

# INCORPORATING METHODS: VIGNETTE DEVELOPMENT FOR ANALYZING AGGRESSIVE DRIVING BEHAVIORS

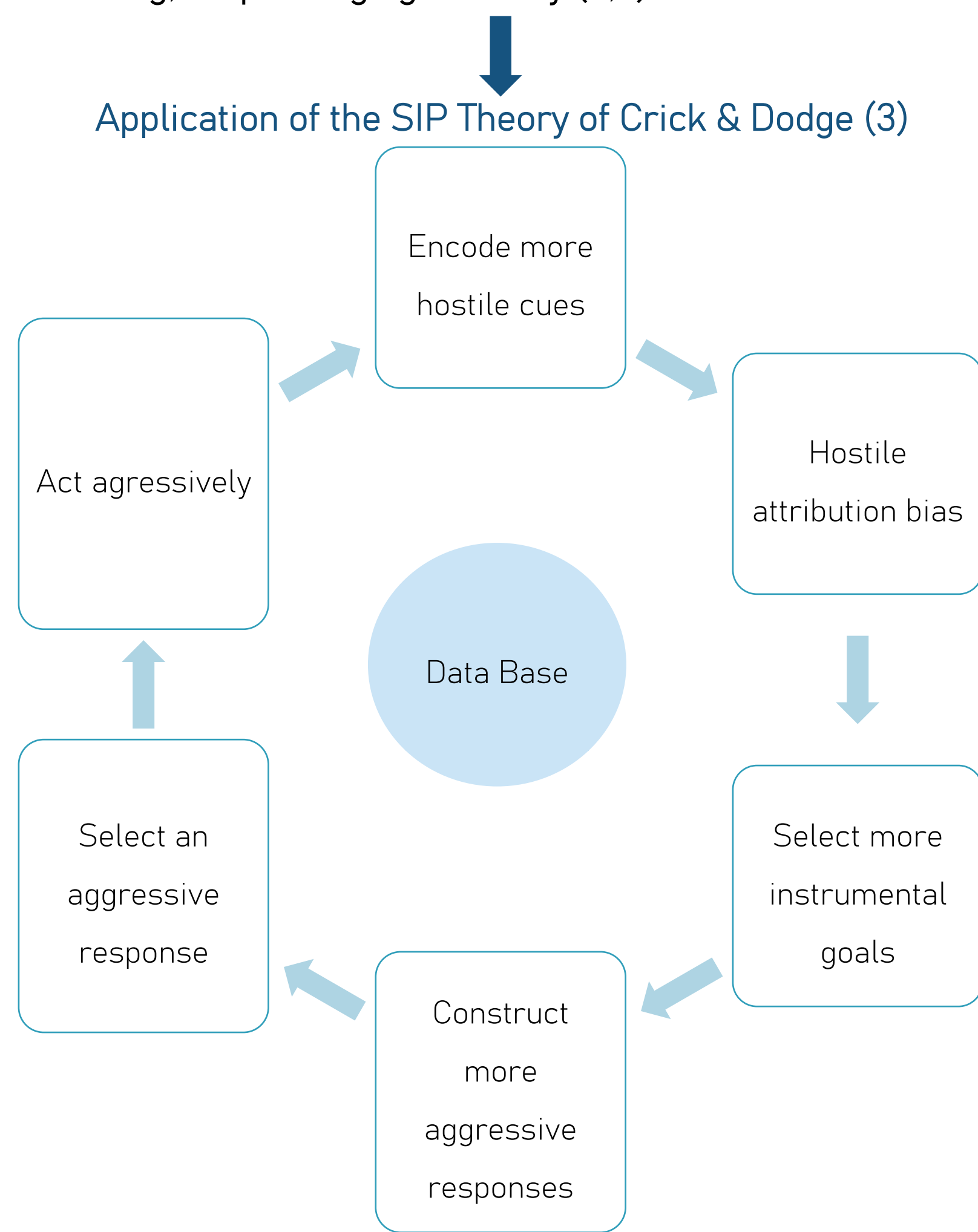
Mariana Sebastião Machado (mmmachado@direito.up.pt)<sup>1,2,3</sup>, Cândido da Agra<sup>3,4</sup> & Carla Sofia Cardoso<sup>2,3</sup>

<sup>1</sup>PhD research fellow FCT (2021. 04650.BD) | <sup>2</sup>School of Criminology, Faculty of Law, University of Porto | <sup>3</sup>CIJ - Centre for Interdisciplinary Research on Justice | <sup>4</sup>University of Porto

## BACKGROUND

**Aggressive behavior:** Defined as a behavioral manifestation of a system responsible for the individual reaction to a perceived threat; **Aggressive driving behavior:** Pattern of unsafe driving behaviors, perceived as potentially aggressive and harmful, that put the driver and/or others in risk (1)

While driving, the subjects can perceive different situations and other drivers as hostile and threatening, responding aggressively (1,2)



How to measure SIP?

**Vignettes** "standardized examples of situations that ask the respondent to put themselves in the particular situation given, thereby allowing all respondents to artificially experience the same situation that is not bounded by individual opportunities" (4)

## METHODOLOGY

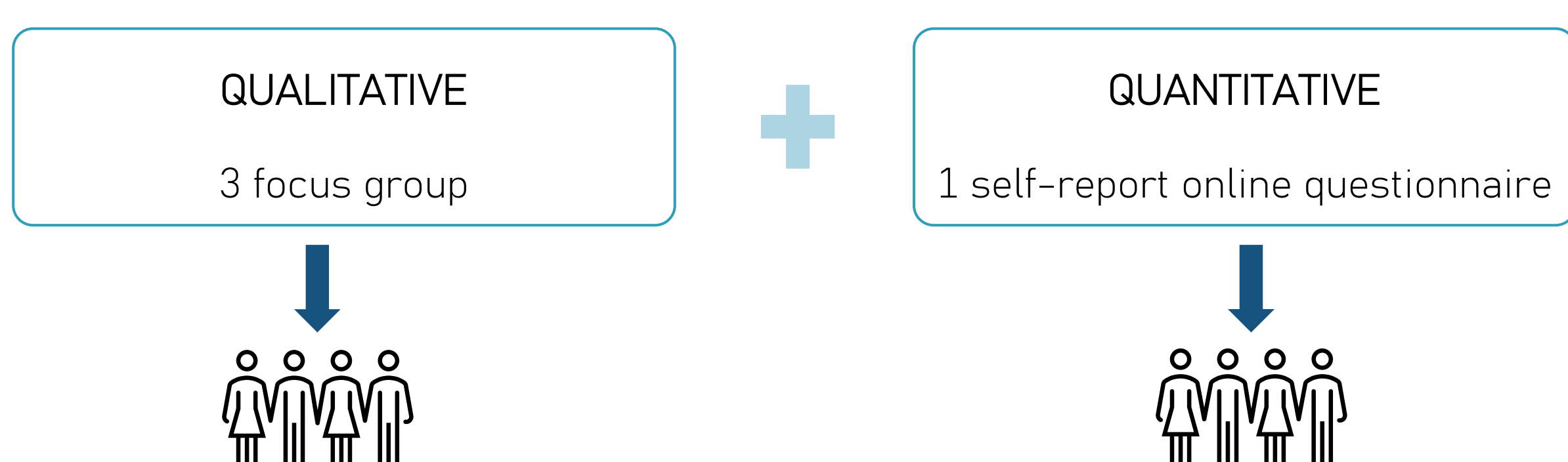
### How to develop vignettes?

- Situations described possible conflict situations between drivers - starting point: items of self-report questionnaires
- Vignettes with a minimum of 50 and a maximum of 200 words (5)
- Presented one or more characters, without the use of dialogue (5) and made an initial reference to the context in which the situation took place (6)
- Not including the sex of the protagonists - it could lead to a bias in the responses

### 6 vignettes developed

*You are stopped at a traffic light, and the signal is red. You are the first in line. The light turns green, and it takes some time to start moving. The driver behind you honks at you.*

### How to test them?



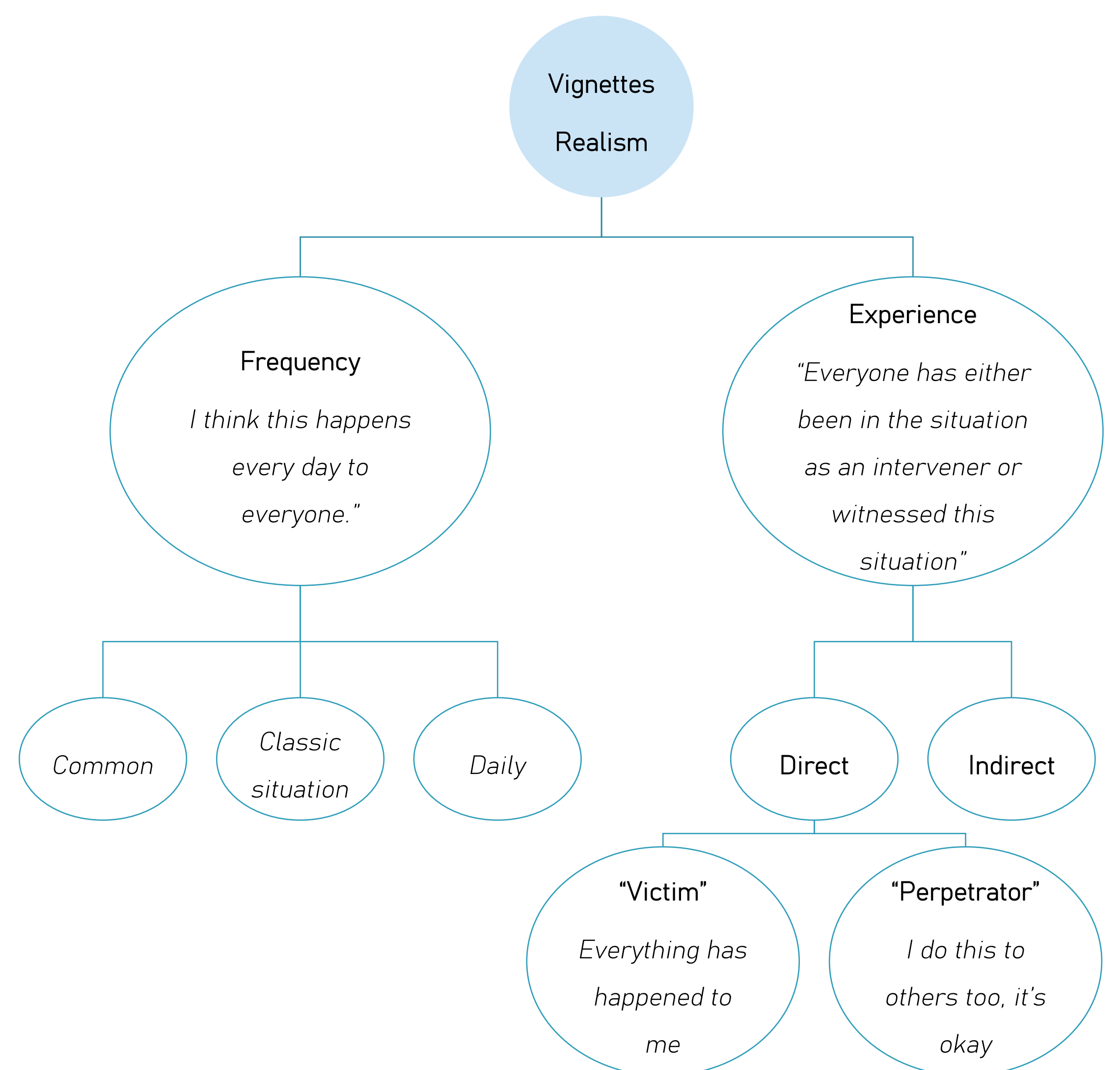
N = 20 (70% women)  
Aged between 21 and 65

N = 562 (58.70% women)  
Aged between 18 and 67

## RESULTS

### Qualitative Results

- Vignettes are seen as realistic and part of the daily day in Driving
  - Frequent & Common
- The participants have already experience the situations
  - Directly or indirectly
  - Experience as the person who suffers the action or did the action



### Quantitative Results

- SIP variables, stemming from vignettes, exhibit **good levels of internal consistency**.
  - $\alpha$  ranging from .78 to .94
- SIP variables **positively correlated with each other**.
  - E.g., hostile attribution - Implementation of an aggressive driving response ( $r = .31, p < .001$ )
- SIP variable of **implementation of aggressive response positively correlated with aggressive Driving behaviour scale** ( $r = .43, p < .001$ ) & **negatively correlated with pro social Driving behaviour scale** ( $r = -.29, p < .001$ )
- Higher levels of aggressive Driving behaviors positively correlated with involvement in road accidents

## CONCLUSIONS

This study allowed the development of valid vignettes to evaluate aggressive driving behaviors using SIP. Thus, it will make it possible to study this specific manifestation of aggressive behavior, which encompasses various malice consequences worldwide, through one of the most used frameworks in the study of aggressive behavior. Moreover, it will allow the design of prevention/intervention programs to modify the existing bias in SIP in driving context, reducing aggressive driving behaviors

## REFERENCES

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