# VIRTUAL EMPATHY AS AN INFLUENCE FACTOR OF ROAD SAFETY PREVENTION MESSAGES' RECEPTION

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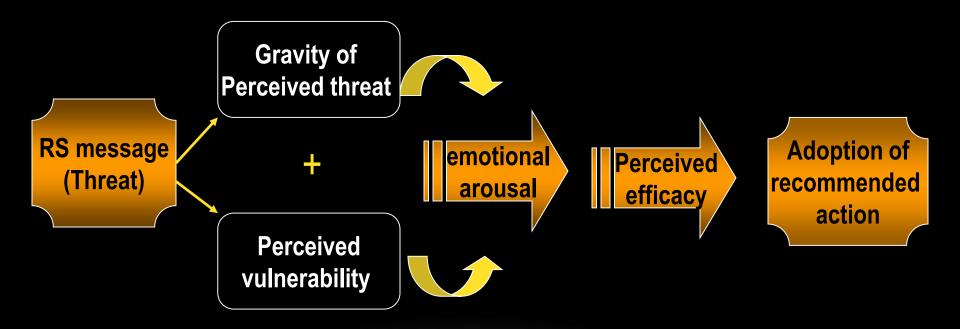
# INTRODUCTION

- Role of human factors (speed, alcohol, distractions) in 90% of road accident
- Young drivers
- (16-24 years) are particularly vulnerable (inexperience, invincibility syndrome, etc.)
- Public advertising campaigns as a mean to prevent road accidents: popularity of fear appeals
- "Campaigns for preventive behavior are more effective if they emphasize the negative consequences of current behavior. Arousing fear (...) has been found to be highly to moderatly successful as a campaign strategy."

(Rodriguez & Anderson-Wilk, 2002)

# FEAR APPEALS IN ROAD SAFETY ADVERTISING

# General principle



# FEAR APPEALS IN ROAD SAFETY ADVERTISING

<u>Levels of realism</u>: messages appealing to fear and exposing a similar threat, but using a different type of threat representation.

Symbolic Realistic Hyper-realistic

3 levels of realism

# **EMPATHY AS A DISPOSITIONAL TRAIT**

Attitude and behavior change theories : role of individual dispositions?



Cognitive dimension: perspective taking

Affective dimension: emotional sharing

**Def.**: Ability to take somebody else's perspective, to imagine how they are feeling and to understand and share their emotions while keeping a sense of self-awareness.

# **EMPATHY AS A SITUATIONAL RESPONSE**

**TRAIT- EMPATHY** 





**RESPONSE-EMPATHY** 

Spontaneous projection in a given situation

Spontaneous emotional response to another's emotional state

# VIRTUAL EMPATHY

Exploratory concept representing the mediatised context in which empathy can occur, in comparison to a face-to-face/ interpersonnal situation

Interaction person – person empathy

Interaction receiver – media
virtual empathy

**Def**.: Receiver's ability to take a character's (real of fictive) perspective and to project in their situation, to feel and understand how they are feeling while keeping a sense of self-awareness and of the media filter separating him from the observed content.

# **OBJECTIVES OF THE STUDY**

- 1. To examine the relationship between the level of virtual empathy (VE) as a trait and the situational empathic response experienced during the exposure of road safety (RS) messages based on a realistic threat's representation.
- 2. To examine the influence of theme (speed / alcohol / cell. phone) and origin of the ad (Quebec / France) on the situational empathic response of young drivers exposed to RS messages based on a realistic threat's representation.

# Phase I: Questionnaire (measurement of virtual empathy as a trait)

# Sample:

- 104 undergraduate students (Laval University)
- aged between 20 and 31

### Instrument:

Virtual empathy scale (Daignault, 2007; Reny-Delisle, 2013)

- 60 items reflecting cognitive and affective dimensions and the diversity of media landscape (type of content and media)
- 5-point Likert scale (never/ rarely/ sometimes/ often/ always)
- Partially based on existing empathy scales (Davis, 1980; Gerdes et al., 2011)
- Previously pretested and validated (Cronbach's alpha: 0,857)
- Socio-demographic questions added

# Virtual empathy scale (Daignault, 2007; Reny-Delisle, 2013)

Cela m'arrive	jamais	rarement	parfois	souvent	toujours
Quand je vois une publicité télévisée à caractère dramatique (ex.: scène d'un accident causé par l'alcool ou la vitesse au volant), je ressens les émotions des personnes mises en scène					
Quand je regarde un film ou une de mes émissions préférées (téléroman/télésérie) et que mon personnage favori est heureux, je me sens moi-même heureux					
« Quand je regarde un documentaire ou un reportage télévisé sur la pauvreté, je					
parviens à m'imaginer ce que ce serait d'être pauvre »					

# Phase II: Experiment (situational virtual empathy)

# Sample:

- 63 students from first phase participated in one of the 8 experimental sessions
- aged between 20 and 26

### Stimuli:

- 6 RS spots (30 sec.) based on a realistic threat's representation

### **Theme**

- Speed (2)
- Alcohol (2)
- Cell phone (2)

### Origin of ad

- Québec (3)
- France (3)

# Phase II: Experiment (situational virtual empathy)

### Measurement:

- 1. Perception analyzer (continuous evaluation technique)
- Handset with a rotary button and an indicator of the selected value (0 to 100).
- Measure of the two main dimensions of situational virtual empathy: spontaneous emotional response and projection
  - 2. Thought-listing procedure
    - Cognitive response approach (information processing)



Phase II: Experiment (situational virtual empathy)

### Protocol:

# 2 ad exposures

1st exposure: Measure of situational VE (emotional response) with perception analyzer

### Instruction:

"As you watch the ad, indicate on a scale from 0 (not at all) to 100 (extremely) to what extent you feel the emotions conveyed. Turn the rotary button in a continuous manner. If you don't feel anything, leave the button at 0."

2nd exposure: Measure of situational VE (projection) with perception analyzer + thought listing task

### Instruction:

"As you watch the ad, indicate on a scale from 0 (not at all) to 100 (extremely) to what extent you can project yourself in the events presented. Turn the rotary button in a continuous manner. If you can't project yourself, leave the button at 0. You'll then have 60 seconds to write every thought that came up while watching the ad."

# PRELIMINARY RESULTS

**Q.1** Is there a relationship between virtual empathy (VE) as a trait and situational empathic response ?

### Table 1

Type of VE	Mean (μ)	r Pearson	Sign. (5%)
Trait	2,65		
Situational	26, 80	-0, 037	0,776

### Table 2

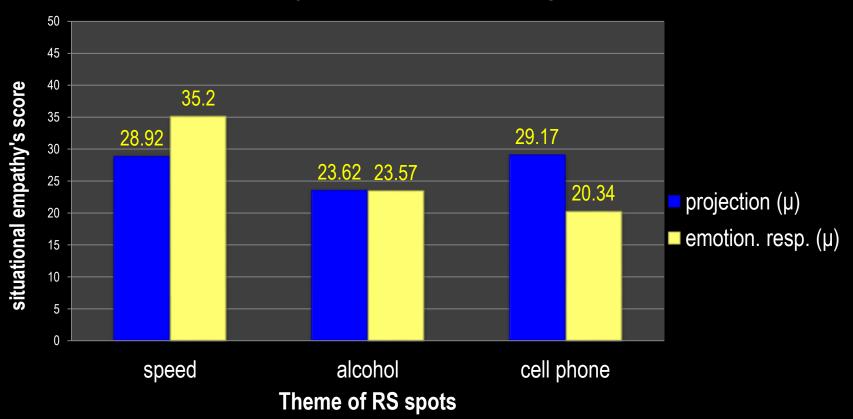
Level of VE (trait)	Situational VE response (µ)	t	Sign. (5%)	
Low	0			
Moderate	25,42	-1,136	0,920	
High	28,65	-1,100	0,320	

Is trait-empathy independent from the situational empathic response that can be generated by a specific media content?

# PRELIMINARY RESULTS

**Q.2** Does the theme of RS spots influence the situational empathic response of young drivers?

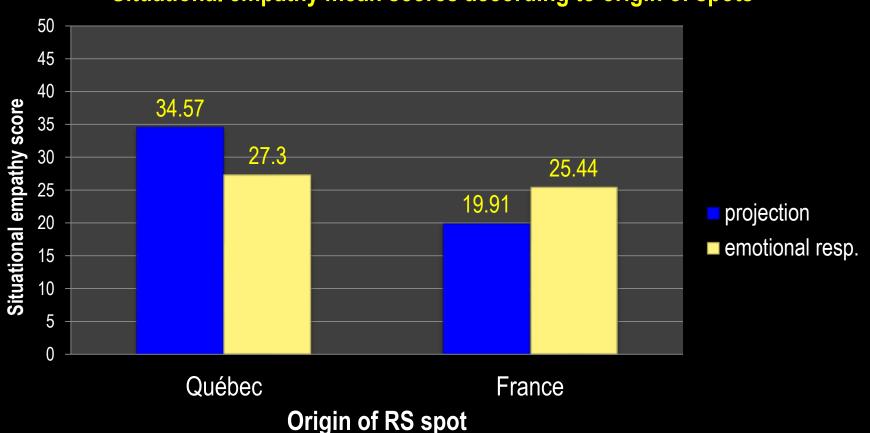
## Situational empathy mean scores according to theme of spots



# PRELIMINARY RESULTS

**Q.3** Does the origin of RS spots influence the situational empathic response of young drivers?

# Situational empathy mean scores according to origin of spots



# CONCLUSION

- ➤ A RS ad can generate an empathic response, independently of general empathic disposition.
- Virtual empathy ad's effectiveness?
- Further research will examine the influence of different road safety's advertising strategies (e.g. positive appeals, guilt appeals) on the empathic response.

# THANK YOU! MERCI!