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DTU

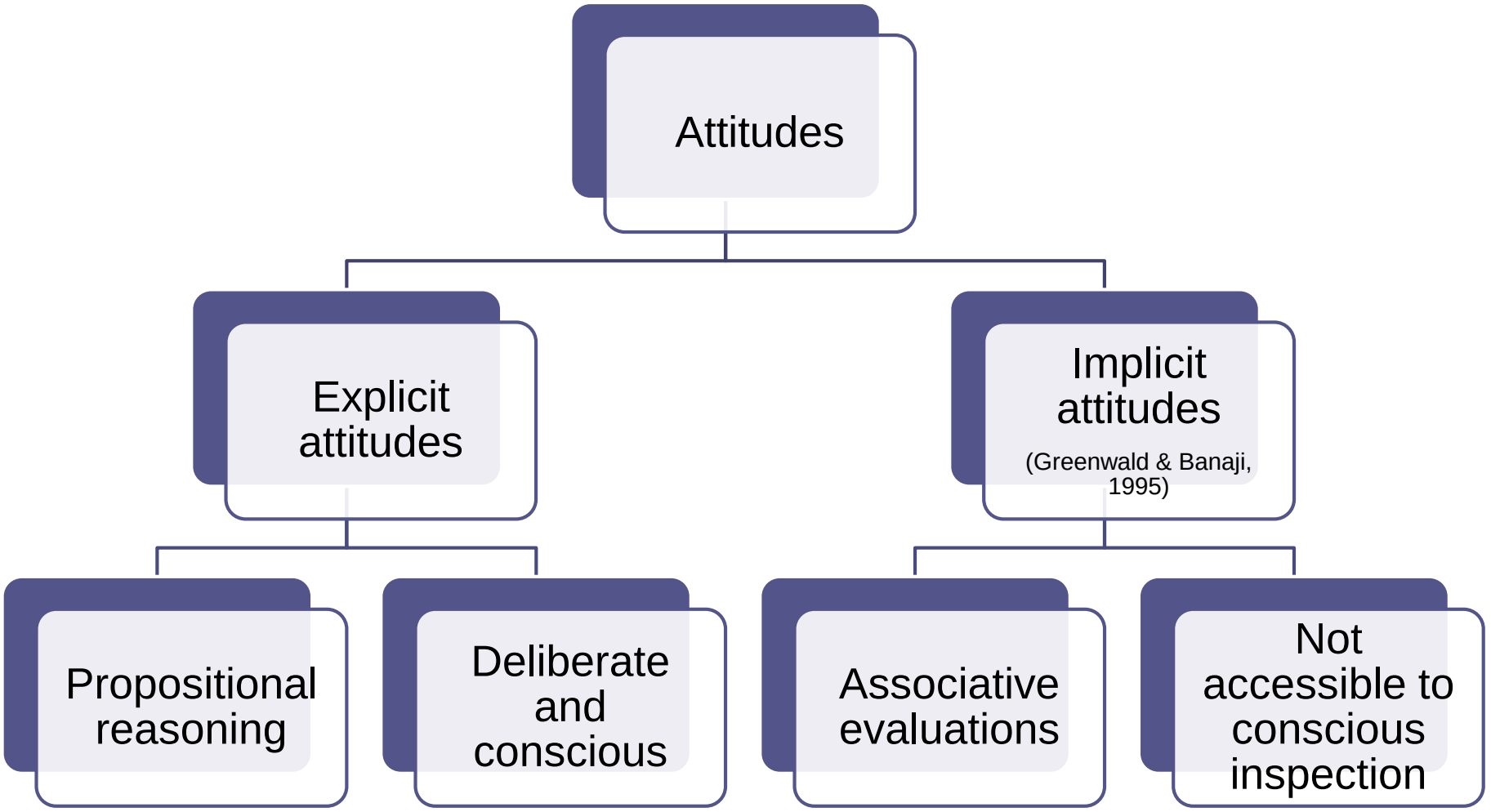
IMPLICIT ATTITUDES TOWARDS RISKY AND SAFE DRIVING IN A DANISH SAMPLE

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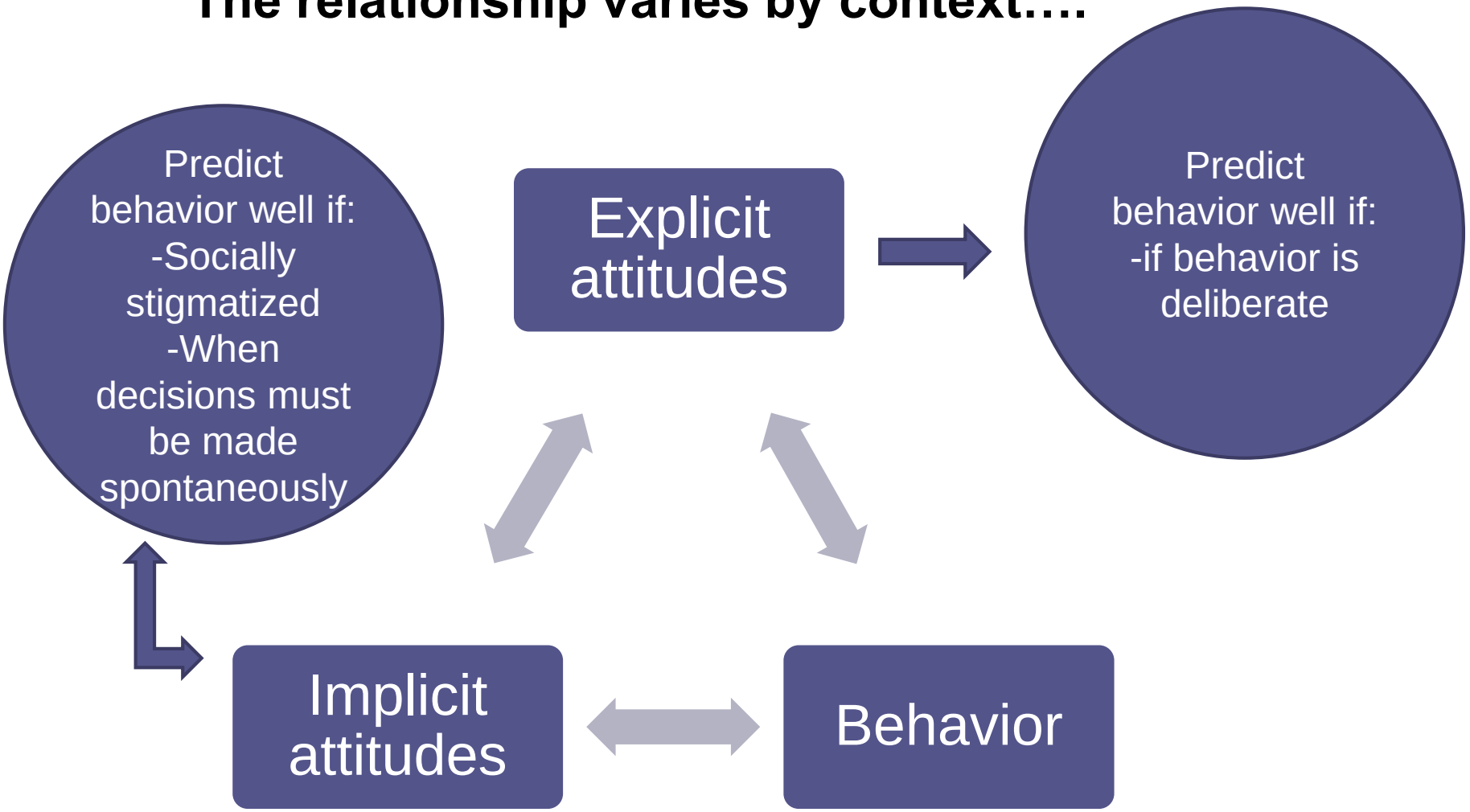

Attitudes
Explicit attitudes
Implicit attitudes
(Greenwald & Banaji, 1995)
Propositional reasoning
Deliberate and conscious
Associative evaluations
Not accessible to conscious inspection

Implicit attitudes

Reveal information that people are unwilling or unable to share

Have shown to predict behavior in many areas (Stereotyping, consumer behavior, health behavior)

The relationship varies by context….



Might fit in a driving context because:

Driving is characterized by frequent decisions under time pressure

Safety is highly promoted

Attitudes towards risky and safe driving might be socially sensitive

Purpose of the study:

Measure implicit attitudes towards risky and safe driving	Compare implicit attitudes with self-reported driving behavior

Measuring implicit attitudes:

Will apply the Go/No-go association task (GNAT)(Nosek & Banaji, 2001)

Easier to associate concepts that are closer in the mind

Reaction time of categorization on the computer

Faster reactions = more associated in the mind

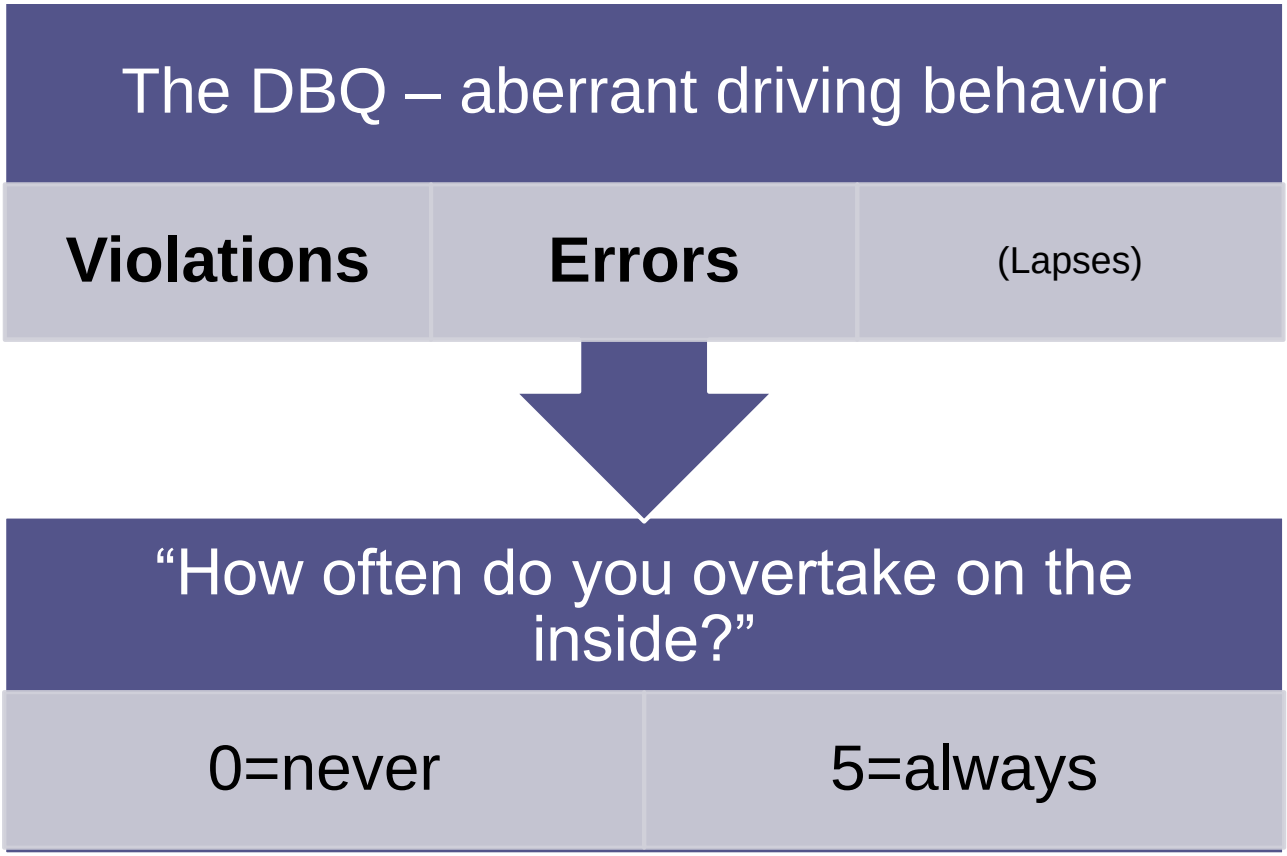
Measuring driving behavior:

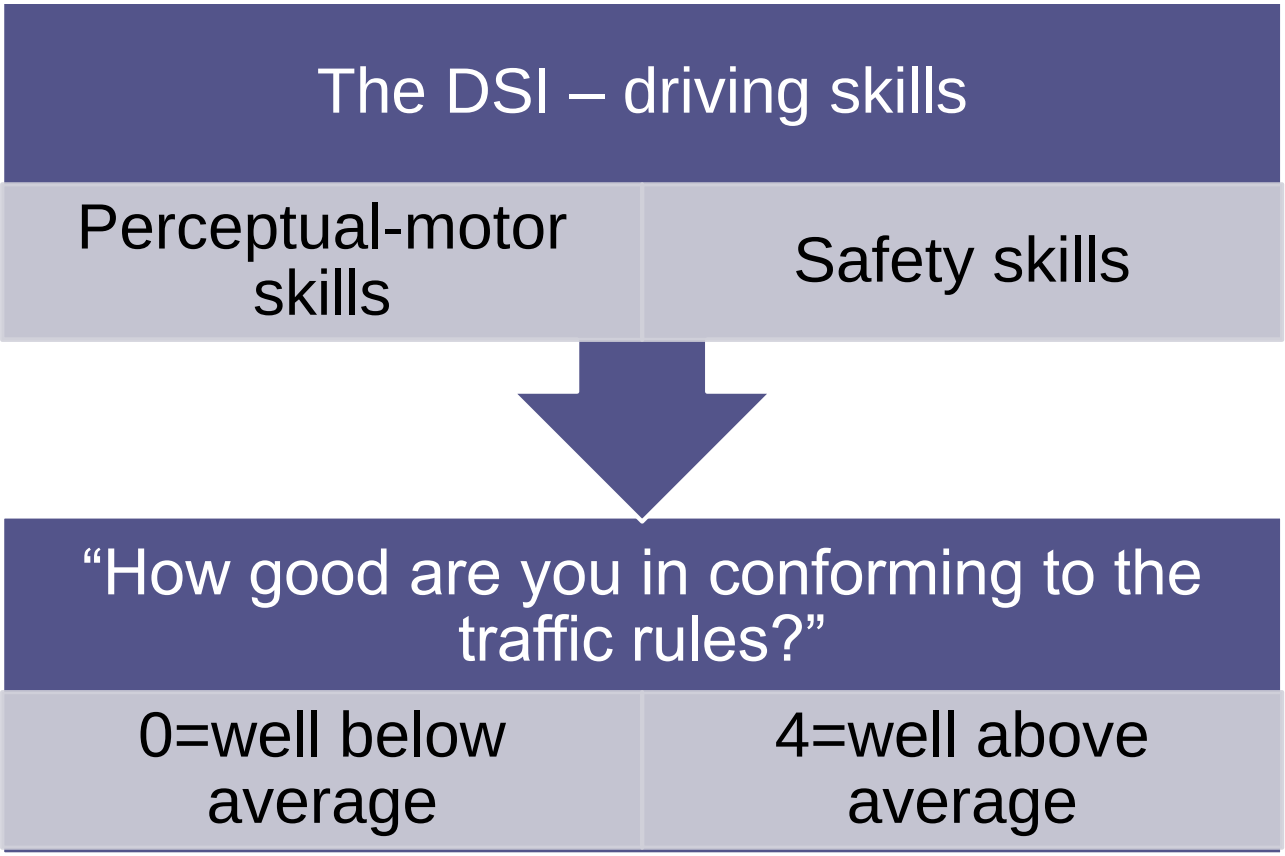
The Driver Behavior Questionnaire (DBQ)

(Reason et al., 1990)

The Driver Skill Inventory (DSI)

(Lajunen & Summala, 1995)


The DBQ – aberrant driving behavior
Violations
Errors
(Lapses)
"How often do you overtake on the inside?"
0=never
5=always


The DSI – driving skills
Perceptual-motor skills
Safety skills
"How good are you in conforming to the traffic rules?"
0=well below average
4=well above average

AIMS

1

- **Refine the GNAT to be used to assess implicit attitudes towards risky and safe driving**

2

- **Explore the relationship between implicit attitudes and self-reported driving behavior**

Method – Design of the GNAT

Target categories: Risky versus safe driving situations

Attribute dimensions: Positive versus negative words

Attitudes measured by the **strength of association** between the target categories and the evaluative dimension

Risky driving

Bad words



- “GO” if stimuli on the screen belongs to any of the above categories

- “NO-GO” if the stimuli on the screen do *not* belong to any of the above categories

Risky driving

Good words



Risky driving

Bad words

Beautiful

Desirable attitudes:

Performance should be faster when “go” is required:

For pictures of risky driving situations and negative (rather than positive) situations

For pictures of safe driving situations and positive (rather then negative) words

Results: GNAT and self-reports

Correlations between implicit attitudes and self-reported driving behavior

		DSI	*DBQ*
Whole sample	Implicit attitude risk	.07	.26
	Implicit attitude no risk	-0.14	.13
Male	Implicit attitude risk	-.14	.45*
	Implicit attitude no risk	-.63**	.08
Female	Implicit attitude risk	.23	.10
	Implicit attitude no risk	.12	.17

Note. Cell entries are Pearson correlation coefficients. ** $p < .01$, * $p < .05$. *Nmale* = 23, *Nfemale* = 32.

2 significant results:

1) The DBQ scores and implicit attitudes towards risky driving: a greater number of own traffic violations/errors = more risk-aversive implicit attitude
2) The DSI scores and implicit attitudes towards safe driving: lower self-reported driving skills = more positive implicit attitudes towards safe driving

Discussion – Main findings

- Reliable instrument
- Implicit attitudes towards safe driving versus towards risky driving = separable constructs
- Only in males
- Limitation: Small sample size

Discussion – violations/errors

Gender role identification with *macho* driving style = more violations

(Harré *et al.,* 1996; Krahé and Fenske, 2002;Harré and Sibley, 2007; Sibley and Harré, 2009b)

Bolstering of one behavior trough rationalizing it

(Swanson et al., 2001)

Implicitly this is not possible

Socialization + learning from mistakes makes drivers hold anti-risk (not pro-safety) implicit attitude

Not strong enough experience (accident) to stop the macho driving style, but “knows” that it is wrong

Discussion – driving skills

Low driving skills, holds pro-safety attitudes

Drivers who think *highly* of their driving skills perceive lesser risk and value safety less

(DeJoy, 1989; Harré *et al*., 2005; Harré and Sibley, 2007; Lajunen and Summala, 1995; Näätänen and Summala, 1976)

Drivers who think *lowly* of their driving skills then perceive greater risk = pro-safety attitudes

Conclusions

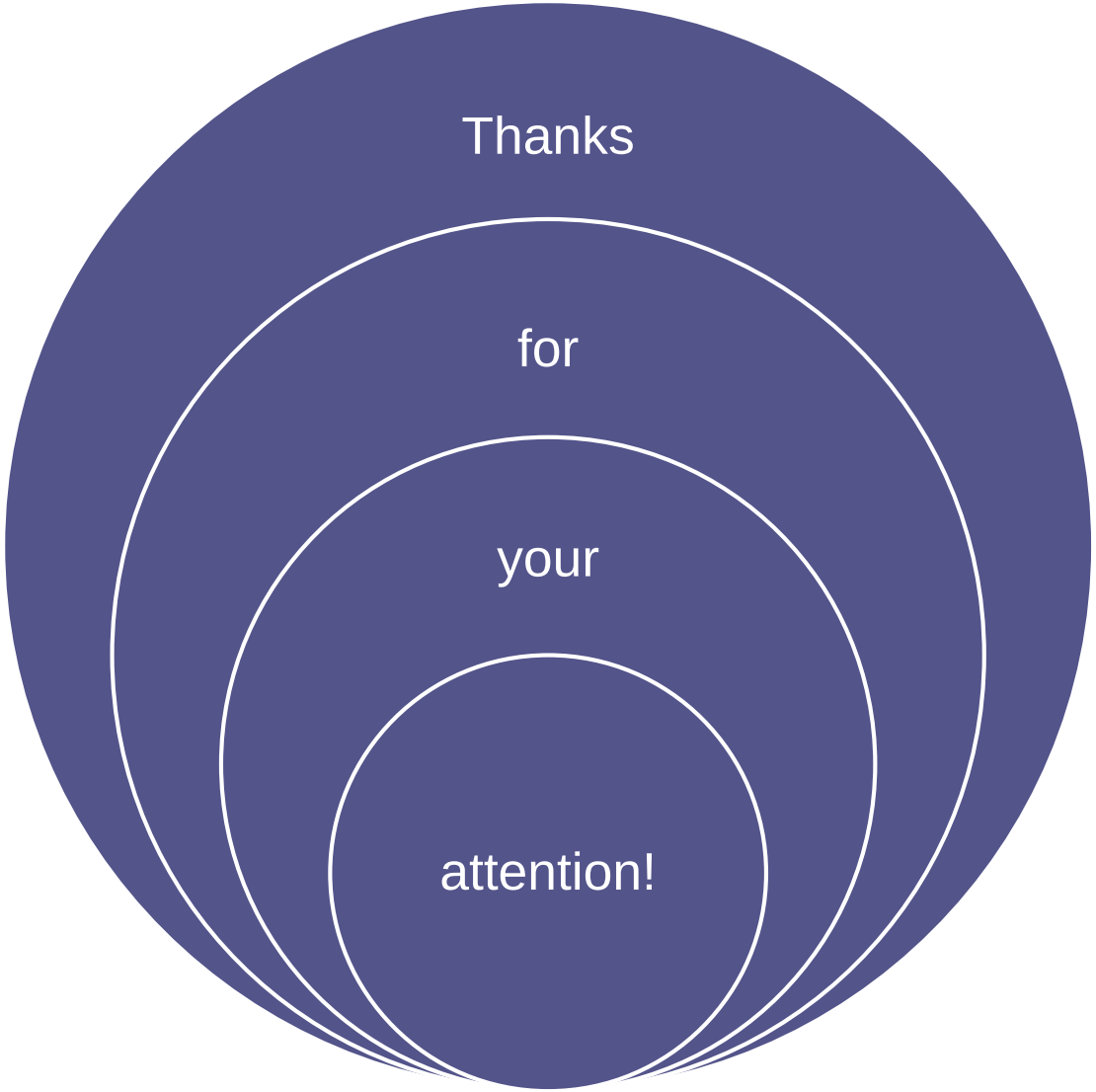
The difference between safe versus risky attitudes = greater theoretical understanding of the processes behind safe and risky driving

Interventions should target men and women differently

Interventions should treat safety and risk separately

Results should be replicated with a larger sample

The link between explicit, implicit and actual behavior should be explored


Thanks
for
your
attention!