

**GOTHENBURG UNIVERSITY  
STIFTELSEN RIKSBANKENS JUBILEUMSFOND  
GLOBAL WEEK**

**WORLD VALUES SURVEY CONFERENCE  
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**"The construction of indexes to measure  
subjective personal security from WVS  
data"**

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WVS Data Archive

# **THE DILEMMA OF POST-INDUSTRIAL SOCIETIES:**

- **FREEDOM**
- **SECURITY**

Grafico 1  
Indice de Post-materialismo, por país y oleada

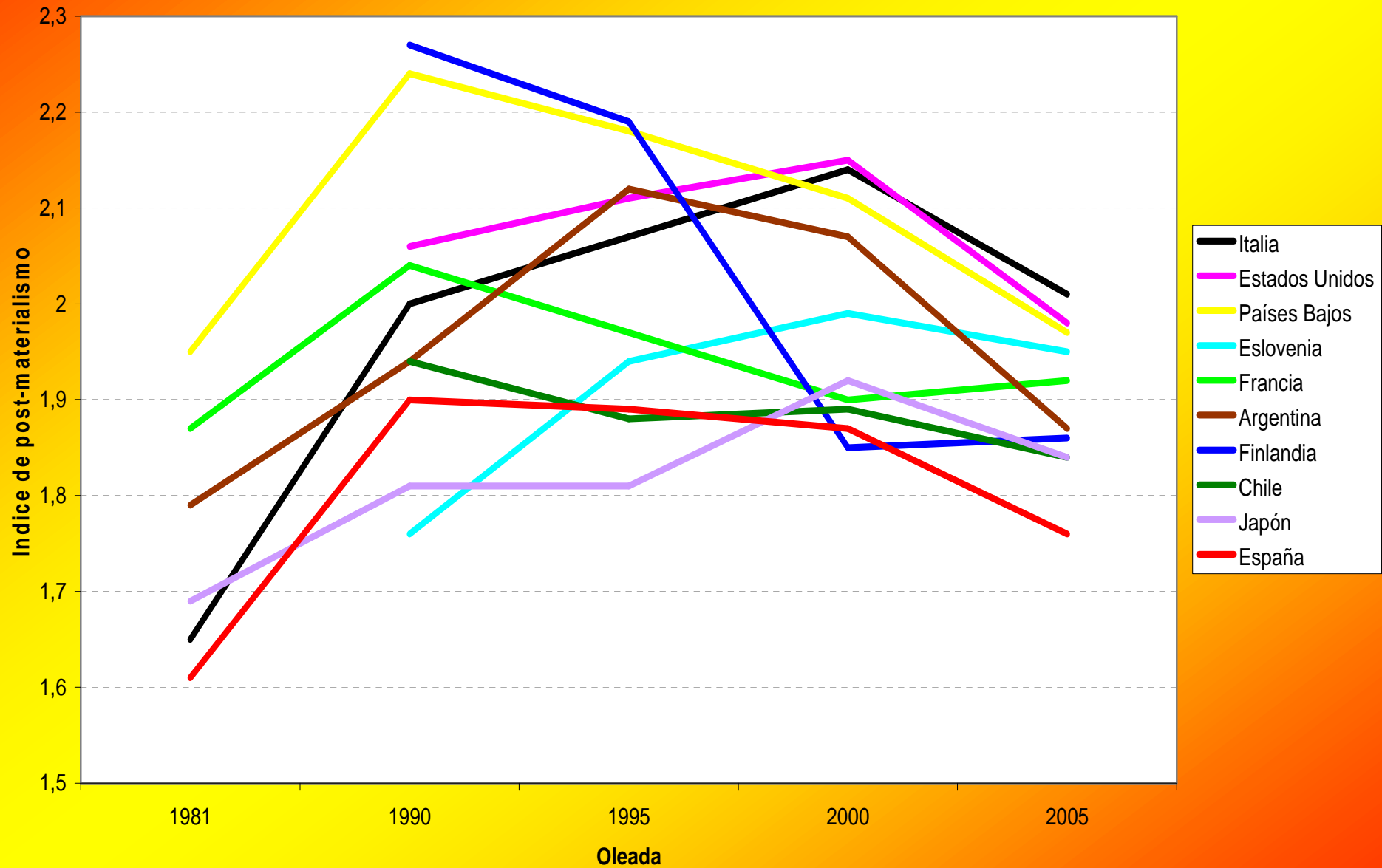


Grafico 2  
Indice de Post-materialismo del Centro Social, por país y oleada

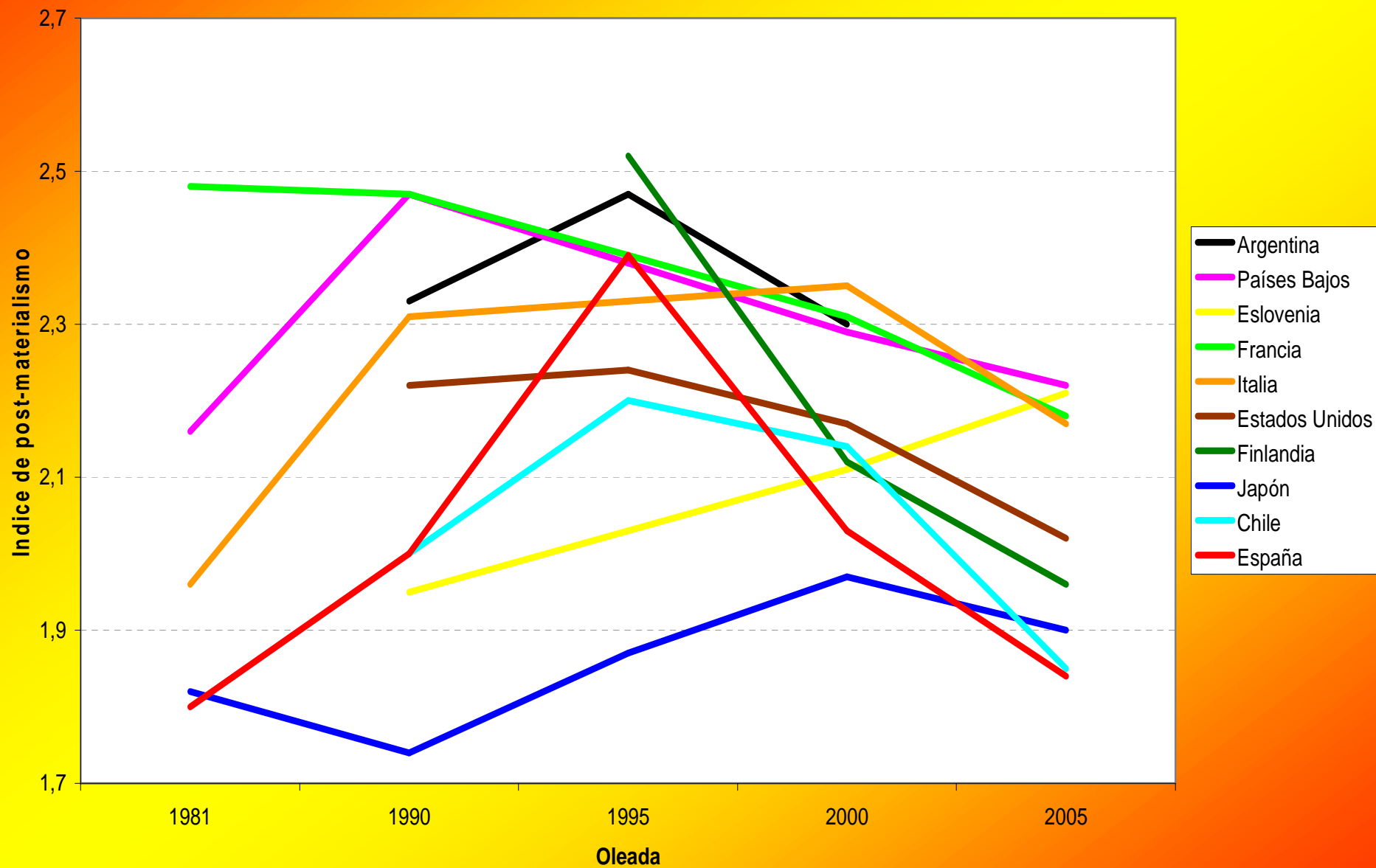
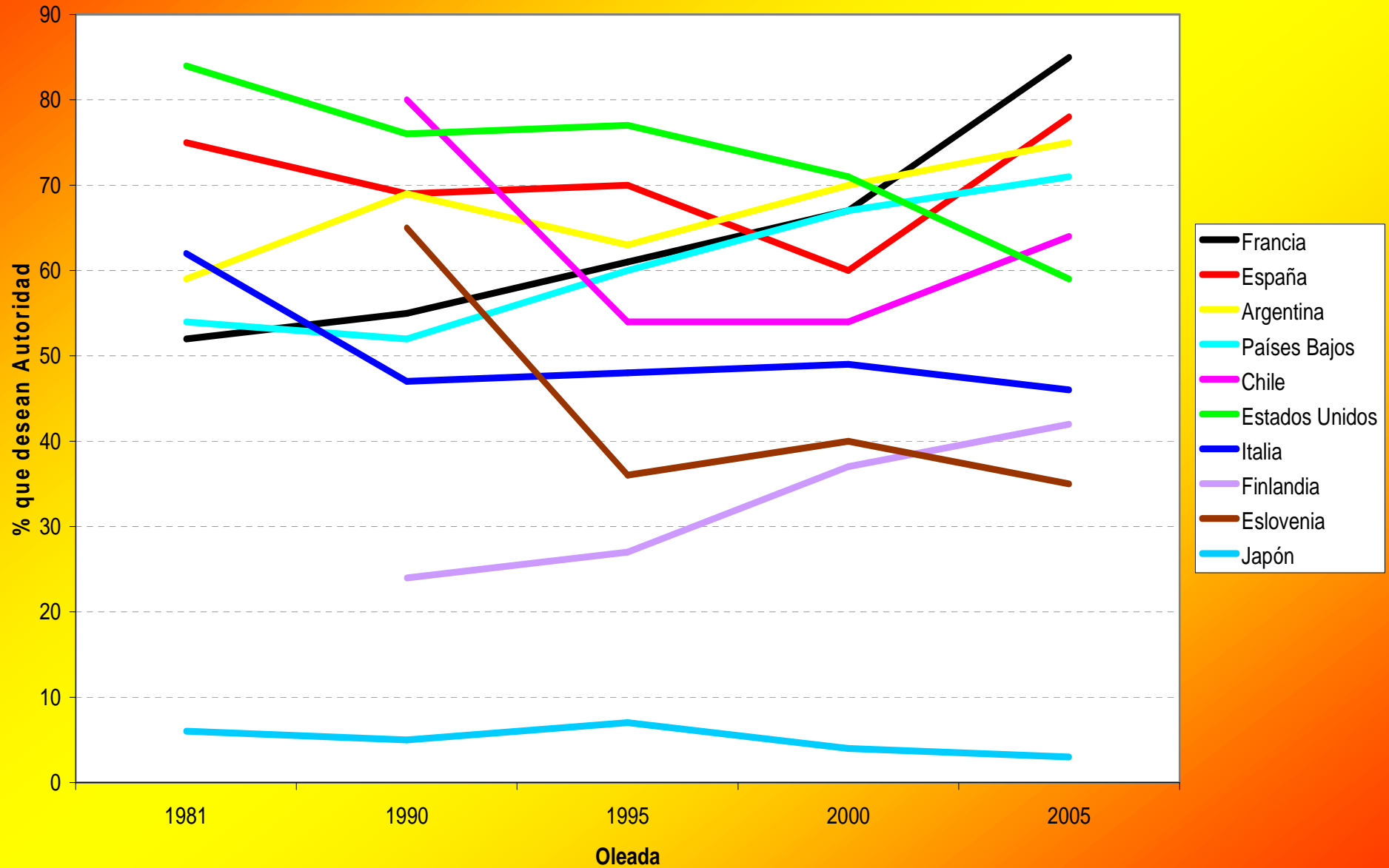
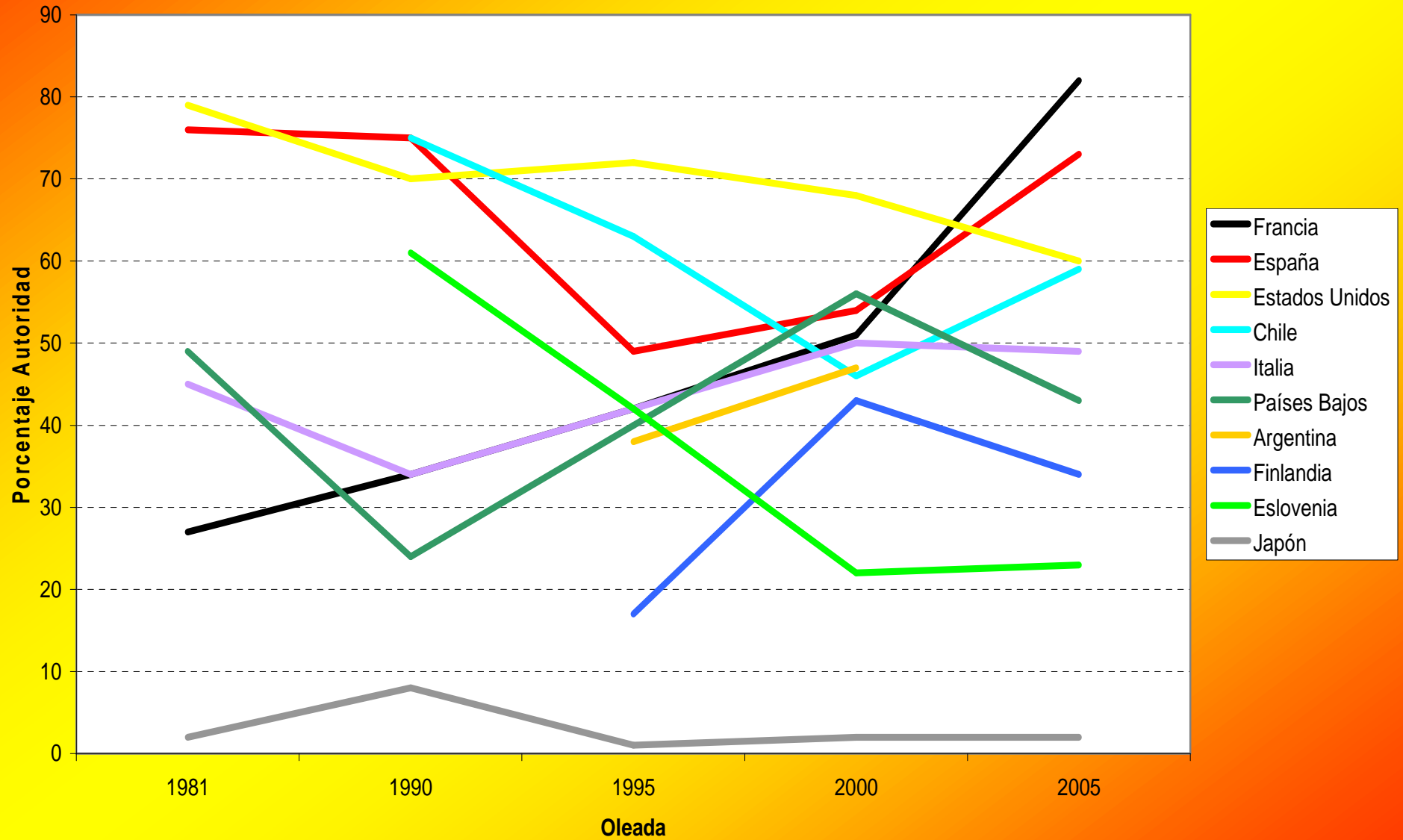


Grafico 3

% que desean Mayor Respeto a la Autoridad, por país y oleada



**Gráfico 4**  
**Porcentaje de Centro Social que considera bueno un mayor respeto por la Autoridad,**  
**por país y oleada**



# THEORETICAL MODEL FOR RESEARCH



## ON SECURITY

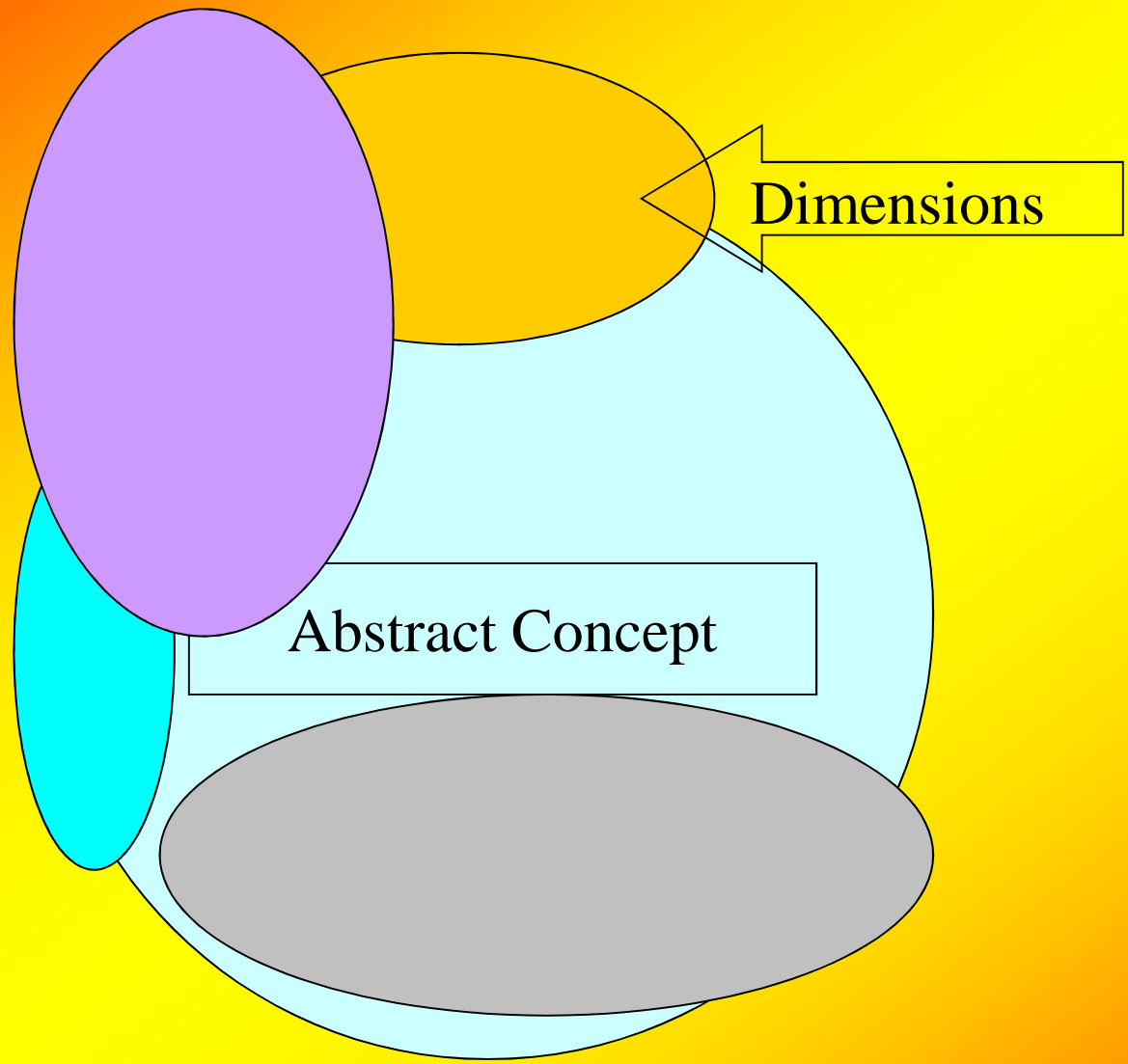
<b>SECURITY IN SPAIN</b>	<b>OBJECTIVE</b>	<b>SUBJECTIVE</b>
<b>INTERNAL</b>	<b>HIGH</b>	<b>LOW</b>
<b>EXTERNAL</b>	<b>LOW</b>	<b>HIGH</b>

# SOCIAL AND POLITICAL INDICATORS



- Abstract concepts.....Concrete Indicators
- The construction of Indicators in the 60's
- Computer science and sophisticated indicators
- Dimensions
- Characteristics of Indicators:
  - Accuracy (validity)
  - Theoretical and practical utility
  - Economy
  - Clarity



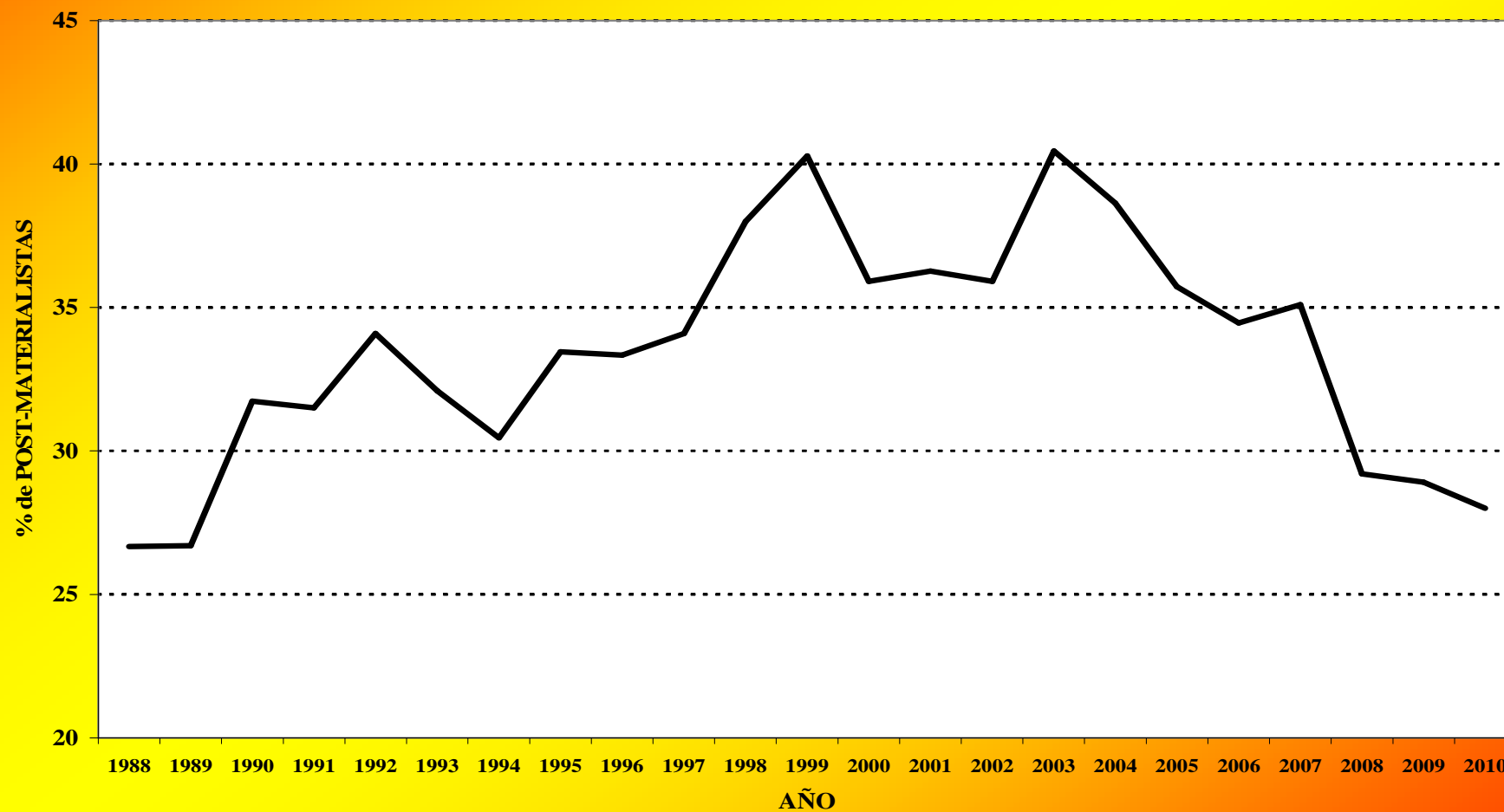


## **THE FIRST SURVEYS and PROJECTS**

- National Survey in Spain: September 2007
- Replication in Madrid: February 2008
- First Report: July 2008
- NESEC: 2009
- GLOBAL CHALLENGE: 2010
- The inclusion of Security Battery in the 2010 WVS Questionnaire

# ANNUAL RATE OF POST-MATERIALISM

## SPAIN 1991-2010



**THE CONSTRUCTION OF A  
SYNTHETIC INDEX OF  
SUBJECTIVE SECURITY**

**ISSS**

# *A Priori Dimensions of the Concept of Subjective Security/Insecurity*

1. General Satisfaction with Life
2. Self-evaluation of Health Status
3. Perception of General Security
4. Perception of Time Changes in General Security
5. Affective Security
6. Perception of insecure situations in the neighbourhood
7. Daily fears and threats
8. Personal concerns about diverse threats and damages
9. Behavioural changes in order to maximize security
10. Economic concerns
11. Concerns about external and non-controllable events
12. Victimization experience

**EXAMPLE OF THE PATTERN  
FOLLOWED FOR EACH  
DIMENSION**

# Personal Concerns about diverse Threats and Damages



Degree of Concern about.:

	Much	Rather	Little	None	DK/NA
Air and Water quality in the place where you live	17%	41	23	17	2
Radiation from nearby antennas	14%	28	26	28	4
Transgenic food	14%	25	23	26	13
Potential fire or gas leaking from nearby establishments	13%	29	30	27	2
Fear about some basic services not working correctly (prolonged lack of power, prolonged lack of water, computing services, etc.)	13%	32	31	23	1
Own illness	25%	36	20	17	1
Relative's or close person's illness	28%	35	21	15	1
Being the target of some serious incident (not an illness, as a crime, an accident, etc.)	20%	36	26	16	1
A relative or close person being the target of some serious incident (not an illness, as a crime, an accident, etc.)	2% <sup>1</sup>	36	23	18	2

# Main Components Analysis of the Items measuring Personal Concerns about diverse Threats and Damages



Main Components Analysis		
	1	2
Relative's or close person's illness	.894	.219
A relative or close person being the target of some serious incident	.865	.307
Own illness	.858	.224
Being the target of some serious incident	.851	.339
Fear about some basic services not working correctly	.514	.638
Potential fire or gas leaking from nearby establishments	0,448	0,713
Air and Water quality in the place where you live	0,183	0,831
Transgenic food	0,219	0,857
Radiation from nearby antennas	0,239	0,862

Rotation Method: Normalization Varimax with Kaiser. a Rotation has converged in 3 iterations.





## Indexes of Concern about Health and Personal or Relative's Integrity, and about External Conditions in the Environment

<u>Concern about Health and Personal or Relative's Integrity</u>		<u>External Conditions in the Environment</u>	
	(1213)		(1213)
4- No concern at all	10%	5- No concern at all	7%
5	2	6	4
6	4	7	5
7	4	8	5
8	12	9	6
9	5	10	8
10	8	11	6
11	4	12	5
12	20	13	5
13	4	14	4
14	6	15	11
15	4	16	6
16- Great concern	15	17	4
NS/NC	2	18	4
		19	2
		20- Great concern	4
		NS/NC	14

## Correlation Coefficients \* (Pearson's r) of each of the Two Indexes with its respective components and between themselves

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Relative's or close person's illness	1	0,78	0,81	0,75	0,92	0,54	0,48	0,34	0,40	0,41	0,54
(2) A relative or close person being the target of some serious incident	0,78	1	0,69	0,88	0,92	0,56	0,55	0,39	0,45	0,48	0,60
(3) Own illness	0,81	0,69	1	0,70	0,88	0,54	0,50	0,34	0,39	0,38	0,53
(4) Being the target of some serious incident	0,75	0,88	0,70	1	0,92	0,59	0,57	0,41	0,49	0,48	0,62
(5) Index of <u>Concern about Health and Personal or Relative's Integrity</u>	0,92	0,92	0,88	0,92	1	0,61	0,58	0,40	0,48	0,48	0,63
(6) Fear about some basic services not working correctly	0,54	0,56	0,54	0,59	0,61	1	0,71	0,50	0,60	0,55	0,81
(7) Potential fire or gas leaking from nearby establishments	0,48	0,55	0,50	0,57	0,58	0,71	1	0,56	0,64	0,61	0,85
(8) Air and Water quality in the place where you live	0,34	0,39	0,34	0,41	0,40	0,50	0,56	1	0,64	0,71	0,82
(9) Transgenic food	0,40	0,45	0,39	0,49	0,48	0,60	0,64	0,64	1	0,76	0,87
(10) Radiation from nearby antennas	0,41	0,48	0,38	0,48	0,48	0,55	0,61	0,71	0,76	1	0,87
(11) Index of Concern about the Environment	0,54	0,60	0,53	0,62	0,63	0,81	0,85	0,82	0,87	0,87	1

\* All correlation coefficients are significant at the .01 level (bilateral)

## Post-Analysis/Dimensions of the Concept of Subjective Security/Insecurity

1. General Satisfaction with Life
2. Self-evaluation of Health Status
3. Perception of General Security
4. Perception of Time Changes in General Security with respect to 10 years ago
5. Affective Security
6. Residential Security
7. Problems in the Neighbourhood
8. Daily fears and threats
9. Personal concerns about Health and Integrity
10. Concern about External conditions and Environment
11. Personal Caution
12. Caution regarding the Car
13. Caution regarding the Home
14. Accessibility to weapons
15. Personal-Family Economic Concerns
16. Personal-Social Concern
17. Concerns about external and non-controllable events
18. Victimization experience

# CORRELATION COEFFICIENTS\* (PEARSON'S R) BETWEEN DIFFERENT INDEXES OF SECURITY AND THE GENERAL SECURITY INDEX

	Perception of General Security	SEG1	SEG2	SEG3	SEG4	INSE1	INSE2
Perception of General Security	1	.45	.48	.49	.47	-.49	-.38
SECURITY 1	.45	1	.92	.94	.92	-.94	-.78
SECURITY 2	.48	.92	1	.93	.90	-.94	-.76
SECURITY 3	.49	.94	.93	1	.96	-1,00	-.81
SECURITY 4	.47	.92	.90	.96	1	-.96	-.88
IN SECURITY 1	-.49	-.94	-.94	-1,00	-.96	1	.81
IN SECURITY 2	-.38	-.78	-.76	-.81	-.88	.81	1

\* All correlation coefficients are significant at the .01 level (bilateral).

## MAIN COMPONENT ANALYSIS OF THE 25 INDICATORS USED TO CONSTRUCT THE SSSI

	Componente		
	1	2	3
Crime actions (thefts, aggressions, threats, ...)	0,239	0,271	0,782
Vandalism actions	0,256	0,293	0,789
Noise produced by neighbours or originating outsider the home (traffic, business, nearby plants, bars, discos, drinking places....)	0,192	0,333	0,666
Street fights	0,188	0,296	0,813
Alcohol consumption in the street (“botellón”)	0,210	0,289	0,730
Prostitution	0,460	0,590	0,072
Urban equipment in bad conditions (street lights, sidewalks, concrete, traffic lights...)	0,246	0,601	0,432
Badly lighted areas	0,138	0,628	0,270
“Okupas”	0,409	0,589	0,218
Abandoned cars	0,273	0,663	0,283
Beggars	0,288	0,623	0,265
Pollution, dirtiness or other environmental problems produced by industry or traffic	0,131	0,711	0,243
Racist or xenophobic behaviours	0,221	0,668	0,352
Drug sale	0,165	0,528	0,510
Fear to walk in the street in daylight	0,803	0,147	0,261
Fear to go out at night	0,725	0,106	0,311
Fear when entering or leaving the building	0,786	0,190	0,196
Fear when encountering unknown groups of people in the neighbourhood	0,672	0,097	0,330
Fear when staying alone at home at night	0,737	0,135	0,172
Fear when walking on a park	0,802	0,200	0,204
Fear in underground and buses (public transportation)	0,783	0,323	0,090
Fear in department stores and shopping centers	0,805	0,289	0,082
Fear in discos and youngsters’ places	0,749	0,266	0,110
Fear in mass events (musical concerts, sports events, etc.)	0,696	0,310	0,155
Fear in the garage or parking lot where you leave your car	0,744	0,289	0,124

Rotation method: Normalization Varimax with Kaiser.  
a Rotation has converged in 6 iterations.

# **EXPLAINING THE SSSI**

## Independent/Explanatory Variables

SOCIO-DEMOGRAPHIC	ATTITUDINAL	ECOLOGICAL
Sex	Religious practice	Size of habitat of residence
Age	Self-anchoring ideological position	Autonomous Community
Working status	Subjective social class	
Educational level	Spanish-Nationalist sentiment	
Monthly family income	Exposure to information	
Socio-economic family status	Post-materialism	
Economic situation of household		
Household equipment		
Social position		
Has children in household		

## Independent/Explanatory Contextual Variables

Estructura demográfica y de empleo:

Población Total en 2006

% ocupados sobre la población de 20 a 59 años

% en paro que han trabajado anteriormente sobre la población de 20-59 años

% parados buscan 1º empleo sobre la población de 15 a 29 años

% 65 y más años en la población total

% de pensionistas sobre la población de 65 y más años

Nº de abortos por 1.000 mujeres de 15 a 49 años

Estructura económica:

PIB per capita

% de activos sobre población total

% de parados sobre población total

Criminalidad

Número de delitos por 1.000 habitantes en. 2006

Índice de variación en los delitos desde 2005 a 2006 por 100 habitantes

Inmigración

Nº total de extranjeros en 2006

Nº de extranjeros por 100 habitantes en 2006

% de extranjeros en Régimen General por 100 extranjeros

% variación en el número de extranjeros entre 2005 y 2006

Saldo migratorio por cada 100 habitantes



**MAIN COMPONENT ANALYSIS OF INDICATORS OF  
DIFFERENT DIMENSIONS OF SECURITY FORCING THE  
SELECTION OF ONLY ONE MAIN COMPONENT**

	Componente
Index of Concerns with the Environment	.701
Index of Concerns with Health and Integrity	.676
Index of Personal Economic Concerns	.661
Index of Social Economic Concerns	.573
Index of Concerns about External Non-controlled Events	.568
Index of Accessibility to Weapons	.327
Index of Caution about Car	.202
Index of Personal Caution	.157
Index of Victimization	.114
Index of Caution regarding the Home	.104
Index of Perception of Changes in General Security compared to 10 years before	.023
Index of Affective Security	.014
Self evaluation of Health status	.013
General Satisfaction with Life	-.143
Index of Perception of General Security	-.526
Index of Daily Fears	-.731
Index of Residential Security	-.757
Index of Problems in the Neighbourhood	-.783

## REGRESSION MODEL TO EXPLAIN SSSI

	Non standardized coefficients		Standardized coefficients		
	B	Standard error	Beta	t	Sig.
<b>R<sup>2</sup> = .55</b>					
(Constant)	-39.376	16.930		-2.326	.020
Size of place of residence	-1.028	.173	-.161	-5.944	.000
Post-materialism	.862	.292	.077	2.949	.003
Index of victimization	-1.870	.786	-.060	-2.380	.018
M: % occupied/20-59 years	1.421	.190	.657	7.469	.000
M: % unemployed who have worked./20-59 years	-.777	.255	-.184	-3.045	.002
M: % unemployed seeking a job/15-29	2.636	.365	.380	7.227	.000
M: % unemployed over total population	1.809	.331	.439	5.462	.000
Index of Perception of General Security	3.272	.250	.352	13.089	.000
Index of Concerns with the Environment	-.400	.089	-.135	-4.518	.000
Index of Personal Caution	-1.472	.423	-.091	-3.484	.001
Index of Accessibility to Weapons	-17.200	2.263	-.206	-7.601	.000
Index of Personal Economic Concerns	-.386	.105	-.119	-3.657	.000
Index of Social Economic Concerns	-1.008	.247	-.120	-4.075	.000



**THANK YOU VERY MUCH  
FOR YOUR ATTENTION**

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