significantly nearer ( $r = .36$ ). We did not find significant differences in injury severity. The conclusion is that expressive violence is connected to shorter distances.

## 2. BACKGROUND

- La hora y el lugar de un crimen no son variables aleatorias, están estrechamente ligadas con el agresor y su motivación.
  - La motivación influye en la percepción de oportunidades en el entorno, dependiendo de si el agresor busca un beneficio o dañar a la víctima (Brantingham & Brantingham, 1993) y esto afecta a la distancia recorrida (Santtila et al. 2008).
  - Así, dependiendo de la motivación de los homicidios estos pueden clasificarse en:
- |   |  |
|---|--|
| <b>Expresivo</b>  | <b>Instrumental</b>  |
| ➤ Reacción emocional, descontrolada e impulsiva ante suceso estresante  | ➤ Conducta racional para obtener un beneficio                                  |
| ➤ Existencia vínculo víctima y agresor                                  | ➤ Ausencia vínculo entre víctima y agresor                                     |
| ➤ Violencia excesiva, normalmente manual y arma blanca o de oportunidad | ➤ Violencia baja, suficiente para controlar a la víctima u ocasionar la muerte |
|   | ➤ Mayor planificación  |
- (Meloy, 2006; Last & Fritzson, 2005; Salfati; 2000; Salfati & Canter, 1999; Youngs, Ionnaou & Eagles, 2014)

## 3. RESEARCH QUESTION

Siendo la violencia expresiva una respuesta impulsiva y emocional ante un evento estresante e incontrolable para el agresor y la violencia instrumental un mecanismo racional que busca tanto la obtención y maximización de beneficios como la evasión ante la justicia. ¿Los homicidios expresivos ocurren más cerca del domicilio del agresor que los instrumentales?

## 4. METHODOLOGY

### 4.1 SAMPLE

111 random offenders of single homicides solved between 2009 and 2012 by Guardia Civil and Policia Nacional.

The sample is obtained from the analysis of police records provided by the Secretary of State Security (Ministry of Interior, Spain).

### 4.2 INSTRUMENT

- Google Maps for Geolocate in decimal degrees the offender's home and the crime scene.
- Great Circle Distance formula to calculate the distance between both places.
- Secretary of State Security Homicide Database. A 108-item questionnaire that covers: 1- Victim; 2- Offender; 3- Crime.

### 4.3 PROCEDURE

- We Classified homicides according to characteristics that previous research refer to expressive and instrumental violence (Last & Fritzson, 2005; Salfati, 2000; Salfati & Canter, 1999; Salfati & Park, 2007; Santtila, Häkkinen, Canter & Elfgen, 2003; Youngs, Ionnaou & Eagles, 2014).

We Grouped important variables used for the classification: relationship (intimate, acquaintance or strangers), type of weapon (none, sharp, blunt, suffocation and firearm) procedure of weapon (opportunity or carried by offender) and level of violence (high, moderate and low).

We used SPSS v.22 to check if the differences in distances between typologies and between variables are significant using Mann Whitney U test to compare Medians due the absence of normality. We worked with levels  $\alpha = .05$ .

## 5.1 DESCRIPTIVE ANALYSIS

HOMICIDE TYPOLGY	Median
Expressive	0
Instrumental	5,41

Variable	Median
RELATIONSHIP	
INTIMATE	0
ACQUITANCE	0,31
STRANGER	5,49
TYPE OF WEAPON	
NONE	1,27
SHARP	0,06
BLUNT	0
SUFFOCATION	0,116
FIREARM	5,44
WEAPON PROCEDENCE	
OPPORTUNITY	0
CARRIED	1,6
VIOLENCE LEVEL	
HIGH	0
MODERATE	0
LOW	0,932

## 5. RESULTS

HOMICIDE TYPOLGY	No travel		Less than 1 km		1 to 2 km		2 to 5 km		5 to 10 km		More than 10 km	
	N	%	N	%	N	%	N	%	N	%	N	%
EXPRESSIVE	41	59,6	12	16,7	7	9,7	4	5,6	2	2,8	6	8,3
INSTRUMENTAL	6	14,6	8	19,5	3	7,3	3	7,3	13	31,7	8	19,5

Variable	No travel		Less than 1 km		1 to 2 km		2 to 5 km		5 to 10 km		More than 10 km	
	N	%	N	%	N	%	N	%	N	%	N	%
RELATIONSHIP												
INTIMATE	32	78	3	7,3	2	4,9	1	2,4	1	2,4	2	4,9
ACQUITANCE	14	32,6	13	30,2	7	16,3	0	0	2	4,7	7	16,3
STRANGER	1	3,4	4	13,8	1	3,4	6	20,7	12	41,4	5	17,2
TYPE OF WEAPON												
NONE	6	40	1	6,7	1	6,7	2	13,3	2	13,3	3	20
SHARP	21	48,8	5	11,6	7	16,3	4	9,3	2	4,7	4	9,3
BLUNT	11	73,3	3	20	0	0	0	0	0	0	1	6,7
SUFFOCATION	3	50	2	33,3	0	0	0	0	0	0	1	16,7
FIREARM	4	16	4	16	2	8	1	4	9	36	5	20
WEAPON PROCEDENCE												
OPPORTUNITY	15	51,7	5	17,2	4	13,8	2	6,9	1	3,4	2	6,9
CARRIED	10	24,4	8	19,5	4	9,8	2	4,9	9	22	8	19,5
VIOLENCE LEVEL												
HIGH	15	60	1	4	2	8	3	12	2	8	2	8
MODERATE	12	60	4	20	1	5	0	0	0	0	3	15
LOW	18	31,6	11	19	5	8,8	3	5,3	12	21,1	8	14

## 5.2 MANN-WHITNEY U TESTS

I	HOMICIDE TYPOLGY	Expressive		Instrumental		Relationship		Intimate		Acquaintance		Stranger	
		U	p.	U	p.	U	p.	U	p.	U	p.	U	p.
	EXPRESSIVE	-	-	658	.000			484	.00	107	.00		
	INSTRUMENTAL	658	.000	-	-			484	.00	297	.00		

TYPE OF WEAPON	None		Sharp		Blunt		Suffocation		Firearm	
	U	p.	U	p.	U	p.	U	p.	U	p.
NONE	-	-	260	.242	64	.026	36	.466	143	.222
SHARP	260	.242	-	-	224,5	.056	120,5	.783	288	.001
BLUNT	64	.026	224,5	.056	-	-	31,5	.302	58	.000
SUFFOCATION	36	.466	120,5	.783	31,5	.302	-	-	40	.078
FIREARM	143	.222	288	.001	58	.000	40	.078	-	-

WEAPON PROCEDENCE	Opportunity		Carried		VIOLENCE LEVEL		High		Moderate		Low	
U	p.											

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