

# Determinants of organic food consumption

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Seminar on Theory of Planned Behavior: Recent Developments and Applications on Pro-environmental Behavior  
Prague, 24<sup>th</sup> September 2010

# Objectives

- analyze empirically determinants of organic food consumption
- test empirically the strength of relationships based on proposed conceptual model
- The conceptual model is the extension of the Theory of planned behaviour (TPB)
- support further development of TPB



# Structure of the presentation

- Overview of modifications and extensions of the TPB
- The conceptual model (hypotheses)
- Data collection
- Results
- Conclusion
- Discussion



# Overview of modifications and extensions of the TPB

- 1) *Significant causal path from subjective norms to attitudes*
- 2) *Self-efficacy, or perceived difficulty instead perceived control*
- 3) *Self-predictions, or desire instead intention*
- 4) *The addition of belief salience measures*



# Overview of modifications and extensions of the TPB

*The inclusion of ...*

- *'personal norms'*
- *'descriptive norms'*
- *moral norms*
- *self-identity*
- *affect*
- *egoistic, altruistic and biospheric concerns*
- *environmental concern*



# Overview of modifications and extensions of the TPB

*The inclusion of ...*

- *past behavior and habit*
- *moderator variables*
- *risk perception*
- *TRA/TPB as part of The Motivation-Opportunity-Ability Model*

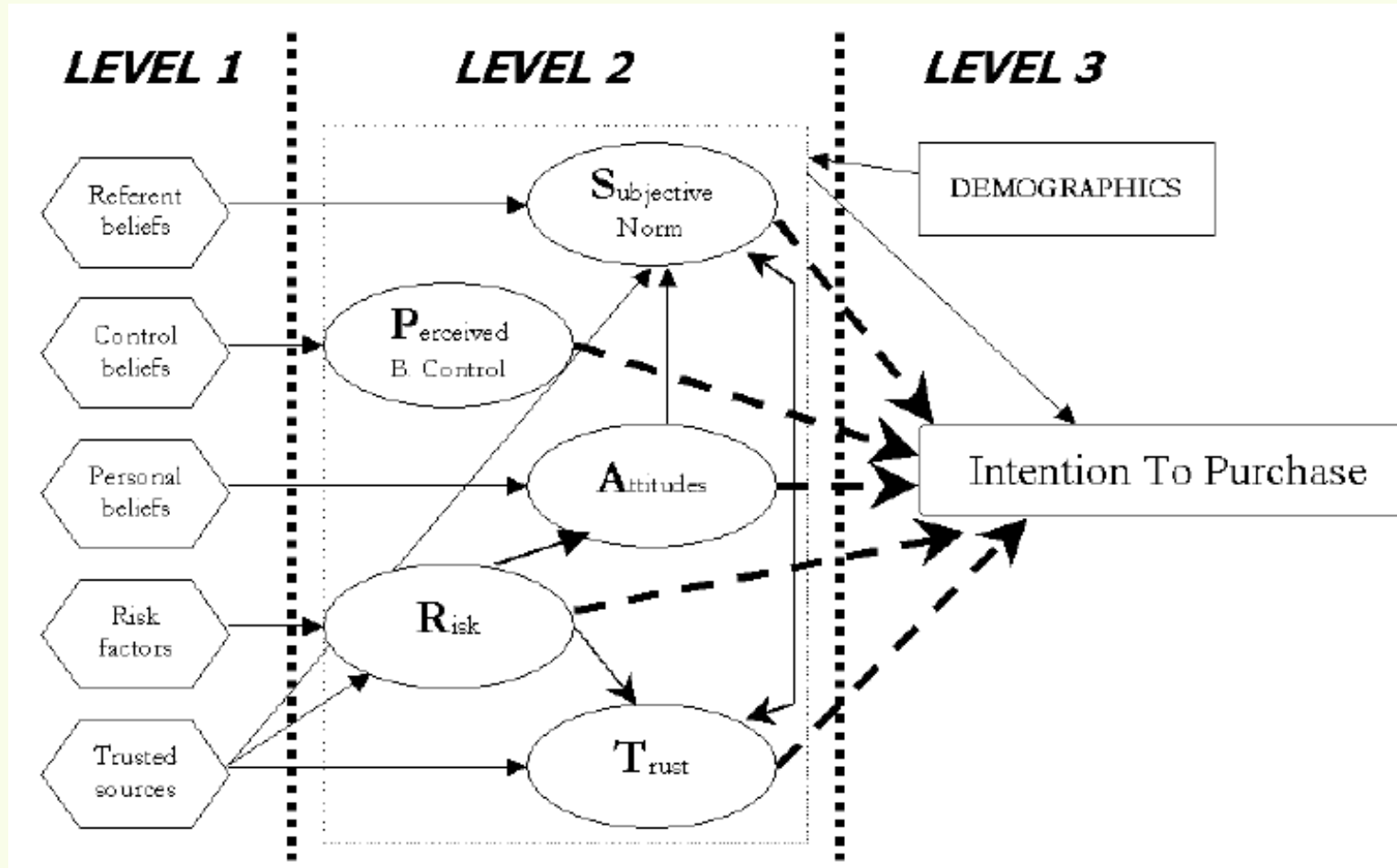


# Risk perception

- Two-component model (Cunningham, 1967)
  - Risk = probability of negative x Importance of consequences occurring negative consequences (multiplicative versus additive model) (Joag et al., 1990)
- Complex risk perceptions models
  - inherent and handled risk, the acceptable risk level (Dowling and Staelin, 1994)
  - Deering and Jacoby's model (1972)



# The SPARTA model

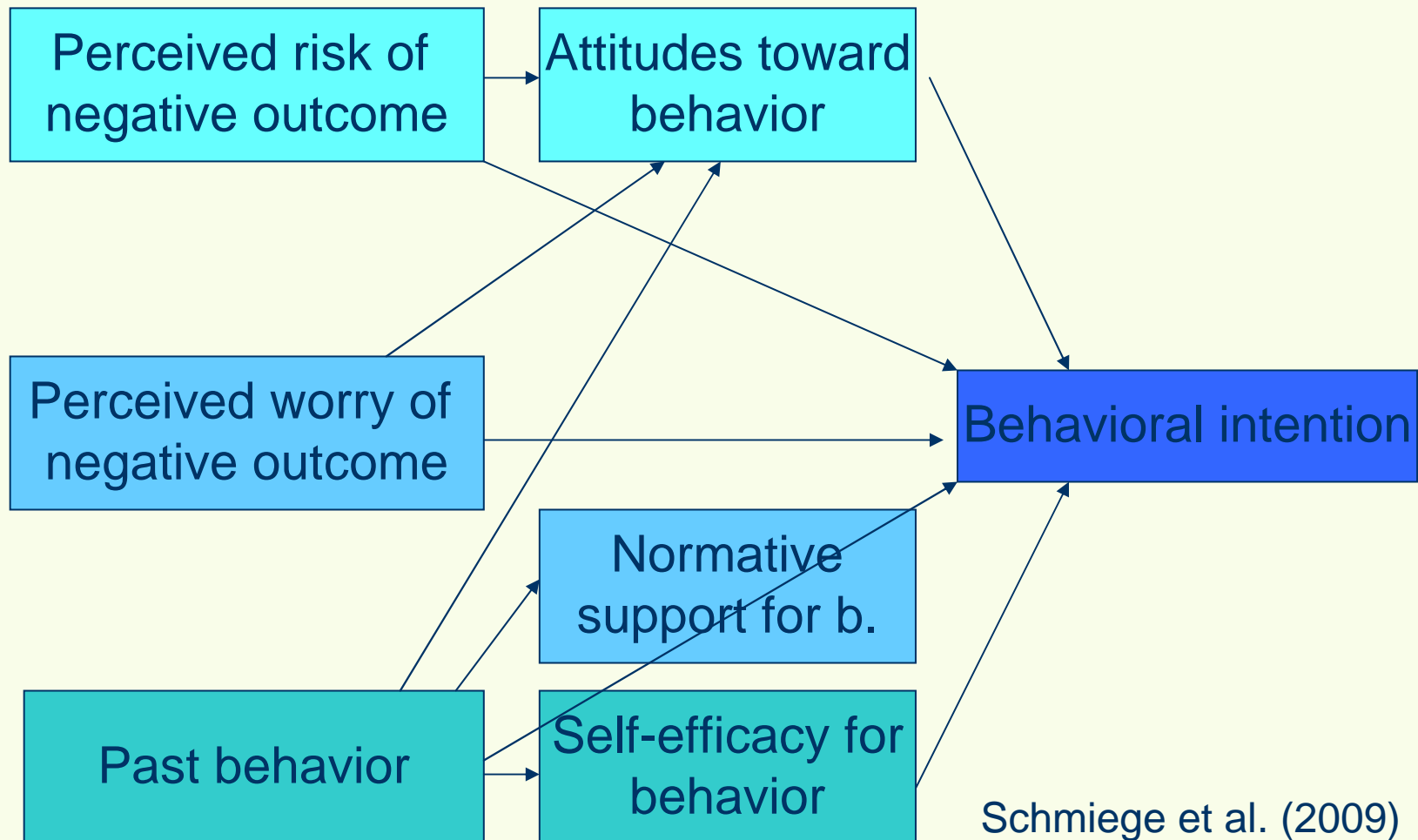


Mazzocchi et al. (2005)





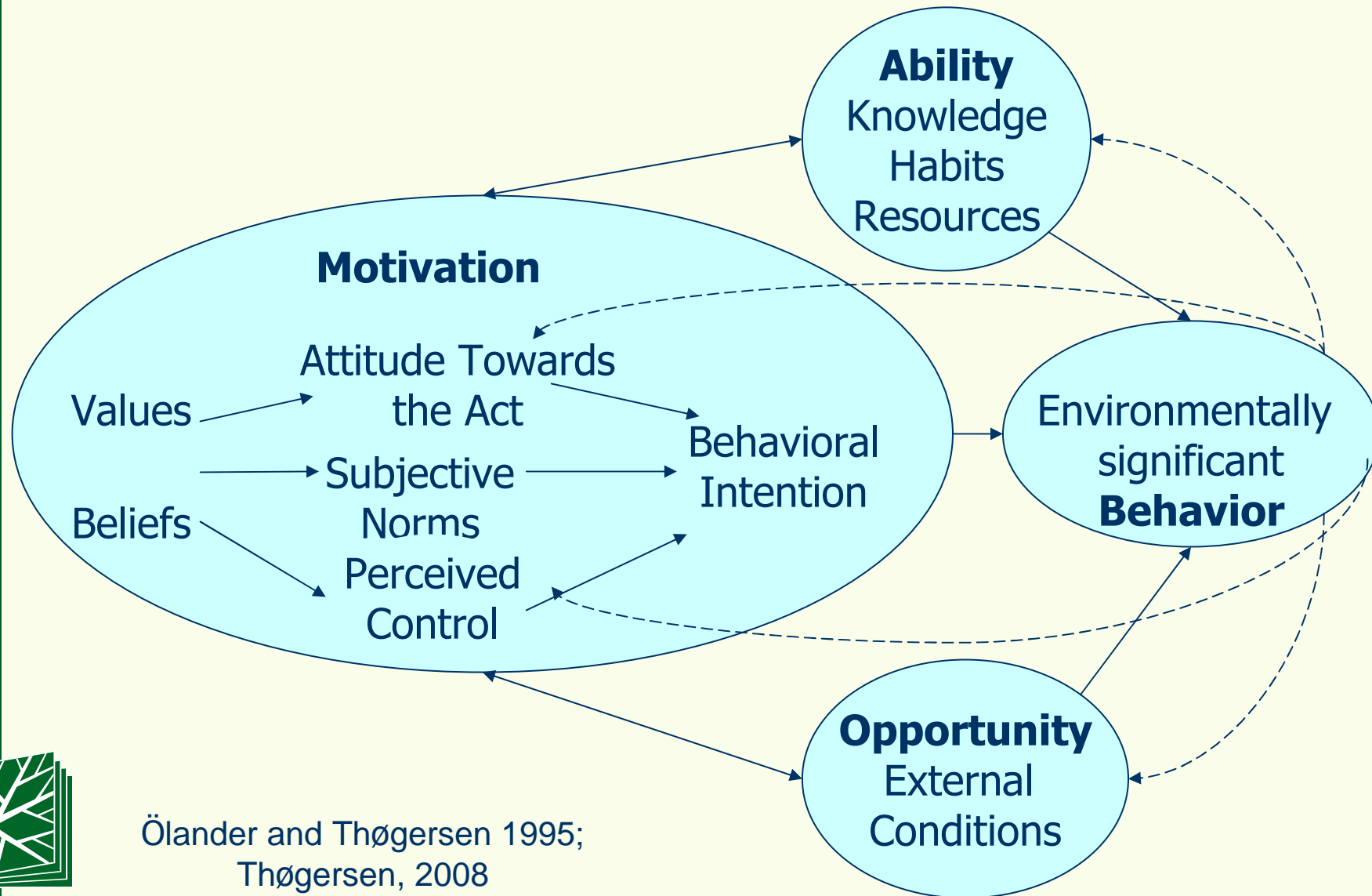
# Integration of worry and risk into the TPB



Schmiege et al. (2009)



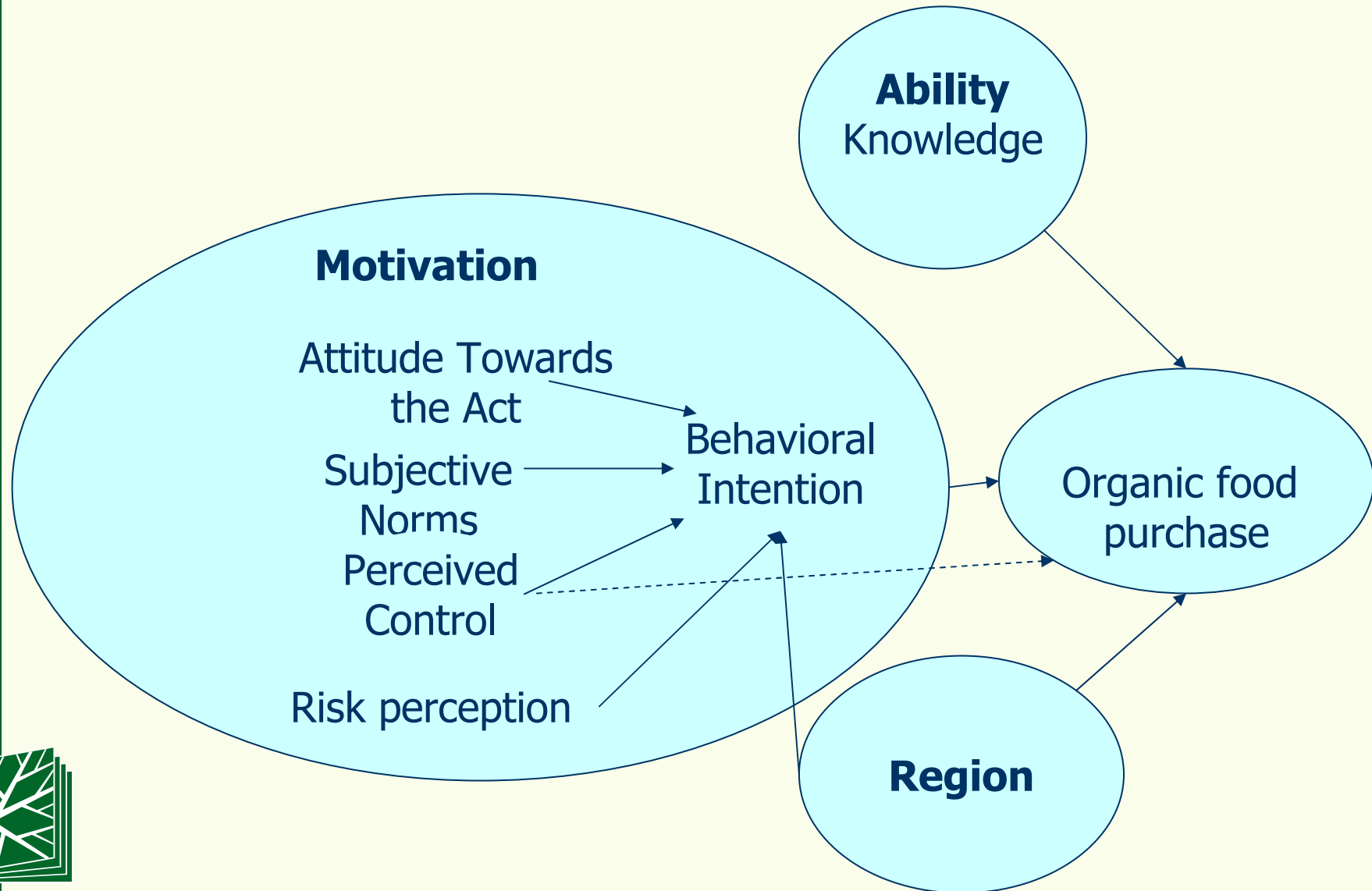
# The Motivation-Opportunity-Ability Model



Ölander and Thøgersen 1995;  
Thøgersen, 2008



# The proposed conceptual model (modification of the Motivation-Opportunity-Ability Model)



## Data collection

- Original qualitative survey conducted in summer 2008 (21 interviews)- to elicit commonly held beliefs
- Original quantitative survey conducted in October and November 2008
- Adult population (18-79 years old) of Prague and Znojmo region

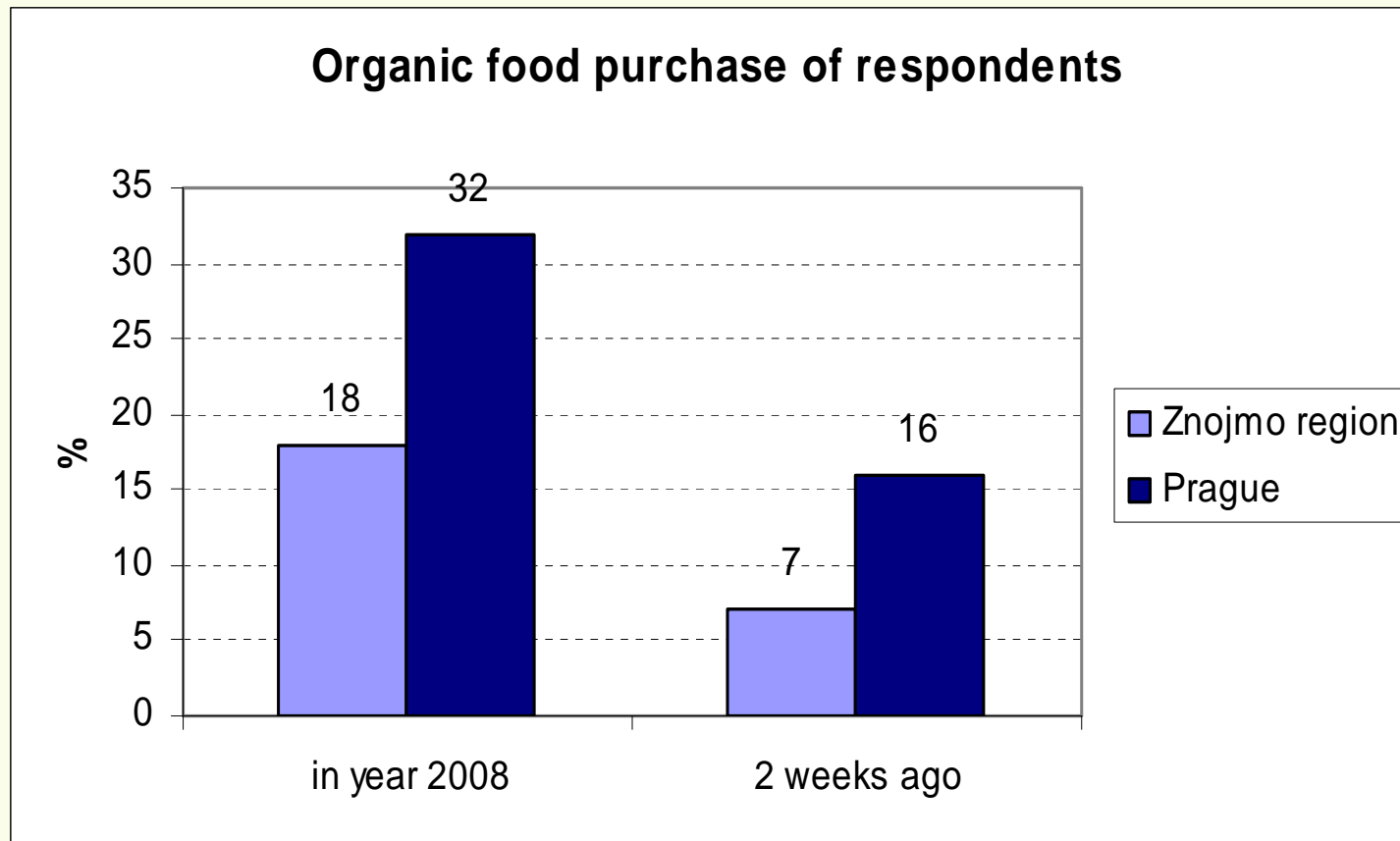


## Data collection and corroboration

- Main reason for selection of these locations: the potential differences in attitude and behaviour between the inhabitants of a large city and those of provincial town and countryside (cp. Von Alvensleben, 1998)
- Quota sampling (age, gender, area, education)
- Representative sample of population of Prague (N= 330) and Znojmo region (N=354)



# Descriptives



Prague (N= 330) and Znojmo region (N=354)



# Binary logistic regression

## Organic food purchase (0/1)

Variables	Estimate	Sig.	Estimate	Sig.
Intention2	2,007	***	1,965	***
Intention3	4,386	***	4,391	***
Intention4	5,303	***	5,280	***
bar_price	-0,044			
bar_availability	-0,04			
bar_grocery	-0,044			
bar_supermarket	0,032			
knowledge	0,502	•	0,518	•
znojmo	-0,569	*	-0,551	*
PBC			-0,023	
<i>Nagelkerke R2</i>	<i>0,615</i>		<i>0,611</i>	

\*\*\*sig.<0.001; \*\*sig.<0.01; \*sig.<0.05; • sig.<0.1



# Ordinal regression (logit)

## Intention to buy organic food

Variables	Estimate	Sig.	Estimate	Sig.
SUBJECTIVE NORMS	0,014	***	0,016	***
ATTITUDES	0,044	***	0,039	***
PERCEIVED BEHAVIOURAL CONTROL	0,003		0,010	
ZNOJMO	0,777	***	0,727	***
RISK_PEST			0,122	**
RISK_GMO			-0,005	
<i>Nagelkerke R2</i>	0,255		0,263	

\*\*\*sig.<0.001; \*\*sig.<0.01; \*sig.<0.05; • sig.<0.1





# Ordinal regression (logit)

## Intention to buy organic food

Variables	Estimate	Sig.
attitude_trick	0,085	***
attitude_mock	-0,003	
attitude_trendy	-0,002	
attitude_env	0,006	
attitude_health	0,078	**
attitude_quality	0,079	**
attitude_taste	0,032	•
sn_partner	0,043	**
sn_parents	0,04	*
sn_children	0,034	*
sn_friends	0,024	
sn_coworkers	0,012	
PBC	0,004	
znojmo	0,717	***

<i>Nagelkerke R2</i>	0,255
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- \*\*\* sig.<0.001
- \*\* sig.<0.01
- \* sig.<0.05
- sig.<0.1



# Conclusions

- Lower probability that inhabitants of Znojmo region will purchase organic food in comparison with inhabitants of Prague
- Attitudes and subjective norms have the positive effect on intention to purchase organic food
- Risk perception of pesticides increases probability of buying organic food



# Conclusions

- The proposed modified model of the MOAB model explained more variance in organic food purchase
- The inclusion of pesticide risk perception significant
- The amount of variance added to the prediction of behavior was small (1%)



## Discussion

- limitations of multiple regression - application of structural equation modelling to the proposed modified model of the MOAB might be more appropriate (possibility to assess the whole model in one analysis, the extent to which model fits the dataset, ...)
- most estimation procedures of SEM assume multivariate normality



## Discussion

- the way of the inclusion of risk perception – need for further research (risk perception-attitudes or/and risk perception-intention)
- measurement of risk perception (two component model, perceived risk of negative outcome, the SPARTA model, etc)



# Thank you for your attention

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# Acknowledgements

This research was supported by National Czech Foundation GAČR No. 403/08/1694, „Application of the model of environmentally significant behavior in the Czech Republic“.

We also gratefully acknowledge support from Ministry of Education, Youth and Sports of the Czech Republic, Grant No. 2D06029 "Distributional and social effects of structural policies" funded within National Research Program II and from “Specific research 2008” grant provided by Faculty of Arts of Charles University (GRANTY/2008/551).

