

# CEPOL R&S CONFERENCE 2016

## The role of research and science in law enforcement education and training (an exploratory survey)

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## **AGENDA**

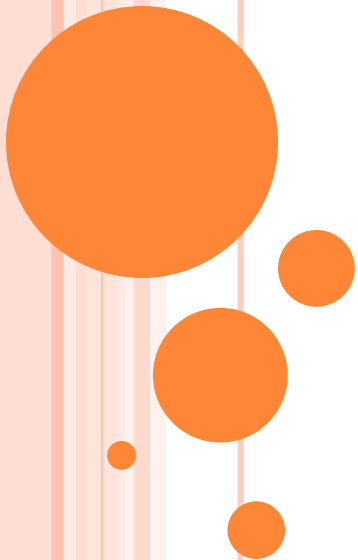
1-Introduction.

2-Research questions.

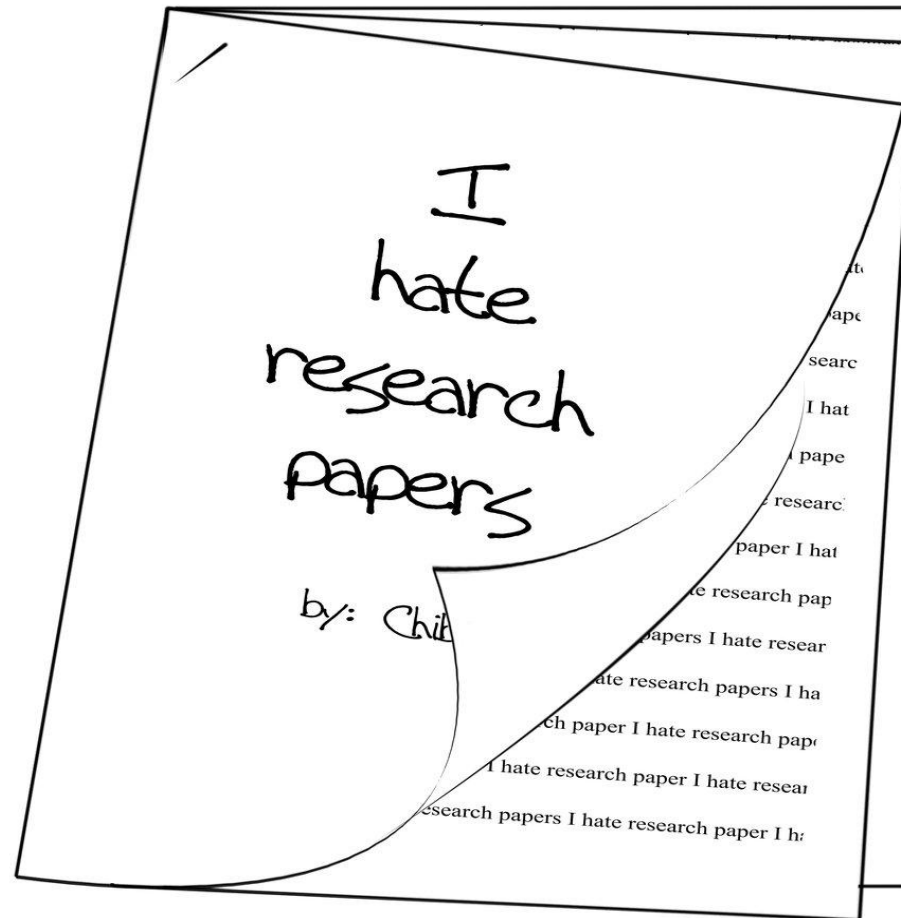
3-Research design.

4-Main findings.

5-Discussion.



## 1-Introduction.



## 1-Introduction.

2-Research questions.

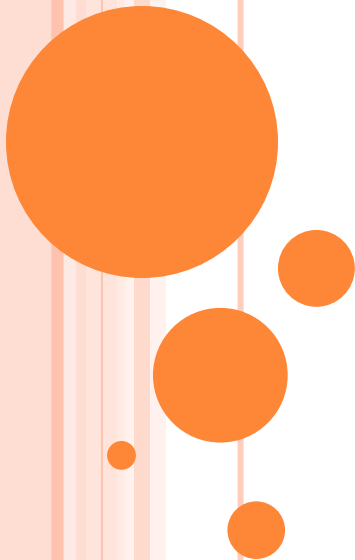
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## Starting with... a common assumption...

Law enforcement agencies and officers are *unique* in the way they *resist* research and science and development/change.



1-Introduction.

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## Law enforcement: An intrinsically hostile world for science, research and development?

Due to the quasi-military structure and the inherent bureaucracy, law enforcement agencies *often fall behind* (Sykes, 1992).

The paramilitary model of police work *dictates* obedience to orders (Bittner, 1990).

Change in law enforcement goes against *its very role* in society, that of maintaining order and control (Cordner, 1992).

Law enforcement agencies *possess* strong organisational cultures that hold tightly to traditional strategies and tactics (Deukmedjian and Lint, 2007).

1-Introduction.

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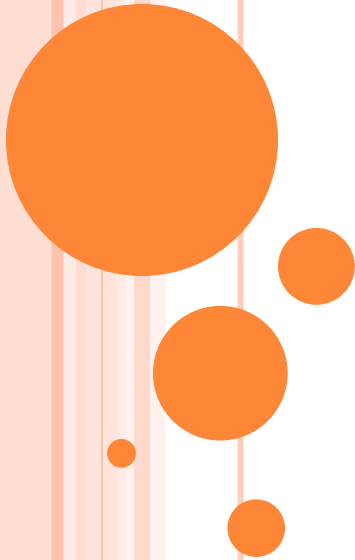
## Law enforcement: An intrinsically hostile world for science, research and development?

Traditional strategies and tactics sustain *the culture* of policing (Greene, Bergman and McLaughlin, 1994).

Bureaucratic law enforcement agencies change *slowly* (Deukmedjian and Lint, 2007).

Law enforcement *values* 'real police work' (Greene, Bergman and McLaughlin, 1994).

Law enforcement is somewhat *unique* because of the high demands of the job (Gaylor,2001).



**1-Introduction.**

2-Research questions.

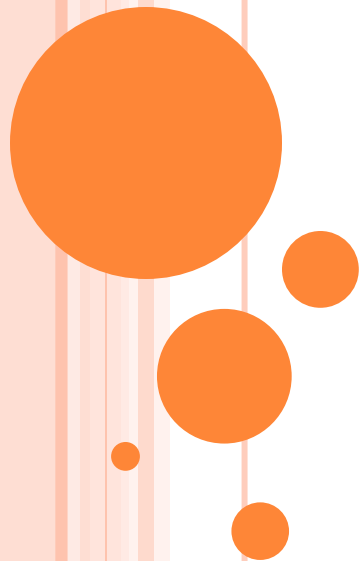
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**Law enforcement: An intrinsically hostile world for science, research and development?**

Factors that affect law enforcement may be *unique* due to the nature of the job, including the potential for violence and trauma, and the social isolation caused by shift work (Sparrow, 1988).



## 1-Introduction.

2-Research questions.

3-Research design.

4-Main findings.

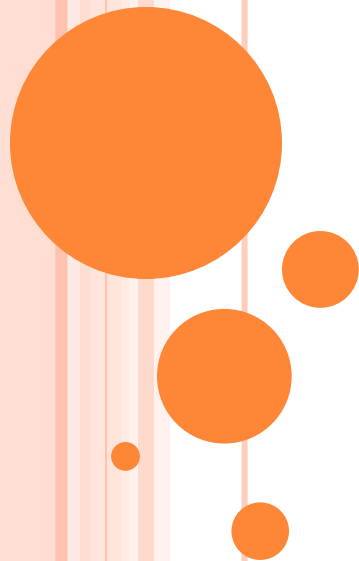
5-Discussion.

## **Law enforcement: An intrinsically hostile world for science, research and development or is there another problem?**

Law enforcement is a complex and diverse world and there are several law enforcement cultures (Monjardet, 1994) – and not all are *hostile* to research and science.

Forensic sciences are a perfect example of a non-hostile world for research and science.

The same applies to science and research findings that paved the way for (new) policing models like hotspot policing, problem-oriented policing, community policing, intelligence-led policing or predictive policing.





## 1-Introduction.

2-Research questions.

3-Research design.

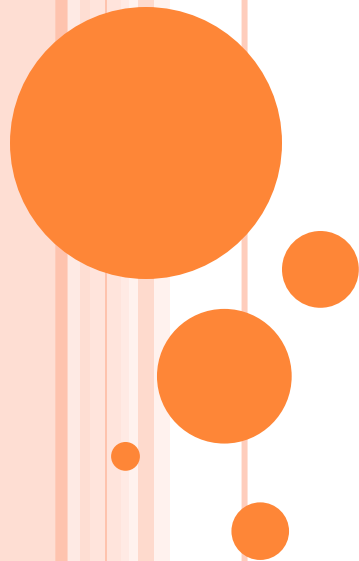
4-Main findings.

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## **Law enforcement education and training: Also an intrinsically hostile world for science and for research findings?**

‘Traditional’ law enforcement education is mostly about training for knowing the ‘right answers’, doing things the ‘approved way’ or arriving at the ‘school solution’ (del Barrio Romero et al., 2009).

Most law enforcement students are not expected to learn how to observe, analyse and question, to formulate hypothesis and make conclusions and then to act, live, and modify their actions according to these conclusions (del Barrio Romero et al., 2009).



1-Introduction.

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**Law enforcement education and training: Also an intrinsically hostile world for science and for research findings or is there, again, another problem?**

European law enforcement education can be placed in four categories (Hanak and Hofinger, 2005):

1-Delivered by institutions that value science and research, regularly conduct research activities and are engaged in the dissemination of scientific results and knowledge;

2- Delivered by institutions that mainly import the available scientific knowledge on police-related subjects;

3-Delivered by institutions that offer training or *instruction* for officers on an 'academic level' but with little emphasis on science or research.

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3-Research design.

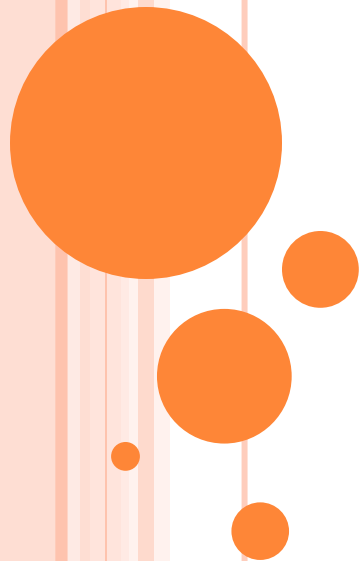
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**Law enforcement education and training: Also an intrinsically hostile world for science and for research findings or is there, again, another problem?**

4-Delivered by institutions that only train skills, which is understood to require little academic (scientific) knowledge.

Law enforcement education and training is also a complex and diverse world – and not all systems are *hostile* to research and science.



1-Introduction.

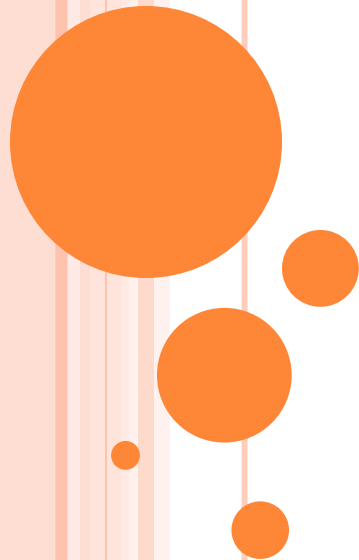
**2-Research questions.**

3-Research design.

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## 2-Research questions.



1-Introduction.

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## **Main research question:**

Are law enforcement officers (and perhaps also LE educators and trainers) in Europe really *unique* in the way they *resist* research and science?

## **Other research questions:**

Are there significant differences in the way research and science are *perceived* by law enforcement and by non-law enforcement professionals in Europe?

Are there significant differences in the way new knowledge (including research findings) is *perceived as instrumental for a good job performance* by law enforcement and by non-law enforcement professionals in Europe?

1-Introduction.

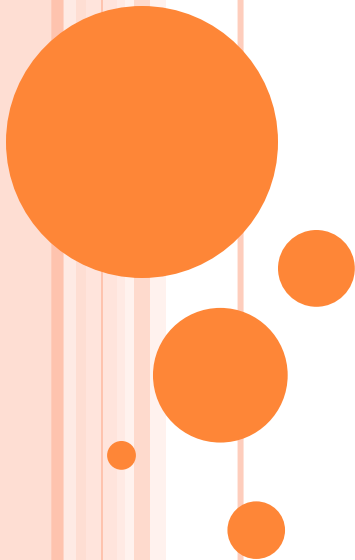
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Are there significant differences in the way law enforcement and non-law enforcement professionals in Europe seek and prefer to acquire new knowledge (including science and research findings)?



1-Introduction.

2-Research questions.

**3-Research design.**

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5-Discussion.

## 3-Research design.



**RESEARCH DESIGN**

1-Introduction.

2-Research questions.

**3-Research design.**

4-Main findings.

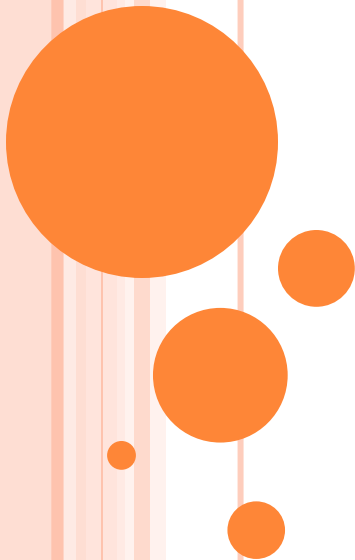
5-Discussion.

## **The original idea – research should incorporate:**

- 1-Different European countries.
- 2-Different professionals and ‘ranks’.
- 3-Different data gathering methods/techniques (triangulation).

## **The outcome:**

- 1-Only way to incorporate different countries was by using a online survey (no triangulation).
- 2-Only way to reach different professionals was through the use a snowball sampling process .





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## Research time-line:

1-Online survey was developed and tested in March 2016.

2-Online survey (final version) included the following questions:

Question 1 - I usually prefer to acquire new professional knowledge by:

Question 2 - To be honest, I'm usually not compelled to acquire new professional knowledge, unless:

Question 3 - What is really important, in my job, is to have:

Question 4 - When I think about my job, my idea of science is:

Question 5 - When I think about my job, my idea of good scientific research is one that:

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## Research time-line:

Question 6 - When I think about my job, good performance is normally linked to the ability to:

Question 7 - My current job is in:

Question 8 - For how long (years) have you been performing your current job?

Question 9 - What is your current position?

Question 10 - What are your academic qualifications?

Question 11 - What is your age (years)?

Question 12 - What is your gender?

Question 13 - Where is your current job located?

3-Questions 1 to 7 included 'closed' answers (options), plus an open answer option.

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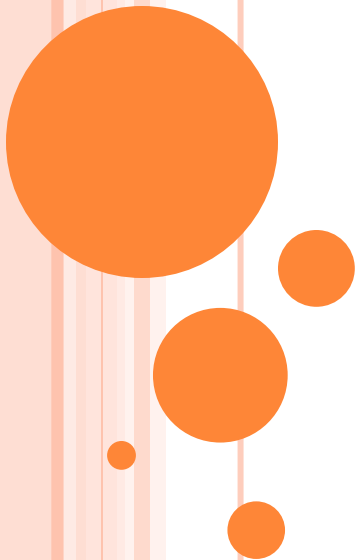
## **Research time-line:**

4-Final online survey could be filled-in in 5-10 minutes.

5-Final online survey remained opened from April 2016 to end of July 2016.

7-A snowball sampling process was used.

8-Final sample consisted of 147 respondents with the following characteristics.



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## Sample

Professional group	Nº	%
Law enforcement officers (LEO)	55	37,4
Law enforcement educators and trainers (LEET)	56	38,1
Non-law enforcement professors and trainers (NLEPT)	22	15,0
Other non-law enforcement professionals (NLEP)	14	9,5
<b>Total</b>	<b>147</b>	<b>100,0</b>

Job position (%)	LEET	NLEPT	LEO	NLEP	Total
Senior position	28,6	31,8	31,0	42,9	<b>31,3</b>
Middle position	64,3	63,6	49,1	42,9	<b>56,5</b>
Junior position	5,4	4,5	7,3	7,1	<b>6,1</b>
<i>Missing</i>	<i>1,8</i>	<i>0,0</i>	<i>12,7</i>	<i>7,1</i>	<b>6,1</b>
<b>Total</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

Likelihood ratio = 2,334; p=0,887.

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<b>Years on-the-job (%)</b>	<b>LEET</b>	<b>NLEPT</b>	<b>LEO</b>	<b>NLEP</b>	<b>Total</b>
Less than three years	33,9	9,1	30,9	42,9	<b>30,6</b>
Between three and ten years	37,5	59,1	29,1	42,9	<b>38,1</b>
More than ten years	28,6	27,3	40,0	14,2	<b>30,6</b>
<i>Missing</i>	0,0	4,5	0,0	0,0	<b>0,7</b>

Likelihood ratio = 11,997; p=0,062.

<b>Age (%)</b>	<b>LEET</b>	<b>NLEPT</b>	<b>LEO</b>	<b>NLEP</b>	<b>Total</b>
Between 25 and 39 years	35,7	40,9	29,1	42,9	<b>34,7</b>
Between 40 and 49 years	33,9	31,8	40,0	21,4	<b>35,4</b>
Between 50 and 66 years	25,0	27,3	23,6	21,4	<b>23,8</b>
<i>Missing</i>	5,4	0,0	7,3	14,3	<b>6,1</b>

Likelihood ratio = 2,283; p=0,892.

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Academic degree (%)	LEET	NLEPT	LEO	NLEP	Total
PhD or higher	32,1	13,6	7,3	7,1	17,0
Master	50,0	59,1	41,8	50,0	49,0
Bachelor	10,7	13,6	25,5	28,6	18,4
Professional diploma	5,4	13,6	20,0	14,3	12,9
High school diploma	1,8	0,0	5,4	0,0	2,7

Likelihood ratio = 24,847; p=0,016.

Work-place location (%)	LEET	NLEPT	LEO	NLEP	Total
'Nordic' and 'Anglo-Saxon' countries	12,5	13,6	21,8	14,3	16,3
Western and central countries	17,9	22,7	29,1	28,6	23,8
Southern countries	14,3	13,6	23,6	21,4	17,7
Eastern countries	51,8	50,0	25,5	28,6	40,1
Other part or the world	3,5	0,0	0,0	7,1	2,0

Likelihood ratio = 15,803; p=0,200.

# The role of research and science in law enforcement education and training

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2-Research questions.

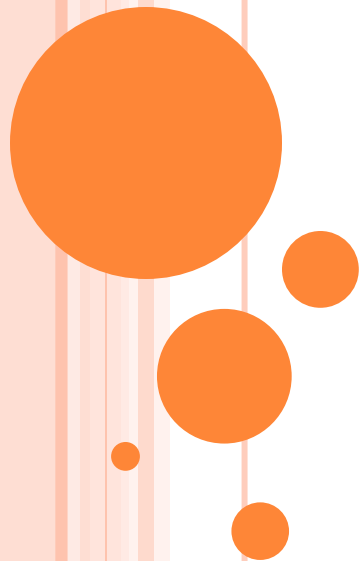
**3-Research design.**

4-Main findings.

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<b>Gender</b>	<b>LEET</b>	<b>NLEPT</b>	<b>LEO</b>	<b>NLEP</b>	<b>Total</b>
Male	53,6	50,0	76,4	42,9	<b>59,9</b>
Female	46,4	50,0	23,6	57,1	<b>40,1</b>

Likelihood ratio = 10,078; p=0,018.



1-Introduction.

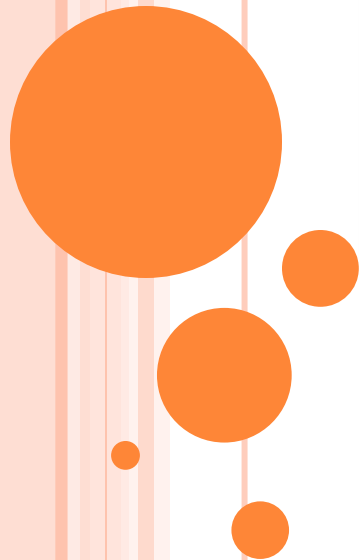
2-Research questions.

3-Research design.

**4-Main findings.**

5-Discussion.

## 4. Main findings.





1-Introduction.

2-Research questions.

3-Research design.

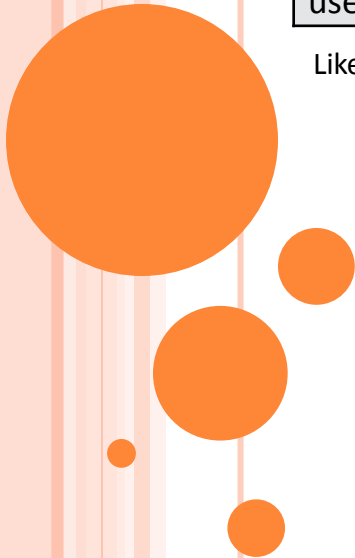
**4-Main findings.**

5-Discussion.

## The 'idea' of science 'for the job' (%)

	LEET	NLEPT	LEO	NLEP	Total
Promising theories that may improve job performance	51,8	45,5	43,6	42,9	<b>47,6</b>
Tested theories about what really works and can improve job performance	42,9	45,5	45,5	42,9	<b>43,5</b>
Something behind technology, otherwise useless	5,3	9,0	10,9	14,2	<b>8,9</b>

Likelihood ratio = 2,060; p=0,914.



1-Introduction.

2-Research questions.

3-Research design.

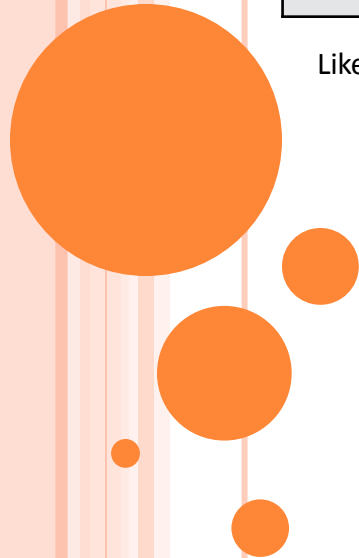
**4-Main findings.**

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## The 'idea' of scientific research 'for the job' (%)

	LEET	NLEPT	LEO	NLEP	Total
Important for the development of new and useful technologies	39,3	54,5	45,5	42,9	<b>44,2</b>
Important if findings can be applied in 'real life'	32,1	22,7	32,7	21,4	<b>29,9</b>
Important if findings are challenging	28,6	22,7	21,8	35,7	<b>25,9</b>

Likelihood ratio =2,937; p=0,817.



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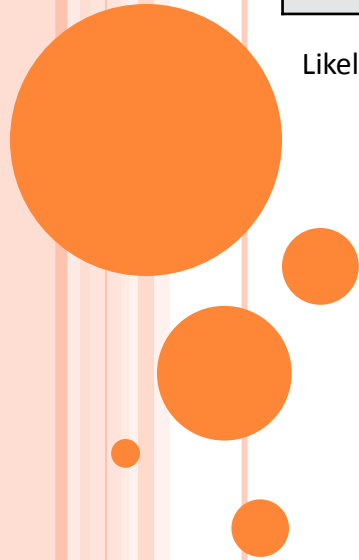
**4-Main findings.**

5-Discussion.

## What is the most important job performance factor? (%)

	LEET	NLEPT	LEO	NLEP	Total
Updated knowledge, training and adequate tools	58,9	40,9	40,0	35,7	46,3
Professional commitment	28,6	22,7	29,1	28,6	27,9
Experience	12,5	36,4	30,9	35,7	25,8

Likelihood ratio = 9,602; p=0,142.



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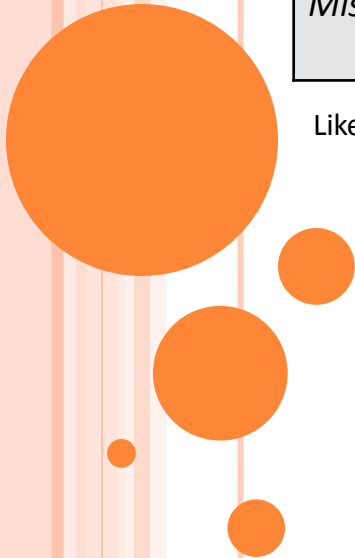
**4-Main findings.**

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## Main motive for acquiring new professional knowledge (including science and research findings) (%)

	LEET	NLEPT	LEO	NLEP	Total
Improve job performance/ achieve better results	66,1	54,5	65,5	50,0	61,9
Job promotion/career improvement	32,1	40,9	34,5	42,9	36,1
<i>Missing</i>	1,8	4,6	0,0	7,1	2,0

Likelihood ratio = 1,291; p=0,731.



1-Introduction.

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**4-Main findings.**

5-Discussion.

## Preferred 'method' for acquiring new professional knowledge (including scientific research findings) (%)

	LEET	NLEPT	LEO	NLEP	Total
Classroom and 'on-the-job'	35,7	40,9	50,9	42,9	42,9
'On-the-job' and self-learning	19,6	22,7	12,7	35,7	19,0
Classroom and self-learning	21,4	13,6	9,1	7,1	14,3
'On-the-job'	7,1	4,5	20,0	14,3	12,2
Classroom	5,4	4,5	5,5	0,0	4,8
Self-learning	7,1	4,5	0,0	0,0	3,4
Distance (online) learning	0,0	4,5	0,0	0,0	0,7
Classroom and online learning	1,8	0,0	1,8	0,0	1,4
'On-the-job' and online learning	0	4,5	0,0	0,0	0,7
Self-learning and online learning	1,8	0,0	0,0	0,0	0,7

Likelihood ratio = 31,853; p=0,238.

1-Introduction.

2-Research questions.

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**5-Discussion.**

## **5. Discussion.**



1-Introduction.

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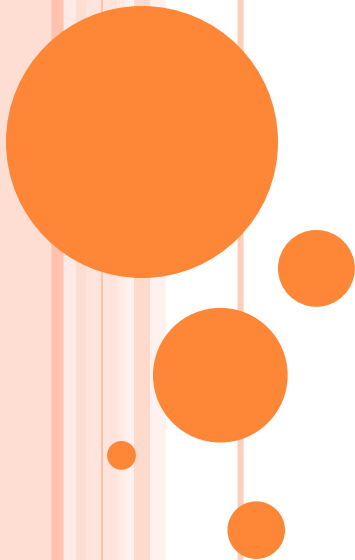
**5-Discussion.**

## **Considering:**

1-The sample (small) size (n=147).

2-The lack of triangulation/ the exclusive use of an online survey.

**The following must be dealt with caution and has to be confirmed (or not) by further research.**



1-Introduction.

2-Research questions.

3-Research design.

4-Main findings.

**5-Discussion.**

1-In spite of having the lowest academic level, surveyed law enforcement officers 'see' science (when applied to the job) as positively all other surveyed professionals. No special 'hostility', nothing *unique* about LE.

2-The same goes for how surveyed law enforcement professionals and the other surveyed professionals 'see' scientific research findings. Nothing *unique* again about LE.

3- Surveyed law enforcement professionals 'see' updated knowledge (including science and research findings), training and adequate tools as being as important for a good job performance as other surveyed professionals. Nothing *unique* again about LE.



1-Introduction.

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**5-Discussion.**

4-Against expectations, more surveyed law enforcement officers, educators and trainers ‘revealed’ that improve job performance/ achieve better results was the main motive for acquiring new professional knowledge (including science and research findings). This is indeed *unique*, but not in the usual negative sense of it.

5-Surveyed law enforcement officers, as well as other non-LE professionals, ‘revealed’ a clear preference for ‘on-the-job’ learning and training, and educators and trainers (LE and non-LE) for ‘scholar’ methods. Once again, nothing unexpected, nothing *unique* about LE.

1-Introduction.

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**5-Discussion.**

## **Possible lessons for law enforcement education and training:**

1-Findings of applied scientific research are welcomed by LE educators, trainers and officers, as by other professionals, *providing* they prove useful for improving job performance/ results or for the development of new technologies.

2-LE professionals, as other professionals, seem to prefer 'science' that provides the most probable, verifiable and valid (and complete) explanation for how, when, where and why something happens – and 'robust models', able to predict what will most probably occur in a given context and in the presence of a given set of variables.

1-Introduction.

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**5-Discussion.**

3-A large part of law enforcement education and training takes place 'on-the-job' (and the same happens in other professions) and this stresses the absolute necessity of not exposing LE students/trainees to *weak* scientific models or *weak* research findings – simply because the models/ findings will be systematically contradicted by *experience*.

4-The role of fundamental research, done by LE agencies or LE education or training institutions, needs to be further researched/ discussed. This exploratory research did not address (yet) this (important) issue.

5- The same applies to the role of LE governance. This exploratory research focused on LE professionals, not on governance. Future research will have to focus on this (important) subject.

# The role of research and science in law enforcement education and training

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**5-Discussion.**



**Thank you for your kind attention!**

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