

Behavioral intentions at the individual and group levels: A cross-cultural comparison between the USA and Greece

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Purpose of the study

- ◉ Contribute to the existing models for the prediction of behavioral intentions; explore possible determinants of intentions not studied extensively so far by taking into account:
 - > the intrapersonal as well as the interpersonal/ intergroup variability of intentions,
 - > the social context where intentions are formed (individual vs. group condition),
 - > some cultural dimensions (e.g., values) relevant to intentions through the internalization of subjective norms.

The attitude–behavior discrepancy

- Social psychological research has shown that the correlation between attitudes and overt behavior ranges from low to moderate (Wicker, 1969).
- Failure to predict behavior from attitudes was mainly due to using different levels of specificity for the measurement of the two constructs or even due to ignoring the role of situational/social agents.
- A number of models were developed in order to identify determinants of interpersonal behavior. In these models, intention is viewed as the result of a “reasoned” or “carefully planned” process.

Models for predicting behavioral intentions

- According to the **theory of reasoned action** (Ajzen & Fishbein, 1980. Fishbein & Ajzen, 1975), the probability to engage in a specific behavior is determined by:
 - > individual attitudes and wishes,
 - > the subjective norm, i.e., the expectations of important others,
 - > the perceived level of control (**theory of planned behavior**, Ajzen, 1991).

$$\text{INTENTION} = \beta_1 (\text{ATTITUDE}) + \beta_2 (\text{NORM}) [+ \beta_3 (\text{CNTRL})]$$

Models for predicting behavioral intentions

- ◎ According to the **theory of interpersonal behavior** (Triandis, 1980), intention is an important determinant of behavior together with habits and the situational conditions. Intention is influenced by:
 - > individual attitudes (i.e., beliefs and evaluations of outcomes)
 - > social factors (i.e., norms, roles, self-concept), and
 - > affectual factors (i.e., emotional responses).

Intention formation in the social context: collective/shared intentions

- ◉ The study of intentions has been restricted to the individual level, probably due to methodological individualism (Adamopoulos & Kashima, 1999).
- ◉ Three directions in exploring intention formation under group conditions:
 - > collective intentions are reduced to individual decision processes,
 - > individual intentions are “slices” of the aggregated collective intention (e.g., Tuomela, 2005),
 - > we-intentions as a fundamental, non-reducible unit of analysis (Searle, 1995. Tomasello, 2008).

Intention formation and the role of culture

- The cultural dimension of individualism-collectivism (Triandis, 2001) may influence intentions through:
 - > the specific content assigned to social norms,
 - > the relative importance attributed to individual attitudes and subjective norms.
- Whereas attitudes are essential in individualistic cultures, norms may be important determinants of intentions in collectivistic societies.
 - > In the latter, norms may be internalized in the form of a sense of duty or moral obligation (Botempo et al., 1990; Miller, 1997).

Cross-cultural comparison of values between Greece and the USA

	USA	Greece
Individualism ¹	1	41
Uncertainty avoidance ¹	57	1
Independent self ²	9	19
Emotional distance from extended family ²	8	21

¹ Ranking among 69 countries (Hofstede, 2001, www.geert-hofstede.com)

² Ranking among 27 countries (Georgas et al., 2006)

Research hypotheses

- ⊙ Attitudes will be more important predictors of intentions in the condition of individual decision. The subjective norm will be more salient in the formation of collective intentions (group condition).
- ⊙ Intentions of American students will rely more on their individual attitudes. The impact of moral obligation on intention formation will be stronger among Greek students.
- ⊙ Cross-cultural differences in the prediction of intentions will emerge, esp. in the group condition and less so in the individual decision process.

METHOD

Participants

- Country
 - > USA n = 450 (Allendale, MI)
 - > Greece n = 422 (242 Athens; 180 Thessaloniki)
- Sex
 - > male n = 308 (28% USA; 44% Greece)
 - > female n = 564 (72% USA; 56% Greece)
- Condition
 - > individual n = 443 (61% USA; 45% Greece)
 - > group n = 429 (39% USA; 55% Greece)

Measuring behavioral intentions

- 30 behaviors (e.g., personal life, family, academic issues, peer relationships, professional plans)
 - 7-point Likert-type scale
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- Behavioral intention (1=unlikely, 7=likely)
 - Individual attitude
 - > ...good/bad ...important/unimportant ...wise/unwise
 - Subjective norm (1=disagree, 7=agree)
 - Moral obligation (1=disagree, 7=agree)

Measuring behavioral intention: example of the individual condition

- I intend to get very good grades in my college courses (INTENTION)
- Getting very good grades in my college courses is ...good ...important ...wise (ATTITUDE)
- Most people who are important to me think that I should get very good grades in my college courses (SUBJECTIVE NORM)
- I feel a moral obligation or duty to get very good grades in my college courses (MORAL OBLIGATION)

Measuring behavioral intention: example of the group condition

- **In the group I hang out with**, we intend to get very good grades in our college courses (INTENTION)
- In the group I hang out with, getting very good grades in college courses is ...good ...important ...wise (ATTITUDE)
- Most people who are important to the group I hang out with, think that we should get very good grades in our college courses (SUBJECTIVE NORM)
- In the group I hang out with, we feel a moral obligation or duty to get very good grades in our college courses (MORAL OBLIGATION)

Applying multi-level statistical models for the prediction of behavioral intentions

- Within-subjects procedures are reported to yield more accurate predictions of behavior than across-subjects procedures (Davidson & Morrison, 1983).
- Relationships at different levels of analysis (e.g., within-subjects vs. between-subjects) are supposed to be independent (Nezlek, 2008).
- Need to model separately two different sources of error: (i) from selecting participants, and (ii) from selecting observations within participants.

RESULTS

A multi-level model (HLM2) for predicting behavioral intentions

> LEVEL 1 (30 behaviors x 872 individuals)

$$\text{INTENTION} = \pi_0 + \pi_1(\text{ATTITUDE}) + \pi_2(\text{NORM}) + \pi_3(\text{MORAL}) + e$$

> LEVEL 2 (872 individuals)

$$\pi_0 = \beta_{00} + \beta_{01}(\text{CNTRY}) + \beta_{02}(\text{COND}) + \beta_{03}(\text{CNTRY} \times \text{COND}) + r_0$$

$$\pi_1 = \beta_{10} + \beta_{11}(\text{CNTRY}) + \beta_{12}(\text{COND}) + \beta_{13}(\text{CNTRY} \times \text{COND}) + r_1$$

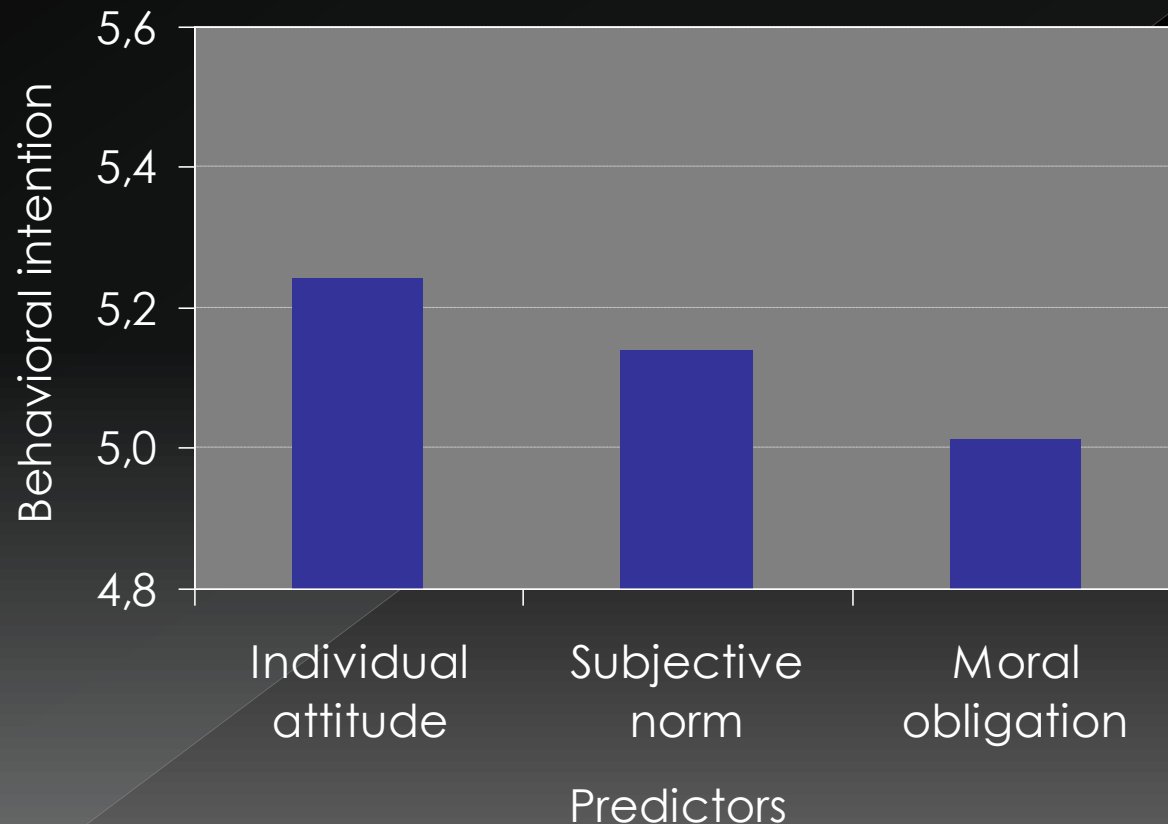
$$\pi_2 = \beta_{20} + \beta_{21}(\text{CNTRY}) + \beta_{22}(\text{COND}) + \beta_{23}(\text{CNTRY} \times \text{COND}) + r_2$$

$$\pi_3 = \beta_{30} + \beta_{31}(\text{CNTRY}) + \beta_{32}(\text{COND}) + \beta_{33}(\text{CNTRY} \times \text{COND}) + r_3$$

Contribution of attitudes, norm, and moral obligation in predicting behavioral intentions

	Coeff.	T-Ratio	p
Intercept	4.82	432.64	< .001
> Individual attitude	0.42	31.89	< .001
> Subjective norm	0.32	25.02	< .001
> Moral obligation	0.19	18.76	< .001

Contribution of attitudes, norm, and moral obligation in predicting behavioral intentions



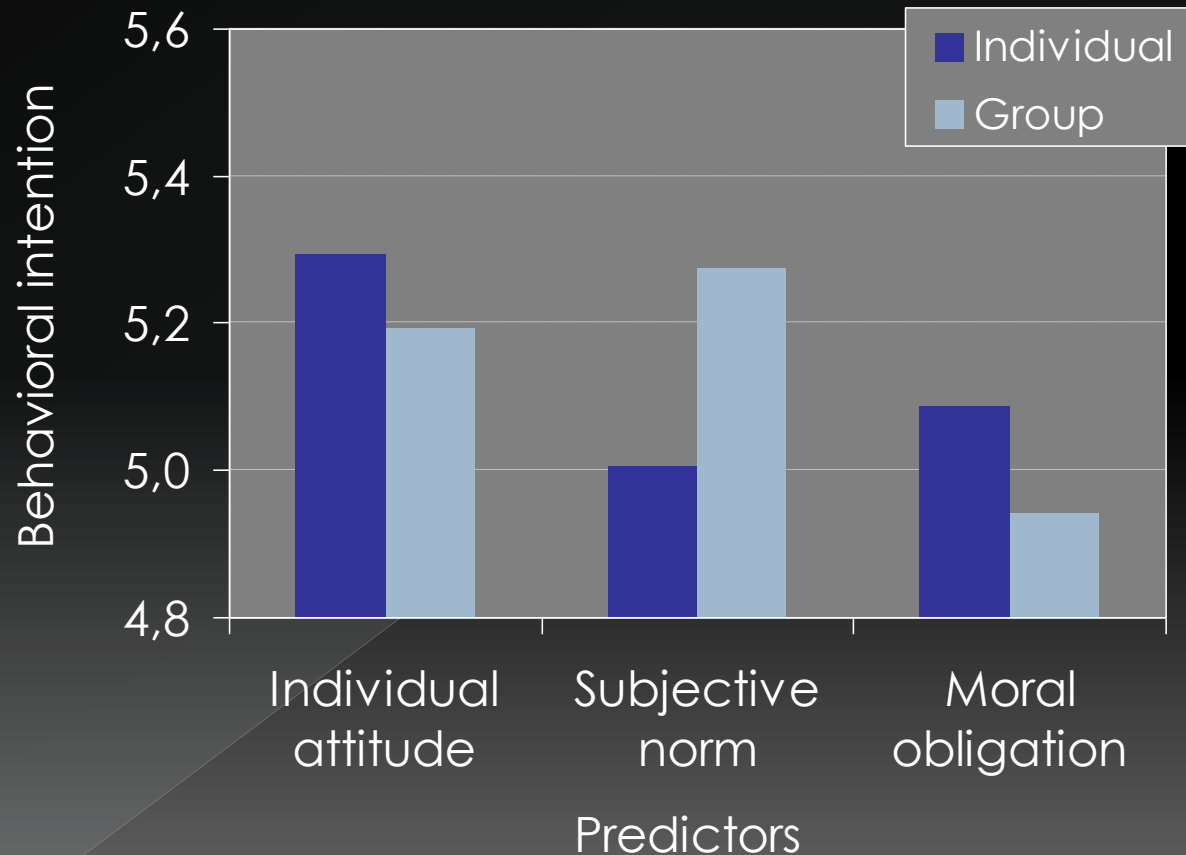
Overall, individual attitudes contribute the most in predicting behavioral intentions, followed by subjective norm. Moral obligation appears to be less important, though still significant.

Effect of condition (individual vs. group) in predicting behavioral intentions

	Coeff.	T-Ratio	p
Intercept	4.82	432.64	< .001
> Condition	0.01	1.30	n.s.
Individual attitude	0.42	31.89	< .001
> Condition	-0.05	-3.83	< .001
Subjective norm	0.32	25.02	< .001
> Condition	0.14	10.62	< .001
Moral obligation	0.19	18.76	< .001
> Condition	-0.07	-7.16	< .001

Condition: -1 = individual, +1 = group

Effect of condition (individual vs. group) in predicting behavioral intentions



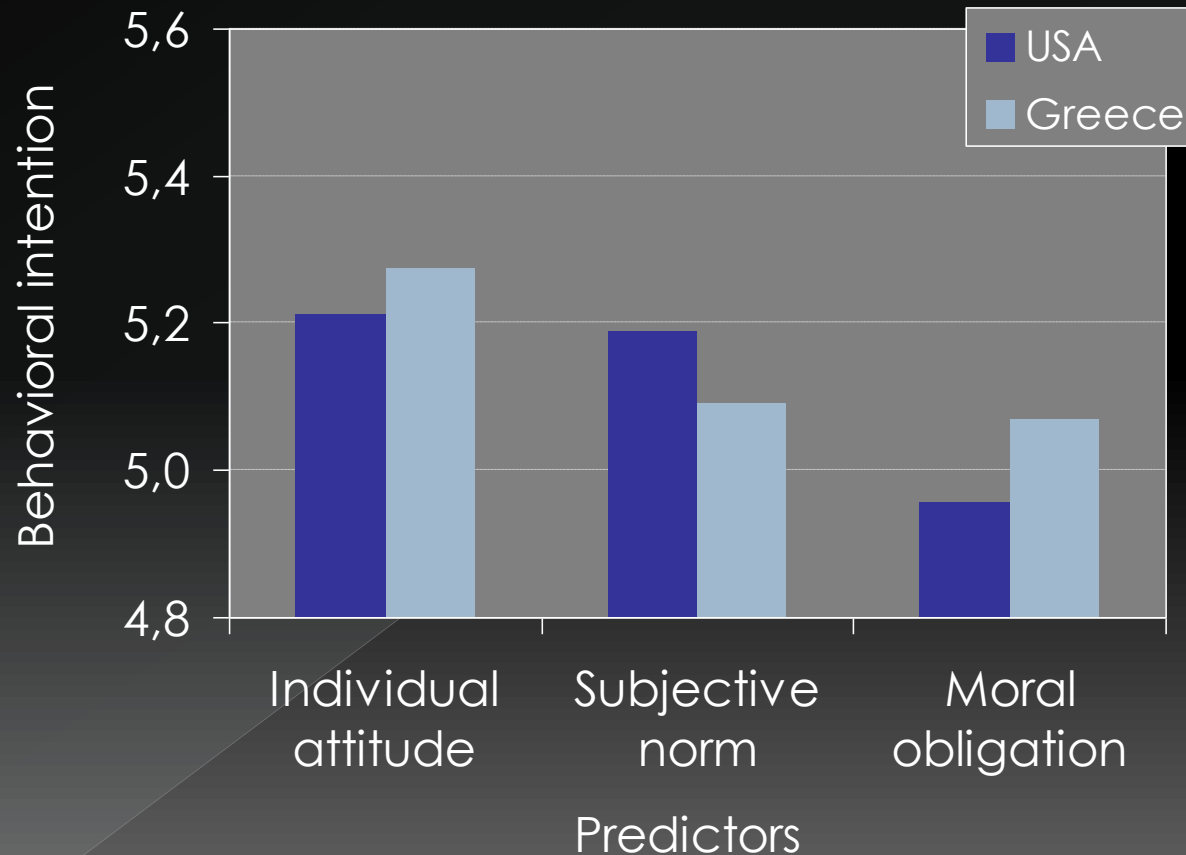
Attitude and moral obligation are more important predictors of intentions in the individual (rather than the group) condition. The reverse is true for subjective norm, which becomes more salient in the group condition.

Effect of country (Greece vs. the USA) in predicting behavioral intentions

	Coeff.	T-Ratio	p
Intercept	4.82	432.64	< .001
> Country	-0.06	-5.47	< .001
Individual attitude	0.42	31.89	< .001
> Country	0.03	2.39	.017
Subjective norm	0.32	25.02	< .001
> Country	-0.05	-3.85	< .001
Moral obligation	0.19	18.76	< .001
> Country	0.06	5.60	< .001

Country: -1 = USA, +1 = Greece

Effect of country (Greece vs. the USA) in predicting behavioral intentions

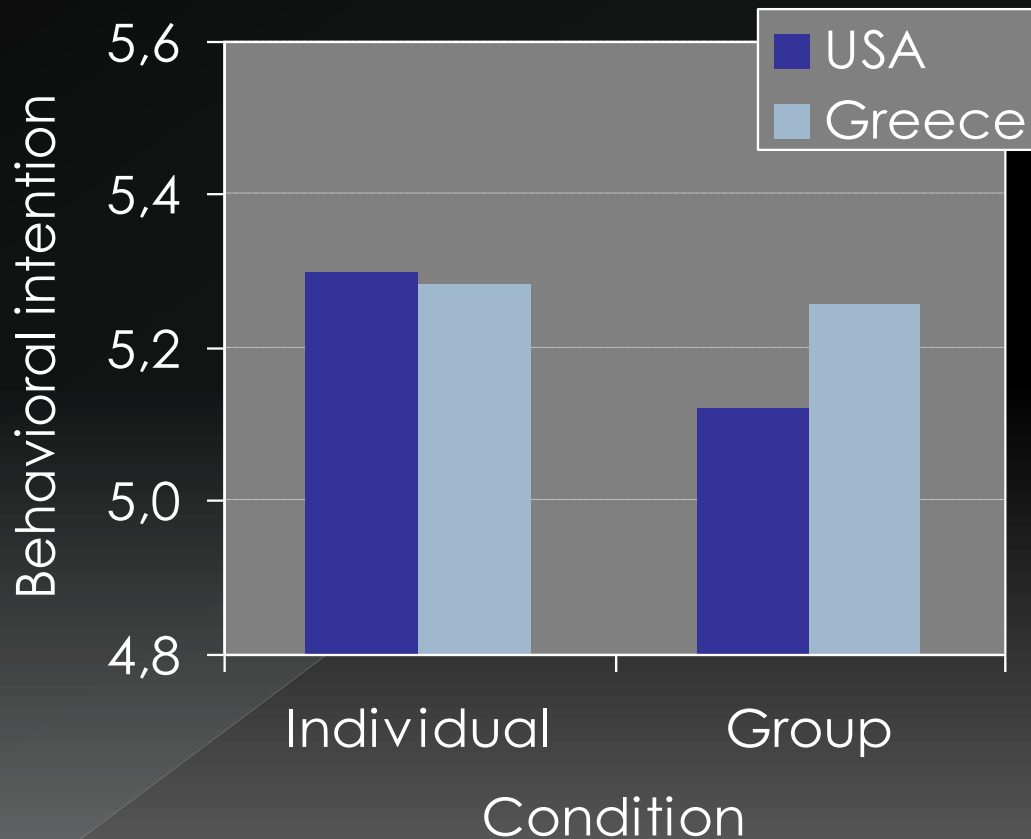


Individual attitude and subjective norm contribute almost equally in predicting behavioral intention, esp. in the USA. In Greece moral obligation appears to be as important as subjective norm.

Interaction of country by condition in predicting behavioral intentions

	Coeff.	T-Ratio	p
Intercept	4.82	432.64	< .001
> Country x Condition	0.02	0.23	n.s.
Ατομική στάση	0.42	31.89	< .001
> Country x Condition	0.04	2.91	.004
Υποκειμενικός κανόνας	0.32	25.02	< .001
> Country x Condition	-0.08	-6.27	< .001
Ηθική υποχρέωση	0.19	18.76	< .001
> Country x Condition	0.02	2.01	.045

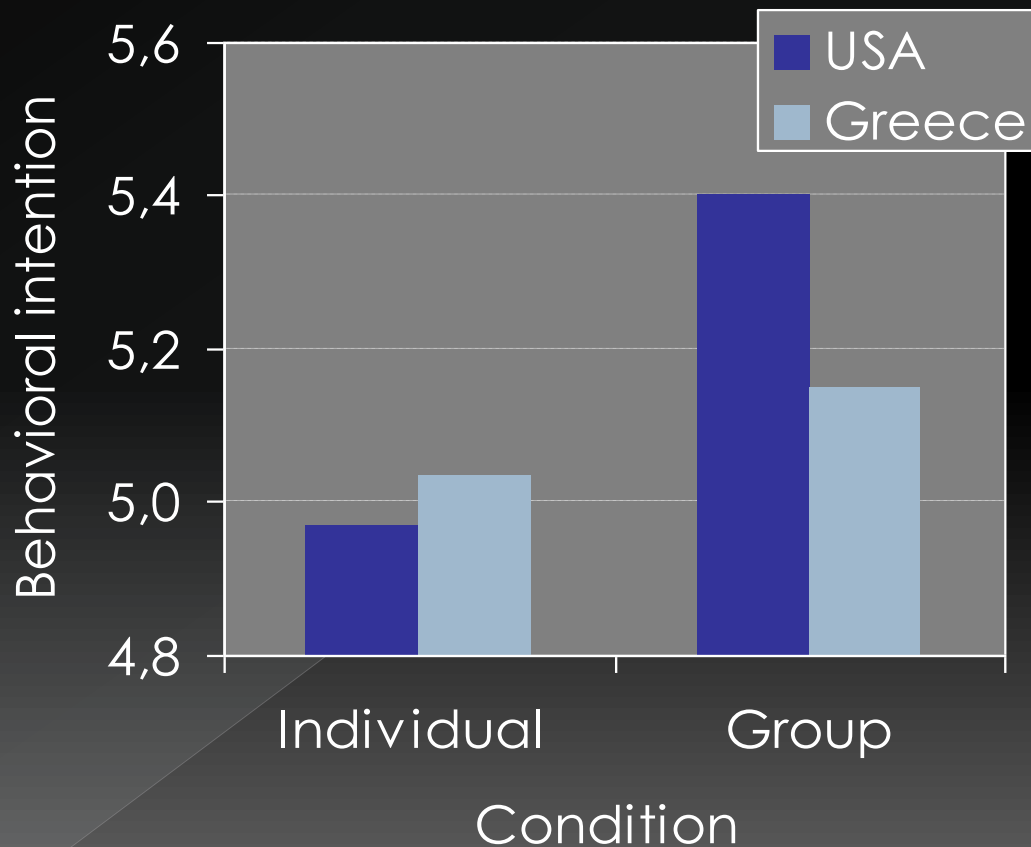
Interaction of country by condition in predicting behavioral intentions from individual attitudes



In the USA, attitudes are stronger predictors of intentions in the individual (as compared to the group) condition.

In Greece, attitudes do not appear to have a differential impact between conditions.

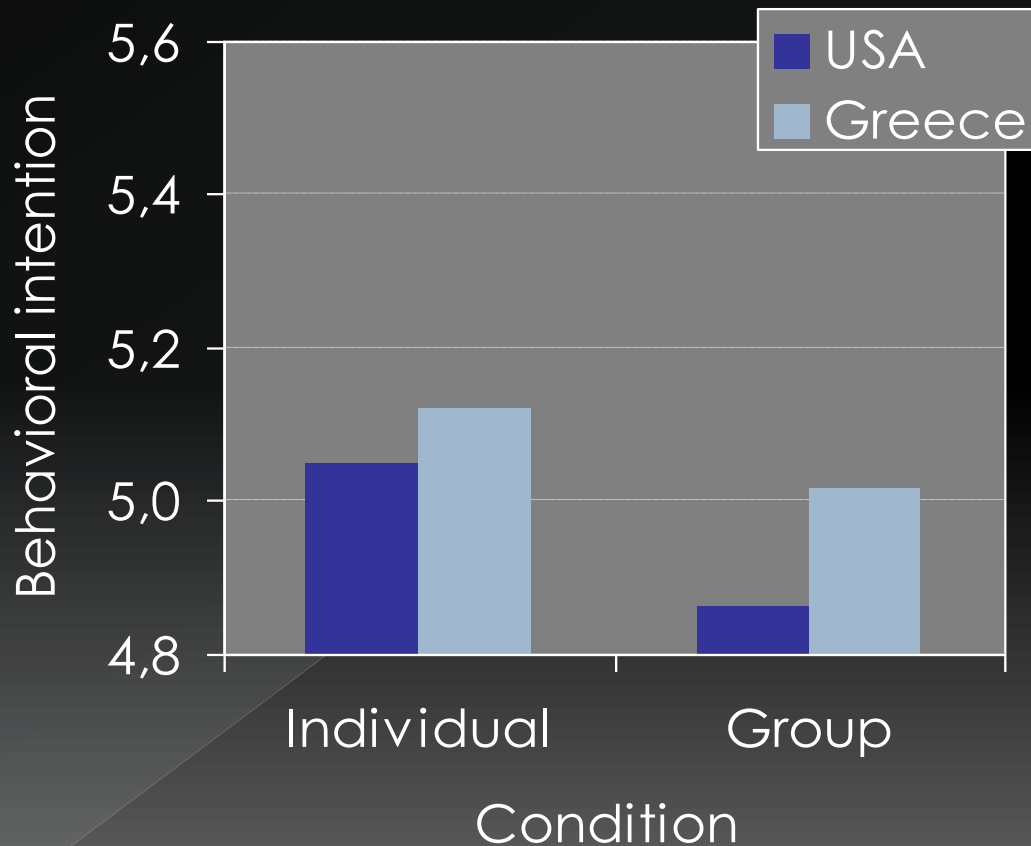
Interaction of country by condition in predicting behavioral intentions from subjective norm



In the USA, subjective norms are stronger predictors of intentions in the group condition, rather than in the individual one.

In Greece, the impact of subjective norm is less differentiated between the two conditions.

Interaction of country by condition in predicting behavioral intentions from moral obligation



In the USA, moral obligation predicts intentions in the individual condition, but not so in the group one.

In Greece, moral obligation continues to be an important predictor of intentions in the group condition.

DISCUSSION AND CONCLUSIONS

Summary of findings

- In line with the predictions of the Theory of Reasoned Action, behavior intentions are related to the attitudes as well as to the subjective norm.
- Moral obligation explains further amount of variance of intentions, independent of attitudes and subjective norm.
- The condition of decision making (individual vs. group) as well as culture have a differential effect upon the relative importance of the above set of predictors of intentions.

Summary of findings: research hypothesis 1

- Hypothesis 1 was confirmed: attitudes were the most important predictor of intentions in the individual condition, while norm was more prominent in the group condition (collective intentions).
- The effect of moral obligation was similar to the effect of attitudes, i.e., it was more evident in the individual (rather than in the group) condition.
 - > It could be argued that moral obligation may serve as a process of internalizing normative beliefs of significant others (Bontempo et al., 1990).

Summary of findings: research hypothesis 2

- Hypothesis 2 was partially supported: moral obligation was a stronger predictor of intentions for Greeks than it was for American students.
 - > In collectivistic cultures, norms are shaped as a sense of duty through the socialization processes.
- Contrary to expectations, intentions of American students relied upon their individual attitudes and the subjective norm in a balanced way.
 - > This can be considered a statistical artifact since a significant interaction was found between country and experimental condition (see hypothesis 3).

Summary of findings: research hypothesis 3

- Hypothesis 3 was confirmed: predictors of intentions of American students differentiated between the two conditions: attitudes were more important for individual decisions and norms for collective decisions.
 - In individualistic cultures there are clear boundaries between ingroup and the self; while in collectivistic societies personal decisions are implicitly affected by group membership (Triandis, 2001).
 - Furthermore, the content of moral obligation may be related to social norms for collectivists, but to personal attitudes for individualists.

Restrictions of the study and future directions

- ◉ Which concrete behaviors are related to attitudes, norms and moral obligation at varying degree?
- ◉ Group decisions are aggregated individual intentions or a condition of interdependent, coordinated action?
 - > Need to differentiate further between collective and concordant intentions.
- ◉ Which level of analysis is more appropriate for measuring cultural determinants of intentions?
 - > Need to collect data on values at the individual level in order to test for cross-level effects.

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Thank you
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