



# Do Norms Dominate Interests?

**Testing Implications of Dual-Process Models  
and Rational Choice Theory  
for Protest Participation**

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## The Problem

A great deal of our behavior is **automatic**: it is elicited by situational stimuli.

⇒ greeting a friend, taking the subway to the work place. Calculate:  $2 + 3 = ?$

A second type of behavior is **reflective**: consequences are calculated and the „best“ behavior is chosen.

⇒ fake data to get tenure more quickly, choose between several job offers.

This holds for **norm compliance** as well – see the examples „greeting a friend“ or „fake data.“



There are two questions that are rarely addressed in the literature:

**(1) If norms are strongly internalized: to what extent do non-normative goals influence norm compliance?**

The **norm** could elicit behavior spontaneously so that other goals are not considered.

**Example** (from the research to be discussed later):

Many participants in the Monday demonstrations in Leipzig in the fall of 1989 had

- a strongly internalized **norm** to participate in the protests (= normative motivation), and
- a strong fear of repression – this is a **non-normative motivation**: not being a victim of state repression.



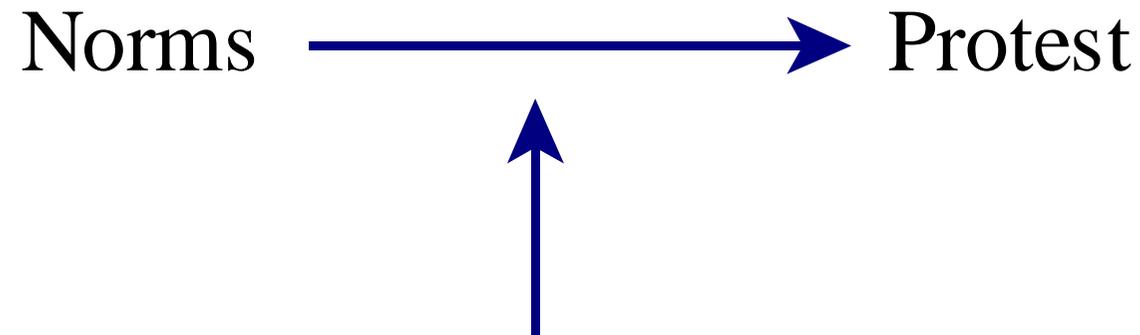
The same question could be asked for **non-normative motivations**:

**(2) If non-normative motivations are intense: to what extent will internalized norms influence norm compliance?**

The **strong non-normative goals** – avoid state repression – could elicit behavior to achieve the goals spontaneously so that norm internalization is not considered.

**These questions are addressed in this presentation.**

Statistically, it is tested to what extent **non-normative motivations are moderators** for the effects of norms on norm compliance. Research example:



Moderator variable:  
**non-normative motivations**



This is an example of situations where there are **two kinds of motivations**:

- normative motivations and
- non-normative motivations.

The latter are often called „**interests**“ in the literature.

However, those with a strong norm internalization have an „interest“ (= goal) to conform with the norm!

Other terminology: **instrumental vs. non-instrumental motivations ...**

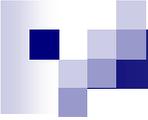


## Terminological conventions:

For the sake of brevity: **interests** refer to **non-normative motivations**.

**Norms** are defined as statements claiming that something should or should not be the case. The defining criterion is thus "oughtness."

**Internalization** of a norm means that norm compliance becomes an intrinsic motivation



## Conflicting and non-conflicting motivations

Another distinction is important in this context. The norm to protest and the motivation to avoid repression are **conflicting**: they cannot be realized simultaneously.

Norms and non-normative motivations may also be **non-conflicting**. Example: norm to protest and the goal of bringing about political change (= *public goods*).

I **focus on conflicting goals** – the norm to protest and the goal to avoid repression. It is more interesting to see how conflicting motivation affect behavior.  
(If there is time I will discuss non-conflicting goals.)



# Outline of the presentation

- The relationship between norms and interests:  
Hypotheses
- What theories imply which propositions?
  - Dual-process theories
  - Rational choice theory
- Research design and measurement
- Results



## **Relationships between Norms and Interests: Propositions**

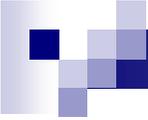
**Again: Focus is on conflicting goals**

**Example (as said before):**

Norm = perceived obligation to protest

Interest = not being subject to state repression.

**How could these motivations influence protest behavior?**

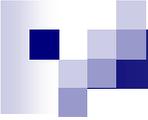


## Additive-effects proposition

**Additive effects proposition:** If internalization changes, norm following changes by a certain amount, whatever the values of other variables are.

Thus, protest norms and repression have additive effects on protest.

This is the **standard hypothesis in the sociological literature**. It is based on role theory (Biddle and Thomas 1966) and functionalism (Wrong 1961). It is also shared by many **social psychologists** (see, e.g., the Fishbein-Ajzen theory such as Fishbein and Ajzen 2009).



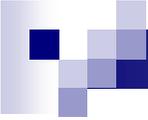
## Incentives proposition

**Idea:** norms and interests are both kinds of motivations, i.e. **incentives**, and have the same effects.

If **one of them is relatively strong** the other is not considered in the decision – the actor knows anyway how to act. So deliberation which is costly is superfluous.

**More precisely:** The greater the **strength of *norm internalization***, the lower are the effects of interests.

In terms of the title of the paper, **norms do not dominate interests**, and **interests do not dominate norms**.



## Norms proposition

Norms are a sort of **filter** that stops any consideration of interests. More precisely:

"The more strongly a norm prescribing a certain behavior is internalized, the weaker are the effects of calculated incentives on this behavior. ... If internalization is very strong, the norm is enacted **irrespective of the presence and strength of such incentives.**" (Kroneberg, Yaish and Stocké 2010: 9, emphasis added)

This is held by the **model of frame selection** (Esser 2001 – see Mehlkop and Graeff 2010: 298, with further references).

Thus, **norms dominate interests.**

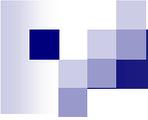


## Interests proposition

The opposite claim is that intense interests are a sort of **filter** that stops any consideration of norm: **norms only influence behavior if interests are not too strong.** In the latter case individuals follow their interests.

**More precisely:** If an interest is relatively strong, it triggers the respective behavior, *regardless of the strength of internalized norms*

Thus, **interests dominate norms.**



The interests proposition is similar to (or identical with?) the **low-cost proposition**. It holds that „environmental concern [includes norms KDO] influences ecological behavior primarily in situations and under conditions connected with low costs and little inconvenience for individual actors” (Diekmann and Preisendörfer 2003: 443, see also 1998)

This hypothesis is in line with what **Bertolt Brecht** wrote in the Threepenny opera: „First the grub, then the morals.” (“Erst kommt das Fressen, dann kommt die Moral.”)



## A formalization of the the propositions

This is necessary for comparing hypotheses with findings.

Assume we set up a **coordinate system** with "**norm internalization**" as the x-axis, **norm compliance** as the y-axis. What would be the lines **for low and high interest** – for each of the four propositions?

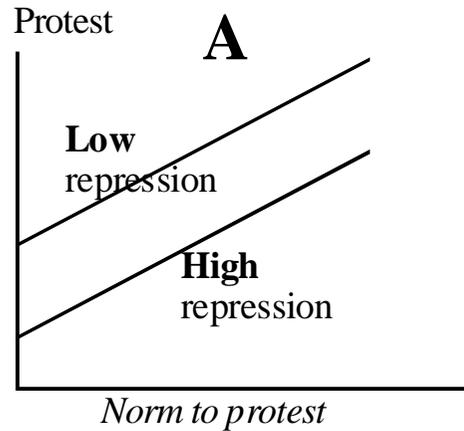
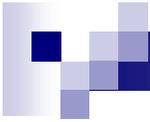
### Example:

**x-axis:** internalization of the norm to protest

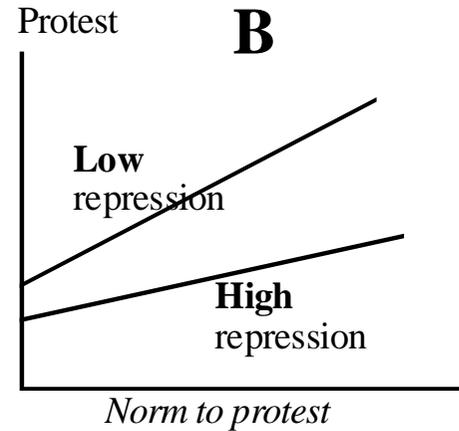
**y-axis:** frequency of protest

What would be the lines for **low and high repression** for

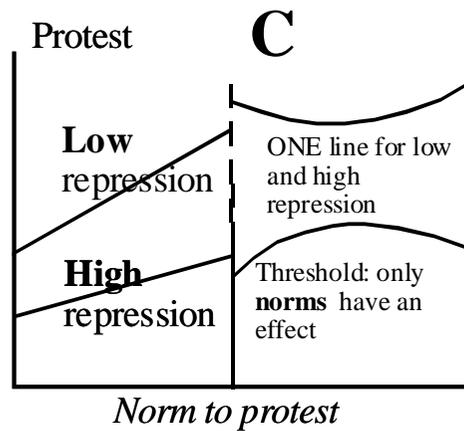
- the  additive-effects proposition,
-  incentives proposition,
-  norms proposition
-  interests proposition?



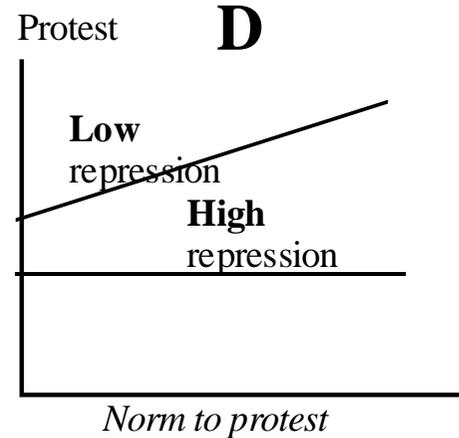
**Additive-effects proposition**



**Incentives proposition**



**Norms proposition**



**Interests proposition**



## Non-Conflicting Goals

Examples:

**Norm** = perceived obligation to protest

### Interests

(a) Motivation to contribute to the provision of public goods (freedom of travel, one-party system etc.)

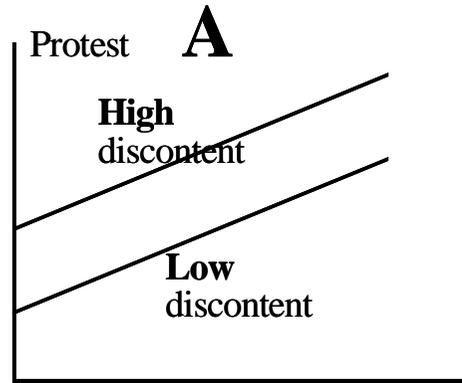
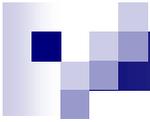
= **discontent**

(b) Getting social approval from important others (friends, members of groups): **social incentives**

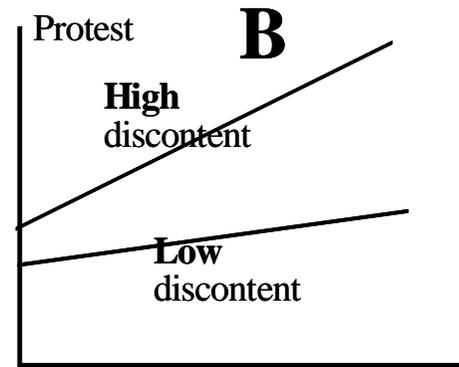


The propositions are similar to those for conflicting goals – with one exception: there are no negative slopes (coefficients).

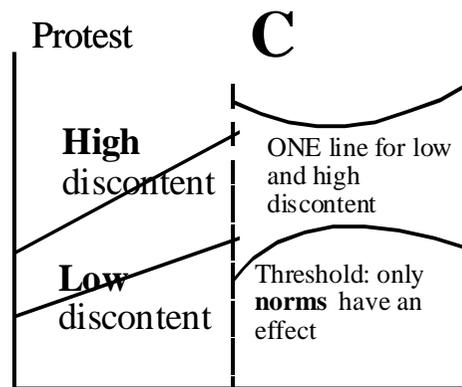
## **Summary of the propositions:**



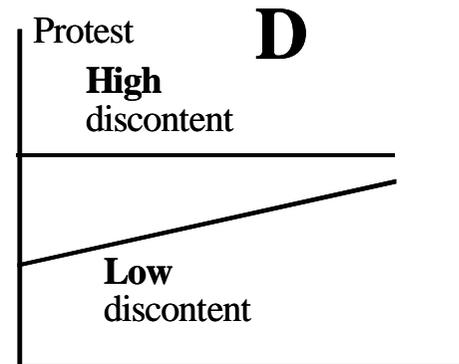
*Norm to protest*  
**Additive-effects proposition**



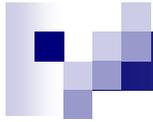
*Norm to protest*  
**Incentives proposition**



*Norm to protest*  
**Norms proposition**



*Norm to protest*  
**Interests proposition**



The same propositions hold for social incentives:  
simply replace

**„high discontent“** with **„high social incentives“**  
**„low discontent“** with **„low social incentives“** ...



# When Do Norms and Interests Have What Effects?

## Predictions from Dual-Process Theories and Rational Choice Theory

The idea that strong norms or interests may dominate weak ones is based on hypotheses from **dual-process theories**.

**Two assumptions are made:**



**Assumption 1:** Deliberation (= calculation, thinking) is costly.

**Assumption 2:** People try to avoid costly behavior.

**Note:**

**Both assumptions are compatible with rational choice theory!** See literature on decision costs – e.g. Buchanan and Tullock 1965 (Calculus of Consent).



## Quotations that illustrate these assumptions:

"Deliberative processing is characterized by **considerable cognitive work**. It involves the scrutiny of available information and an analysis of positive and negative features, of costs and benefits" (Fazio 1990: 89-90).

Furthermore: A „**'law of least effort'** applies to cognitive as well a physical exertion. The law asserts that if there are several ways of achieving the same goal, people will eventually gravitate to the least demanding course of action" (Kahneman 2011: 35, emphasis added).

However, it may be worthwhile to **bear the costs** of deliberating.

- **Much is at stake** („motivation“ to deliberate, i.e. „fear of invalidity“ of a decision, Fazio 1990: 92) → deliberation.
- **Opportunity to act** („time and resources to deliberate“) → deliberation
- **Necessary condition** for any goal to enter a decision is the **accessibility** of norms and interest.

## How can these ideas be applied to norm compliance?

It seems plausible to **distinguish different kinds of situations** where the costs and benefits of following norms and pursuing interests are different.

### 1. **Strong similarity of the net benefits of *norm compliance* and of pursuing *interests* (in a conflict situation).**

This means: accessibility of all goals, not clear what is at stake, in case of low „time and resources to deliberate“ the actor will procrastinate the decision. Costs of deliberation are *relatively* low.

Implausible, that one goal will dominate the other, i.e. there is an **additive effect of norms and interests**. If one motivation becomes stronger the behavior increases/decreases – regardless of the other motivation. **Saving costs of deliberation will not "suppress" considerations of one of the motivations.**



## Scope conditions for the additive effects proposition:

If net-benefits of norm compliance and pursuing an interest are both **relatively similar** there will be additive effects.



## **2. The net-benefits of complying to a norm are relatively high**

There is no motivation to deliberate.

The individual knows or has learned that it is clearly best for him or her to act according to the strong normative goal.

Why, then, deliberate? Interests are disregarded.

**The norm will dominate the interest.**



### **3. The net-benefits of achieving the non-normative goal are relatively high.**

There is no incentive to deliberate.

The individual knows or has learned that it is clearly best for him or her to act according to the interest. Why, then, deliberate?

**Interests will thus dominate norms.**

Both implications can be summarized:



## Scope conditions for the incentives proposition:

(a) If the **net-benefits of norm compliance** are relatively high, norms dominate interests.

(b) if the **net benefits of pursuing interests** are relatively high, interests dominate norms.



## Norms proposition as an implication of the incentives proposition:

The incentives proposition implies: Norms dominate interests **only if** norms are „stronger“ than interests.

## Interests proposition as an implication of the incentives proposition:

The incentives proposition implies: Interests dominate norms **only if** interests are „stronger“ than norms.



**There are situations where one of the propositions typically holds true.**

If empirical research takes place in such situations one of the propositions will be confirmed.

## **The interests proposition**

There are situations where for most individuals the **benefits of norm compliance** are **much lower** than the **benefits of achieving a conflicting goal**.

Example:

Norm = one should protect the environment

interest = save money required for a clean environment

These are situations where the interests proposition holds (e.g. the **low cost hypothesis**).



## The norms proposition

There are situations where for most individuals

the **benefits of norm compliance** are much higher than the **benefits of achieving a conflicting goal**.

Example:

Norm: helping norm (rescuing Jews under Nazi rule);  
interest: not falling victim to being executed by the Nazis



## Will there be threshold effects?

In contrast to the MFS the previous propositions do not imply a threshold effect.

Is it nonetheless plausible that there are such effects?

**Thought experiment:** assume the internalization of the norm to protest increases – due to various conversations with friends – during a year from 0 to 10, in steps of 2. Let all other incentives be constant.

Is there any plausible reason why there should suddenly be a burst of protest? (NOTE: Other incentives are assumed not to change. Otherwise ...)



## Does RCT imply an additive effect of norms and interests?

Various authors claim that rational choice theory (RCT) implies an additive effect (e.g. Kroneberg, Yaish and Stocké 2010)

But this is not shown in detail.

The previous argument shows when interaction effects obtain, and this argument is consistent with RCT!  
Thus, RCT does not assume additive effects.



## Previous Research

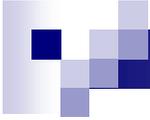
There are numerous empirical studies in which the effects of norms on behavior are tested. Only recent research systematically examined interaction effects of norms and non-normative incentives on behavior, based on dual-process hypotheses or rational choice theory

See in particular the following English publications: Best and Kneip 2010; Kroneberg, Heintze and Mehlkop 2010; Kroneberg, Yaish and Stocké 2010; Mehlkop and Graeff 2010. We include research on the low-cost proposition because this can be reformulated for norms (Rauhut and Krumpal 2008). For the low-cost hypothesis see in particular Diekmann and Preisendörfer 1998, 2003, with further references.

Detailed review not possible.

Only some comments:

- Different kinds of interaction effects were found.
- It has not systematically been discussed to what extent the norms and interests that were addressed were of different „importance“ to the respondents, i.e. to what extent the net utility of norm compliance and the net utility of pursuing an interest were different. Different results in studies could ensue due to differences in benefits.
- Central assumptions – such as activation of norms/interests – are not tested.



# A Test of the Propositions

## The Research Situation

The research that is used to test our propositions took place in Leipzig in the fall of 1990. The **questions of the questionnaire refer to October 9, 1989**. On this day, the largest demonstration in the history of the GDR („German Democratic Republic,” i.e. the communist part of Germany) took place...

The **major fear** of the residents of Leipzig and adjacent areas was that the demonstration that would take place on the Karl Marx Square would be crushed.

And there was a **strong dissatisfaction** with the economic and political situation.



## Expected Findings

It can be assumed that in this situation existing **norms to protest were activated**.

Protest was not a spontaneous action like doing some shopping in a supermarket. Before participating there was **communication** between actors. We found that about half of the participants did not go alone to the protests. It is plausible that intense **deliberation** took place.

In general, thus, an **additive effect** of the protest norm and expected repression should prevail, maybe a **small interaction effect**. (For some people one of the motivations may have been strong.)



## Research Design

The propositions were tested with **survey data of the first wave** of a four-wave panel study that was conducted in Leipzig, East Germany, in the fall of 1990. The interview questions referred almost exclusively to the situation in the fall of 1989. The first **representative study** of the population of Leipzig comprises **1300 respondents**. Comparison of demographic variables of the sample with data from the population of Leipzig suggests that the data were representative.

Protest participation is normally low in a population. In order to increase the number of protesters a **second non-representative sample of 209 respondents** was selected. Interviewers of the professional survey institute that conducted the survey went to the house of democracy in Leipzig in order to recruit interviewees by a snow-ball system.



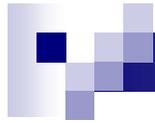
**The representative and opposition sample were pooled.** One reason is that for the extreme case analyses we need as many cases as possible. Furthermore, we need especially many cases at the low and high end of the variables because the hypotheses make predictions for relatively high and low values of a variable.

For **publications in English** where, among other things, the representativity of the sample and the quality of the data are discussed, see: Opp 1994, 1998, 2000, 2004; Opp and Brandstätter 2010; Opp and Gern 1993; Opp and Kittel 2010; Opp, Voss, and Gern 1995.

# Measurement

- Protest participation ...
- General discontent: specific discontents *and* perceived personal political influence ...
- Norms of protest ...
- Social incentives ...
- Repression ...

Summary in Table 1 – next slide



**Table 1. The Scales and Their Measurement: Possible value Ranges, Means, Standard Deviations, and Items**

**Protest (antiregime action).** 1 to 4 / 1.94 / .75. (1) Working for or founding an opposition group. (2) Participating in peace prayers and other church activities. (3) Refusal to vote. (4) Refusal to become member in the SED or a similar organization. Each item had four answer categories: had not taken the action into account (code 1), had thought about performing the action but had not performed it (code 2), had engaged in that action once (code 3) or several times (code 4). Frequency of participation in the Monday demonstrations before and on October 9, 1989 (values 0 to 4, recoded to values 1 to 4 to match the values of the answer categories with the previous items).

**Political discontent.** 1 to 5 / 4.29 / .64. The items measured discontent (1) with the environment, (2) with the existence of two German states, (3) with the possibility for free speech, (4) with the demands of the socialist party SED, (5) with the possibilities of traveling to Western countries. Five categories were presented, from "very satisfied" with code 1 to "very dissatisfied" with code 5.

**Social discontent.** 1 to 5 / 2.37 / .52. The scale refers to discontent with: (1) the possibilities of child care (in kindergartens etc.); (2) equal rights for women and men, (3) possibilities for further education (categories as before).

**Economic discontent.** 1 to 5 / 4.07 / .70. We measured discontent with: (1) the standard of living, (2) the supply of goods in the shops, (3) the purchasing power of the GDR currency in other countries (categories as before).

**Perceived personal influence.** 1 to 4 / 2.07 / .66. Respondents were asked to what extent it was likely that they could have changed the situation in the former GDR by: (1) working for an opposition group, (2) participating in peace prayers, (3) refusal to vote, (4) refusal to become member in the SED or a similar organization. Each item had five answer categories, from "very unlikely" (code 1) to "very likely" (code 5).

**General discontent.** 1 to 20 / 7.58 / 2.81. The previous discontent scales were added and divided by 3 (the number of scales). This sum was multiplied by the influence scale. „General discontent” thus refers to a weighted discontent: strong dissatisfaction and perceived influence yield high scale values.

**Acceptance of a protest norm.** 1 to 5 / 2.91 / .52. Respondents could more or less agree to the following statements. The five answer categories ranged from "fully disagree" to "fully agree." For some items, agreement means a perceived duty to participate, for others agreement to an item means not subscribing to such a norm. In what follows I list the recoded items so that high agreement means acceptance of a duty to protest. (1) If a citizen is very discontented with government policy, he/she should do something about it, for instance take part in a demonstration. (2) A citizen should not only protest if this seems successful. (3) Taking part in political action is even to be expected if there is a risk to get in jail. (4) One should not only be politically active if a sufficient number of others join. (5) Politics should not be left to the elected representatives. (6) Violence against objects may be morally justified. (7) Violence against persons may be justified. (8) If a state suppresses free speech and other basic rights by using violence it is justified that citizens use violence as well. (9) If one is convinced to achieve something through a demonstration, one should not be deterred by a high risk. (10) If discontent of citizens is very high, one has to take part in political actions even if one incurs a risk. (11) Respondents were asked to give their opinion to the emigration wave in the GDR in 1989: I have thought immediately that I am now obliged to act so that not more people leave the GDR. (12) The same question was asked in regard to the changes in Hungary and Poland.

**Social incentives.** 1 to 4 / 2.37 / .52. Membership in protest encouraging groups, expectations of reference persons to protest; critical friends, critical colleagues (for details see text of the paper).

**Subjective probability of repression.** 0 - .8 / .59 / .15. Respondents were asked to estimate the probability in case they protested of (1) being arrested, (2) being hurt by security forces, (3) getting problems on the job, and (4) getting problems for close family members. Four answer categories, from 'very unlikely' to 'very likely.' In order to match the usual value range for probability, the four categories were recoded as .2, .4, .6, and .8. Respondents who were not employed or did not have a family were assigned code 0 for the respective item. The four items capture the most common kinds of sanctions GDR citizens were exposed to.

**Costs of repression.** 0 - 3 / 2.23 / .57. For each of the four kinds of repression respondents were further asked how they had valued being hurt etc. Possible answers were: not very bad (code 1), bad, very bad (code 3).

**Repression.** 0 to 2.40 / 1.43 / .51. A composite scale was constructed in the following way. (1) For each kind of repression the probability and utility were multiplied. These products were then added.

Note: The expressions printed in bold are the names of the scales.



## Findings for conflicting goals: norms and repression

**1. Results of a conventional test** of the interaction effects with interaction terms and the respective additive variables.

**Regression** with

- (1) norms, repression, norms  $\times$  repression (Table 2), then
- (2) norms, repression, norms  $\times$  repression, **and**  
non-conflicting goals – discontent, social  
incentives – as additive control variables  
(Table 3)

Table 2: Interaction Effects of Norms and Interests: Single Equations

Independent variables	Dependent variable: protest					
	1	2	3	4	5	6
Norms	.59**	.58**	.46**	.47**	.41**	.41**
Repression	-.06ns	-.07*				
Discontent			.09**	.09**		
Social Incentives					.56**	.56**
Norms ↗ Repression		-.20**				
Norms ↗ Discontent				.03*		
Norms ↗ Social Incentives						.25**
Constant	1.95**	1.95**	1.96**	1.95**	1.96**	1.93**
Adj. R-square	.17**	.17**	.27**	.27**	.30**	.31**
N	1300	1300	1246	1246	1285	1285

Ordinary Least Squares, unstandardized coefficients. „ns” means „not significant” at the .05 level. \* significant at the .05 level; \*\* significant at the .01 level. Two-tailed tests: .05 level: t-value between 1.65 and 2.35; .01 level t-value greater than 2.35.

Adjusted R-squares are the same!

Opp, Norms and Interests

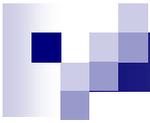


Table 3: Interaction Effects of Norms and Interests: Equations with All Interest Variables

Independent variables	Dependent variable: protest			
	1	2	3	4
Norms	.32**	.32**	.32**	.32**
Repression	-.08**	-.07*	-.07*	-.06*
Discontent	.07**	.07**	.07**	.07**
Social Incentives	.49**	.49**	.49**	.49**
Norms ↵ Repression		-0.08		
Norms ↵ Discontent			.02*	
Norms ↵ Social Incentives				.20**
Constant	1.96**	1.96**	1.95**	1.94**
Adj. R-square	.37**	.37**	.37**	.37**
N	1197	1197	1197	1197

Ordinary Least Squares, unstandardized coefficients. „ns” means „not significant” at the .05 level. \* significant at the .05 level; \*\* significant at the .01 level. Two-tailed tests: .05 level: t-value between 1.65 and 2.35; .01 level t-value greater than 2.35.

Adjusted R-squares are the same!

Opp, Norms and Interests



## Conclusion:

There are **interaction effects**, but they are very **weak** in the sense that they do not increase the adjusted R-square when we include them in a purely additive model. Nonetheless, the interaction terms have the expected sign and are – with one exception – significant. It thus seems **meaningful to explore them in more detail**.



## 2. The graph of the equation of Table 2

### Equation (from Table 2 before):

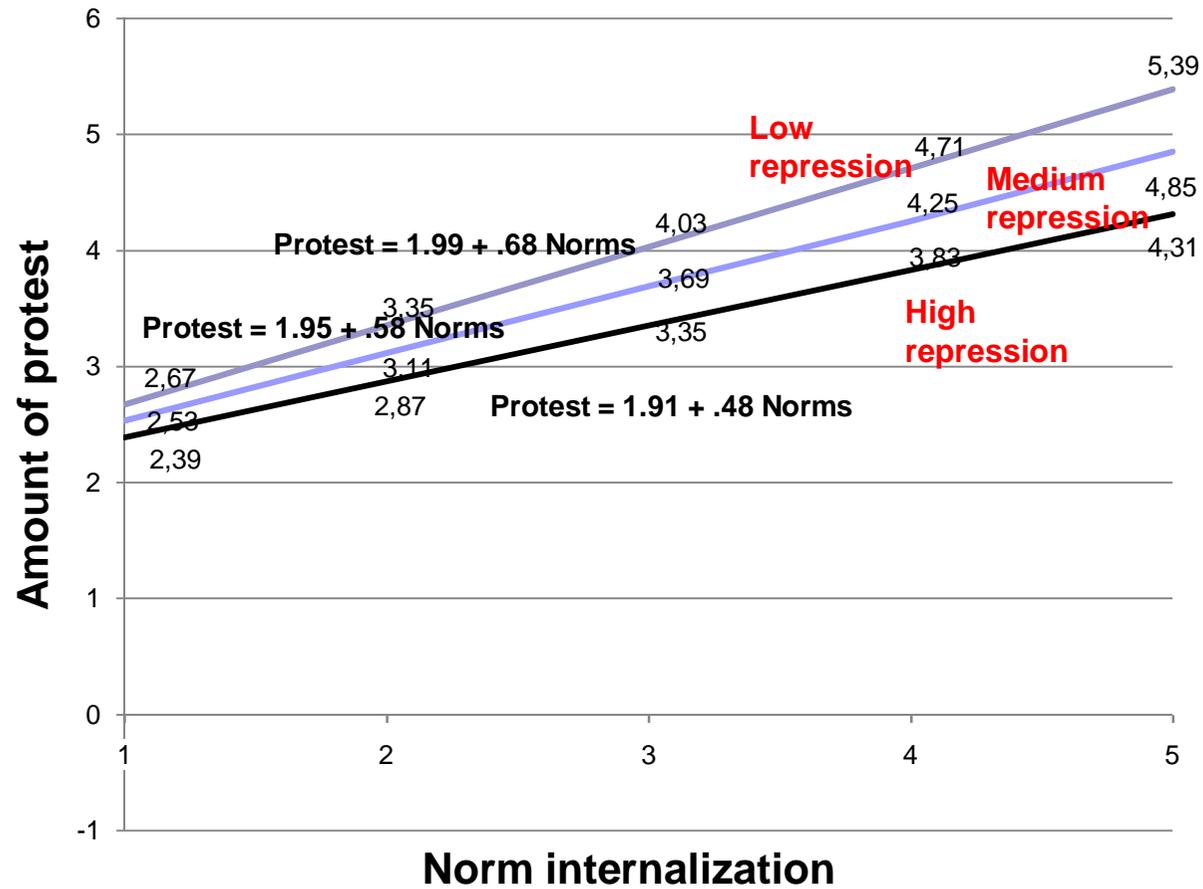
$$\text{Protest} = 1.95 + .58 \text{ Norms} - .07 \text{ Repression} - .20 (\text{Norms} \cdot \text{Repression})$$

(from Table 2)

### Graph:

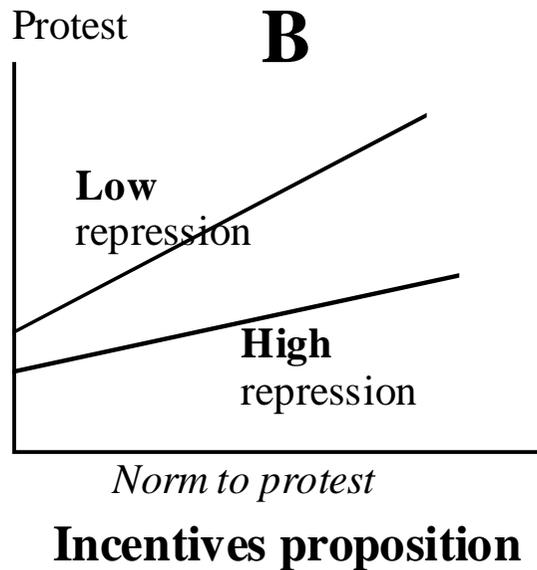
We computed regression coefficients **for the relationship between norms and protest** for three different values of the moderator „repression“ (mean, +1 sd, -1 sd). SD for repression is .5137, SD for norms is .5192.

**Figure 3: Norms and Protest, with Repression as a Moderator**



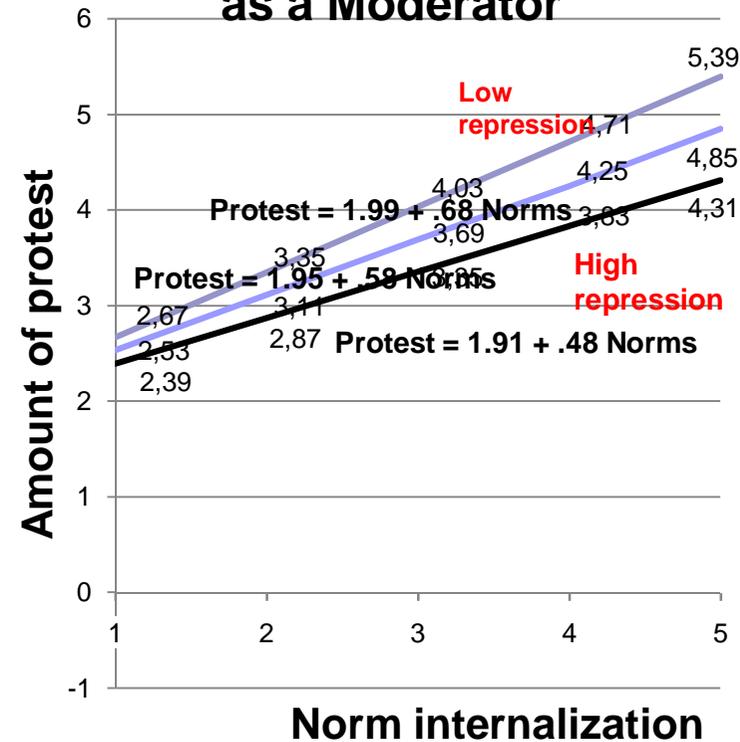
# Which proposition is confirmed?

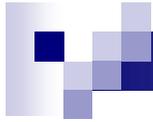
## The incentives proposition:



## Findings:

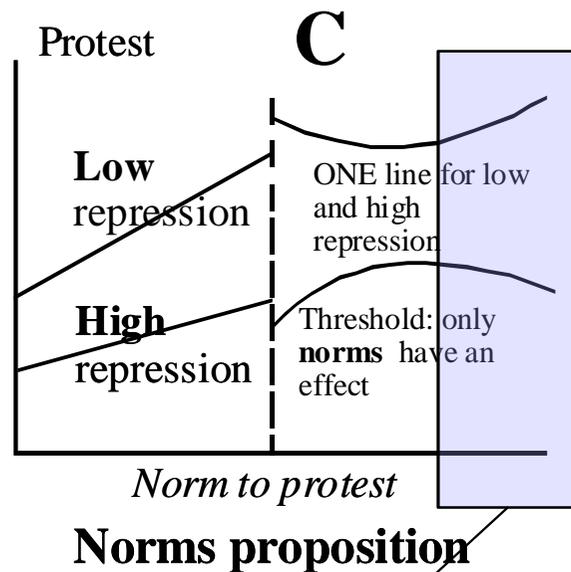
**Figure 3: Norms and Protest, with Repression as a Moderator**





**Note:** in the presentation in Venice the graph looks differently: I made a mistake in the computations. You can check the correctness by computing the equations: I added the numbers for the standard deviations (slide 49).

## Test of the norms proposition



10% of respondents with the highest internalization was selected.

To test this proposition, we must look at respondents with **relatively high norm internalization**.

This is the case for the **highest 10%** of the respondents (N=145). For them, the regression equation is:

$$\text{Protest} = 2.75^{**} - .18^{ns} \text{ Norms} - .38^{**} \text{ Repression}$$

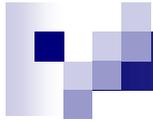
Should have a (strong?) positive effect!

Should be zero!

Thus, even if norm internalization is high, repression has a strong negative effect!

**NOTE:** The variance of the variables is satisfactory.

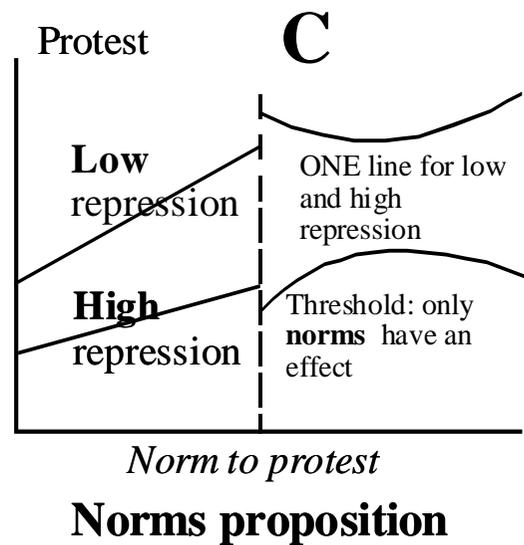
**This is a falsification of the norms proposition!**



Other analyses – not being presented (but see the following slides) – are in line with the incentives proposition as well.

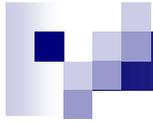
## Skip slides 55-59 due to time constraints

Here is another test of the norms proposition.



We need to see what happens with respondents with **low and high repression**, for increasing degrees of norm internalization.

Therefore, I **regressed** protest on different degrees of norm internalization, for low and high repression.



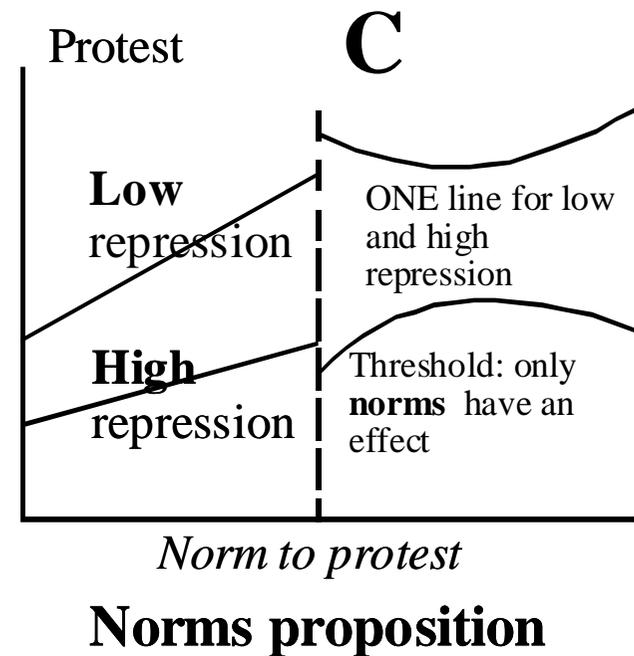
## **Procedure:**

**Low repression** (25% respondents with low repression):  
separate regressions for 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and 90<sup>th</sup> percentile of  
norm internalization.

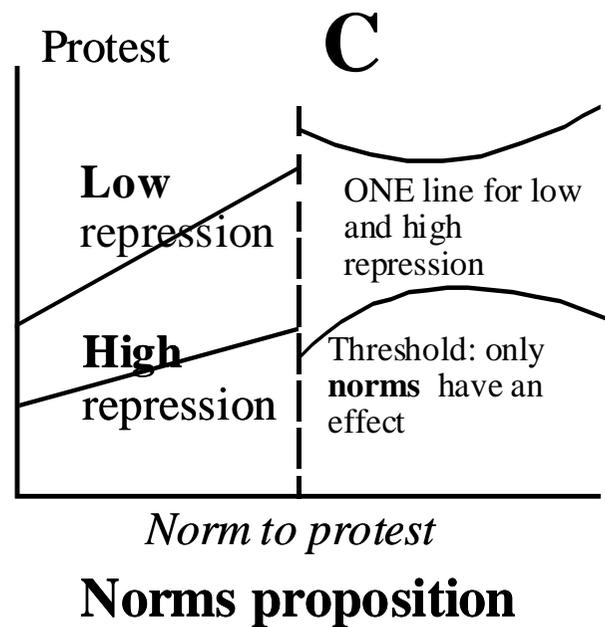
**High repression** (25% respondents with high repression):  
separate regressions for 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and 90<sup>th</sup> percentile of  
norm internalization.

## Prediction:

For those with **low norm internalization** we expect that the coefficients for low and high repression are different. If **norm internalization increases** (i.e. if more respondents with high norm internalization are added – remember that we work with percentiles), there should be some point where the coefficients of low and high repression become equal: only norms matter, regardless of the intensity of expected repression (again see figure C), as the norms proposition claims.



Compare coefficients for low and high repression in table with those of figure C.



**Table 4: Relations of Percentiles of Norms and Protest, for Low and High Repression**

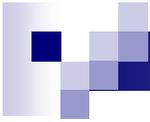
**Panel A: Repression is low (lowest 25 % of repression scale, N = 344)**

Percentiles for norms	B for Repression	Intercept	Adjusted R-square	N
25 <sup>th</sup> percentile	.18ns	1.62**	-.02ns	63
50 <sup>th</sup> percentile	.36ns	1.95**	.01ns	158
75 <sup>th</sup> percentile	.14ns	1.91**	-.003ns	231
90 <sup>th</sup> percentile	-.06ns	1.87**	.07**	266

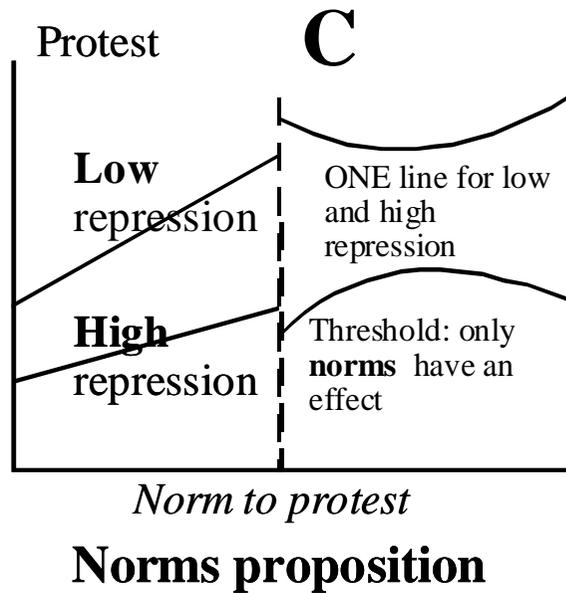
**Panel B: Repression is high (highest 25 % of repression scale, N = 379)**

Percentiles for norms	B for Repression	Intercept	Adjusted R-square	N
25 <sup>th</sup> percentile	-.07ns	1.68**	-.01	98
50 <sup>th</sup> percentile	-.20ns	1.85**	.00	206
75 <sup>th</sup> percentile	-.33ns	1.99**	.01	271
90 <sup>th</sup> percentile	-.26ns	1.98**	.004	308

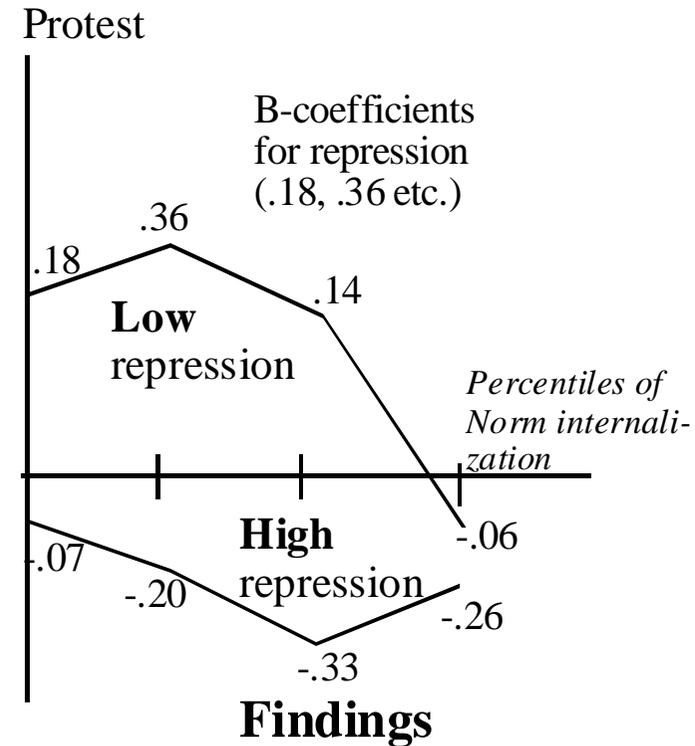
The next slide summarizes the results!



## Expected findings



## Plot of the B-coefficients

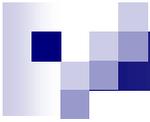


Consistent with the incentives proposition?

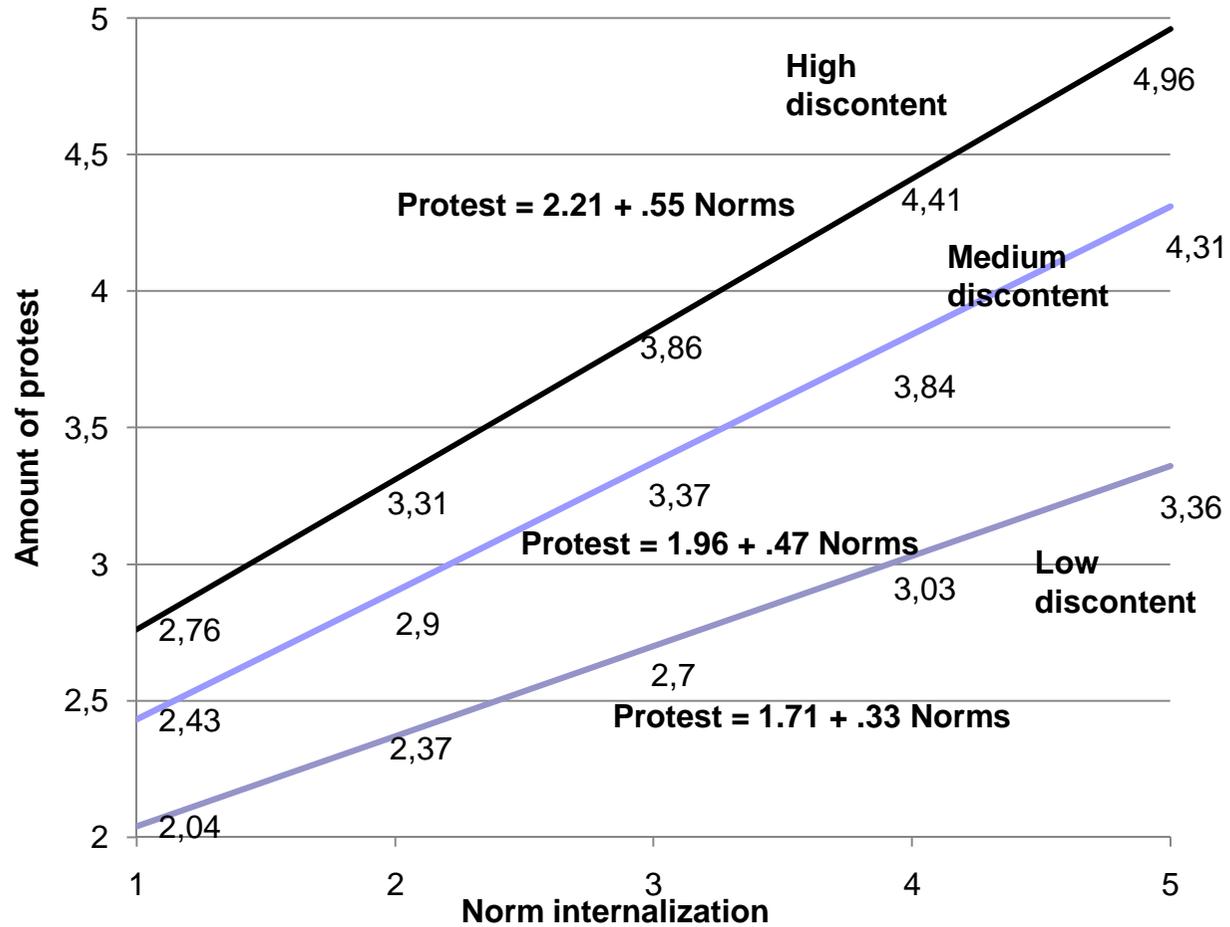


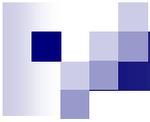
## Summary of the findings

- **Example** used: norm to protest, interest not to be subject of repression.
- **Interaction** effects are small, there are **additive effects**.
- **Data support** incentives proposition – with additive effects.
- **Assumptions not tested:** norm and interest were activated. Costs and opportunities to deliberate. Intensity of norm is regarded as an indicator for high net benefits of complying to the norm. Thus, net benefits of following norms/interests not tested. **Important for further research!**

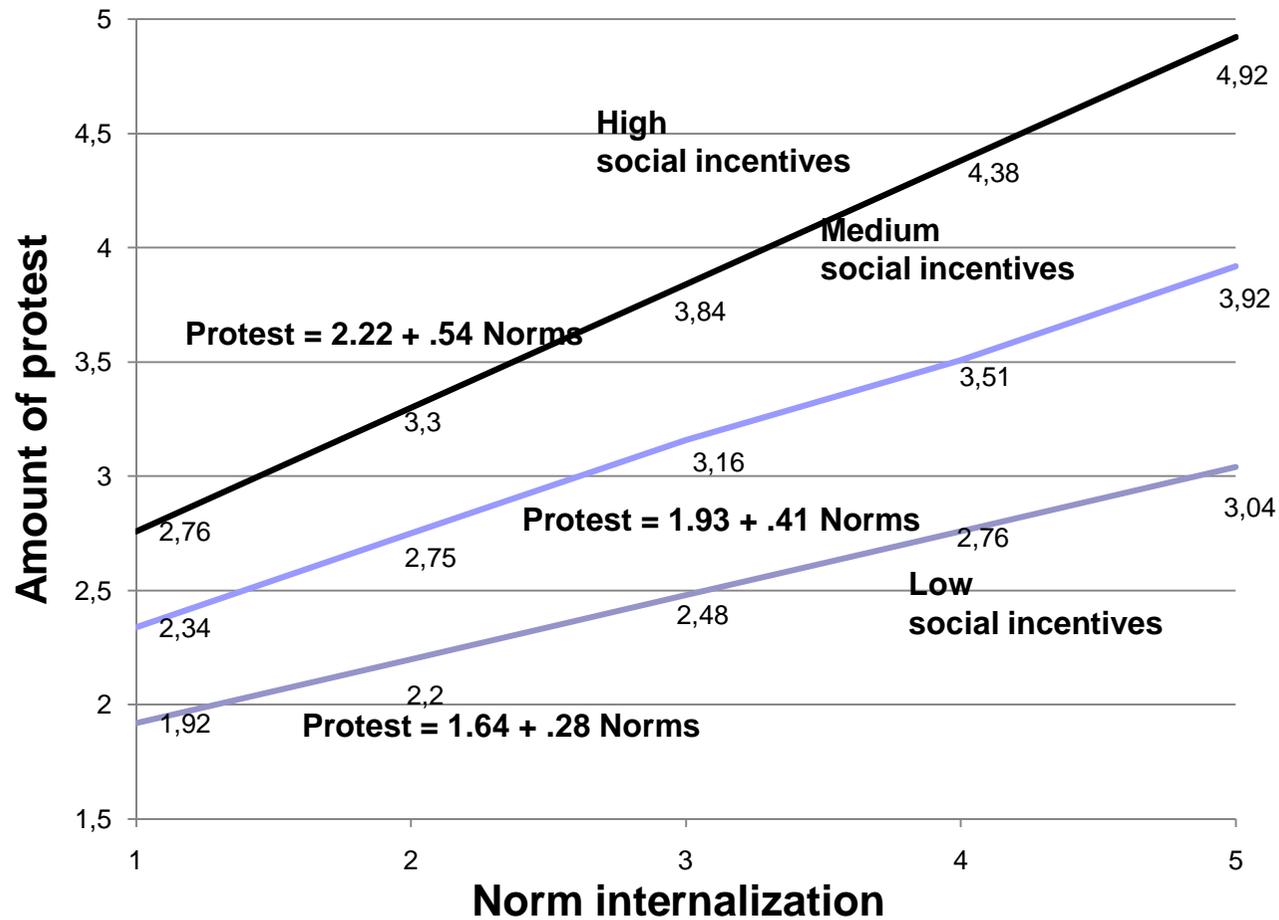


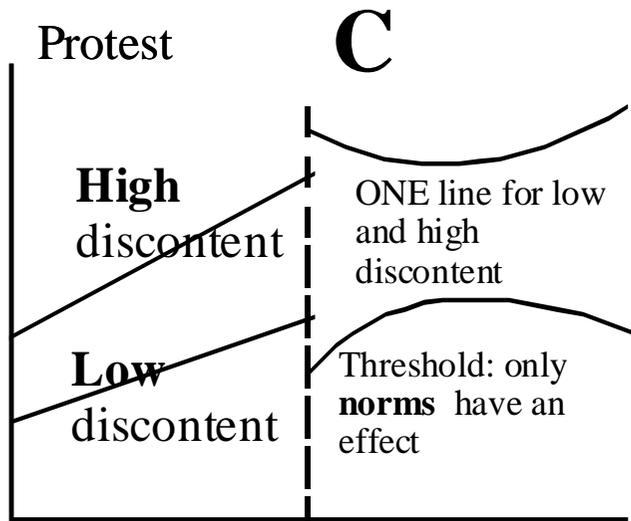
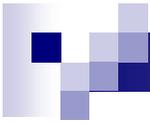
**Figure 4: Norms and Protest, with Discontent as a Moderator**





**Figure 5: Norms and Protest, with Social Incentives as a Moderator**





*Norm to protest*

**Norms proposition**

Table 5: Relations of Percentiles of Norms and Protest, for Low and High Discontent

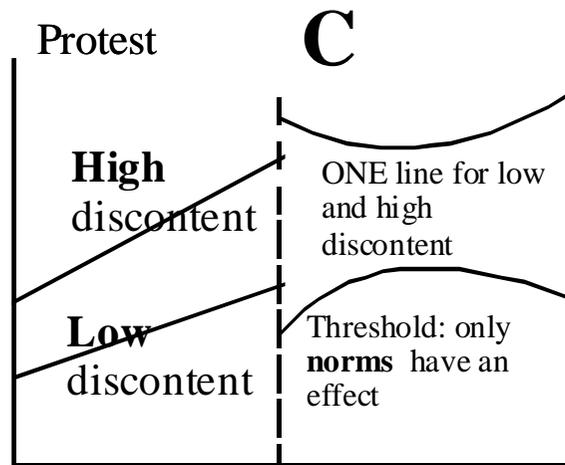
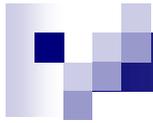
**Panel A: Discontent is low (lowest 25 % of discontent scale, N = 333)**

Percentiles for norms	B for Discontent	Intercept	Adjusted R-square	N
25 <sup>th</sup> percentile	.08*	1.77**	.02**	116
50 <sup>th</sup> percentile	.11**	1.88**	.03**	205
75 <sup>th</sup> percentile	.11**	1.88**	.04**	247
90 <sup>th</sup> percentile	.11**	1.94**	.03**	282

**Panel B: Repression is high (highest 25 % of discontent scale, N = 332)**

Percentiles for norms	B for Discontent	Intercept	Adjusted R-square	N
25 <sup>th</sup> percentile	-.12ns	2.33**	.002ns	35
50 <sup>th</sup> percentile	.11**	1.76**	.07**	114
75 <sup>th</sup> percentile	.09**	1.96**	.04**	188
90 <sup>th</sup> percentile	.11**	1.89**	.07**	236

Coefficients are unstandardized. „ns” means „not significant” at the .05 level. \* significant at the .05 level; \*\* significant at the .01 level. Two-tailed tests: .05 level: t-value between 1.65 and 2.35; .01 level t-value greater than 2.35.



*Norm to protest*

**Norms proposition**

Figure holds for social incentives as well (instead of discontent)

Table 6: Relations of Percentiles of Norms and Protest, for Low and High Social Incentives

**Panel A: Social Incentives are low (lowest 25 % of social incentive scale, N = 363)**

Percentiles for norms	B for Social Incentives	Intercept	Adjusted R-square	N
25 <sup>th</sup> percentile	.26ns	1.61**	.01ns	116
50 <sup>th</sup> percentile	.35**	1.68**	.03**	225
75 <sup>th</sup> percentile	.51**	1.82**	.05**	271
90 <sup>th</sup> percentile	.48**	1.82**	.04**	293

**Panel B: Social Incentives are high (highest 25 % of social incentives scale, N = 365)**

Percentiles for norms	B for Social Incentives	Intercept	Adjusted R-square	N
25 <sup>th</sup> percentile	.57**	1.70**	.06*	42
50 <sup>th</sup> percentile	.50**	1.82**	.05**	118
75 <sup>th</sup> percentile	.57**	1.89**	.06**	207
90 <sup>th</sup> percentile	.55**	1.95**	.05**	259

Coefficients are unstandardized. „ns” means „not significant” at the .05 level. \* significant at the .05 level; \*\* significant at the .01 level. Two-tailed tests: .05 level: t-value between 1.65 and 2.35; .01 level t-value greater than 2.35.



## **Summary of the results for non-conflicting goals: discontent and social incentives as interests**

They provide support for the incentives proposition (with additive effects).

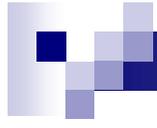
Hypotheses: slides 22 to 25.

Detailed results: the following slides 61 to 64.



# Discussion

- **How to test the following assumptions that are usually made in existing research (including this one):** spontaneous/reflective behavior, accessibility of norms/interests, costs and opportunities to deliberate, „fear of invalidity“, net benefits of norm compliance and achieving interests?
- Are **other tests** of the propositions meaningful **with the data set**, used before?



**Thanks for  
your attention!**