



# **Predictors of Innovative Consumption Practices: Internet Shopping Adoption in Russian Households**

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3<sup>rd</sup> International LCSR Research Workshop Social Changes in  
Cross-National Perspective,  
St. Petersburg April 26-30, 20123

# Consumption: Between Symbols and \$igns

## Theoretical perspectives in

### Sociology

- Consumer society
- Consumption of symbols
- Conspicuous consumption
- Consumption as an instrument of class distinction

“While economics is about how people make choice, sociology is about how they don't have any choice to make” Bertrand Russell

### Economics

- Macroeconomics: aggregated consumption, consumption over the life cycle
- Microeconomics: effects of relative price changes and imperfect and asymmetric information
- Behavioral economics: explanations of irrational consumption behavior

# Theories of Practice

- Neither individualist nor “wholist” (Schatzki 2001)
- Incorporate an appreciation of cultural phenomena and reject *homo economicus* and *homo sociologicus* models (Reckwitz 2002)
- “applications of the concept may deal equally with persistence and change in the forms of practices and their adherents” (Warde 2005)

“A practice is ... a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood.”  
(Reckwitz 2002)

# Research Questions

Why some people adopt new consumption practices earlier than others?

- Does social capital matter
- Do other practices of agent matter
- Do resources matter
- Does context matter

for the adoption of innovative Internet shopping?

# Specific Contribution

- To the diffusion of innovations literature this study introduces individual mobilities (in a broad sense, including educational, professional, and geographic mobility) as factors of engaging in innovative consumption practices
- To the economic sociology – incorporates culture, brought by theories of practice perspective, into the study of changes in consumption

# Theoretical Framework

Social capital acquired through:

- Educational mobility
- Professional mobility
- Geographical mobility

Practices enhancing cognitive skills:

- Reading
- Learning

Adoption of  
innovative  
consumption practice

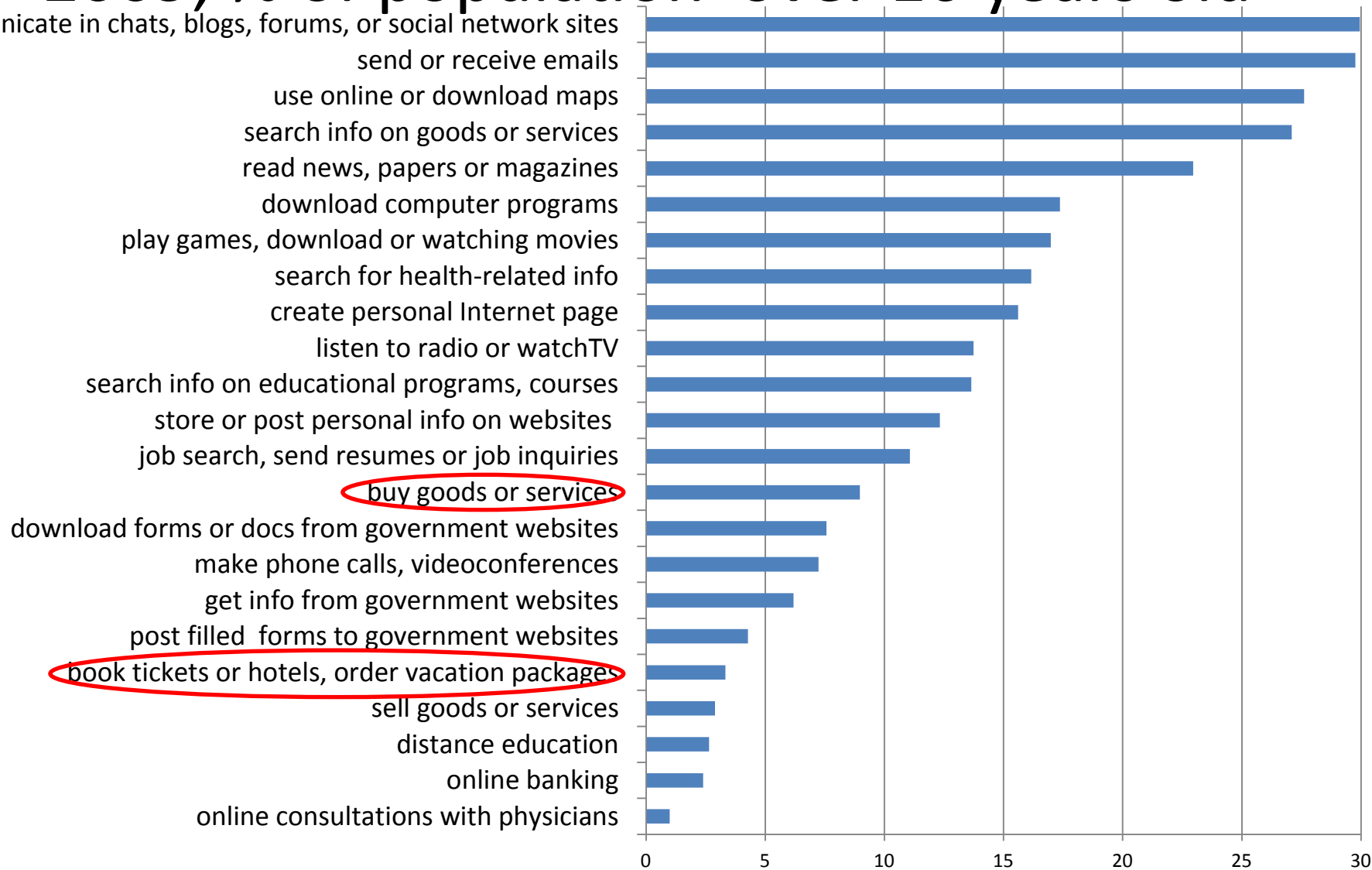
Resources:

- Knowledge
- Material objects
- Spare time

Context:

- ( regulations, policies and infrastructure )
- On the regional level
- Captured by settlement type

# Internet Activities in Russia, RLMS-HSE 2009, % of population over 16 years old



# Dependent Variable

- Innovative consumption practice – adoption of Internet shopping (cumulative of different varieties of goods and services purchased as well as online methods of payment used)

Reflects both innovative “consumption” of computer and Internet AND change in the practice of shopping: from travelling to shopping cites and stepping into public sphere to staying at home and letting the goods travel to you, while remaining in the private sphere of your home (feature shared with mail, catalogue and TVshop orders)



# Explanatory Variables (tbc)

Social capital acquired through:

- Educational mobility – number of higher education institutions graduated from weighted by institution's level
- Professional mobility – number of professions changed
- Geographical mobility – number of settlements inhabited

Practices

- Learning – acquiring knowledge and skills as part of day-to-day activities or at work
- Reading – reading books on computer or e-reader

# Explanatory Variables (continued)

## Resources

- Knowledge – knowledge of foreign language
- Material objects – Internet connection at home
- Spare time – availability of spare time during weekends (or non-work and non-study days)

## Context

- Captured on the regional level
- Captured by the settlement type

# Hypotheses

- Number of professions held, settlements inhabited
- Engagement in practices enhancing cognitive skills
- Availability of material resources and relevant knowledge

is positively associated with the adoption of innovative consumption practices among *adult population* (over 16).

- Number of educational institutions attended

is positively associated with the adoption of innovative consumption practices among the *affluent stratum*.

- Availability of spare time

is positively associated with the adoption of innovative consumption practices among the *least affluent stratum*.

Controls: age, gender, marital status, household income per person, higher education, agency, student and employed status, computer in household

# Data

## Russian Longitudinal Monitoring Survey (RLMS-HSE)

- national representative survey of households and individuals designed for cross-section and panel data analysis
- carried out since 1992, comparable data available since 1994, 19 waves of data have been gathered
- contains data on employment, income, consumption, family structure, mobility, community, etc.
- 18<sup>th</sup> wave in 2009 included an additional “Innovations” block with focus on computer and Internet use
- “Innovations” block was delivered to a random sample of individuals (sample within sample, also national representative) and additional individuals from the upper income quintile

“Russia Longitudinal Monitoring survey, *RLMS-HSE*”, conducted by Higher School of Economics and ZAO “Demoscope” together with Carolina Population Center, University of North Carolina at Chapel Hill and the Institute of Sociology RAS.

# Internet Shopping Index, RLMS-HSE 2009

Internet Shopping Index	General Population N=1,604		Population from the Upper Income Quintile N=784	
	N	%	N	%
0	1,433	89	610	77
1	62	4	67	9
2	44	3	44	6
3	16	1	23	3
4	16	1	11	1
5	7	<1	5	<1
6	7	<1	10	1
7	7	<1	6	<1
8	3	<1	2	<1
9	0	0	0	0
10	2	<1	1	<1

# Fixed-Effects Negative Binomial Regression: Adoption of Internet Shopping, RLMS-HSE 2009

	Model 1		Model 2 (upper income quintile)		Model 3 (4 bottom income qntls)	
	Coefficient	Robust S.E.	Coefficient	Robust S.E.	Coefficient	Robust S.E.
Intercept	-2.543*	1.340	-1.157	1.549	-4.327*	2.023
Age	-.032***	.009	-.023*	.012	-.062***	.009
Female	.028	.280	-.047	.153	-.335	.430
Marital status(=married, w/partner)	.374	.318	.036	.358	1.733***	.247
Higher education	.697*	.348	.538*	.220	1.104*	.667
# of educational institutions	-.015	.062	.046*	.024	-.162	.150
Learning	.175***	.048	.179***	.050	-.054	.084
Reading	.732***	.204	.919**	.344	.656*	.286
Foreign language	.710*	.373	.165	.262	1.027*	.511
# of professions changed	.219**	.075	.250**	.082	.339**	.131
Computer	.708	.844	-.039	.324	.532	.612
Internet	1.765***	.429	1.745***	.260	2.298***	.178
Spare time	-.083	.132	-.162	.184	.612***	.191
Upper income quintile	.599*	.324	-	-	-	-
# of relocations	-.134	.139	-	-	-	-
# of relocations*settlement type interaction						
Large city	-	-	-.282**	.098	-.037	.231
Medium city	-	-	-.034	.236	.227	.166
Town	-	-	-.581	.445	.769	.536
Village	-	-	-.053	.347	-1.640*	.836
Region (base=Moscow and St. Petersburg)						
Northern	-.003	.303	-.660*	.293	-.591	.652
Central	-.987**	.344	-.759*	.296	-2.375***	.635
Volga	-1.478***	.255	-1.040***	.185	-2.314***	.395
Southern	-1.062***	.246	-1.360***	.209	-2.264***	.423
Caucasus	-.915*	.420	-.619*	.337	-4.469***	.532
Ural	-1.144***	.262	-.914***	.188	-1.407*	.630
Western Siberia	-1.910***	.253	-1.500***	.221	-2.518***	.496
Far East	-1.344***	.202	-.969***	.207	-1.769***	.259
N	1136		622		827	
Log-likelihood	-489.73		-475.85		-221.45	
Pseudo R <sup>2</sup>	.21		.17		.26	

# Fixed-Effects Negative Binomial Regression: Adoption of Internet Shopping, RLMS-HSE 2009

	Model 4 (tbc)			Model 4 (continued)	
	Coefficient	Robust S.E.		Coefficient	Robust S.E.
Intercept	-5.575**	1.686			
Age	-.032**	.012	Upper income quintile*Spare time		
Female	-.102	.270	0	.478**	.173
Upper income quintile*Marital status(=married, w/partner)			1	-.352	.291
			Settlement type *# of relocations		
0 1	1.454***	.318	Large city	-.297	.199
1 0	6.136*	2.885	Medium city	.046	.183
1 1	5.725*	2.627	Town	-.131	.589
Higher education	.798*	.444	Village	-.288	.207
Upper income quintile*# of educational institutions			Region (base=Moscow and St. Petersburg)		
0	-.138	.104	Northern	-.468	.404
1	.020	.066	Central	-1.490**	.466
Learning	.133**	.043	Volga	-1.759***	.390
Reading	.747**	.241	Southern	-1.541***	.258
Upper income quintile*Foreign language			Caucasus	-1.915***	.412
0 1	1.082*	.502	Ural	-1.368***	.292
1 0	-.513	.342	Western Siberia	-2.278***	.369
1 1	(omitted)		Far East	-1.990***	.228
# of professions changed	.216*	.090	N	1136	
Computer	.875	.773	Log-likelihood	-483.18	
Internet	1.783***	.365	Pseudo R <sup>2</sup>	.22	

Notes: \* p<.10; \*\* p<.01; \*\*\* p<.001

Controls included in regression: student, employed, agency.

# Fixed-Effects Negative Binomial Regression: Adoption of Internet Shopping, RLMS-HSE 2009

	Model 5		Model 6 (upper income quintile)		Model 7 (4 bottom income qntls)	
	Coefficient	Robust S.E.	Coefficient	Robust S.E.	Coefficient	Robust S.E.
Intercept	-2.810*	1.237	-1.154	1.524	-4.327*	2.023
Age	-.035***	.011	-.024*	.012	-.065***	.011
Female	.036	.298	.085	.230	-.462	.407
Marital status(=married, w/partner)	.368	.384	.144	.346	1.426***	.238
Higher education	.718*	.311	.526*	.263	1.113*	.506
# of educational institutions	-.025	.055	.052*	.030	-.217*	.108
Learning	.183***	.039	.200***	.051	-.118	.084
Reading	.595**	.245	.919*	.389	.673*	.281
Foreign language	.717*	.362	.142	.389	1.116**	.400
# of professions changed	.192**	.068	.271***	.081	.319**	.113
Consumer innovativeness	.419**	.844	-.077	.105	.695***	.186
Internet	1.601***	.400	1.674***	.270	1.967***	.195
Spare time	-.064	.158	-.151	.194	.636***	.177
Upper income quintile	.553*	.335	-	-	-	-
# of relocations	-.057	.134	-	-	-	-
# of relocations*settlement type interaction						
Large city	-	-	-.284**	.101	.199	.228
Medium city	-	-	-.027	.248	.272	.217
Town	-	-	-.591	.469	.734	.659
Village	-	-	-.070	.306	-1.828*	.767
Region (base=Moscow and St. Petersburg)						
Northern	-.543*	.312	-.834**	.295	-1.133*	.543
Central	-.893*	.371	-.714*	.309	-2.186***	.623
Volga	-1.489***	.295	-1.082***	.242	-2.167***	.307
Southern	-1.182***	.242	-1.294***	.271	-2.303***	.395
Caucasus	-.676*	.392	-.501*	.307	-3.719***	.518
Ural	-1.204***	.199	-.896***	.208	-1.228**	.429
Western Siberia	-1.886***	.238	-1.489***	.214	-2.251***	.474
Far East	-1.114***	.188	-.926***	.241	-1.247***	.281
N	1112		603		811	
Log-likelihood	-471.95		-455.65		-213.80	
Pseudo R <sup>2</sup>	.22		.18		.28	



# Preliminary Findings

- Number of professions changed, practices of learning and e-reading, knowledge of foreign language, availability of Internet connection and residing in capitals at home are positively associated with innovative Internet shopping adoption among adults
- Number of educational institutions attended is positively associated with innovative Internet shopping adoption among affluent
- Availability of spare time is positively associated with innovative Internet shopping adoption among least affluent
- Geographical mobility is not significant
- Internet shopping is gender neutral
- “Materiality bites back”: the strongest explanatory power is demonstrated by material “objects” – ½ by Internet connection alone

# Discussion

- Significance of “propensity to innovative consumption” (introduced as control for the lack of values in data) among less affluent and insignificance among most affluent has to be explained
- Geographical mobility is difficult to capture in household panel – suggestions how to collect more information could be formulated
- Redefinition the practice of shopping and moving it from public to private space eliminated gender bias

# Concluding Remarks

- Households empowered by computer and Internet exhibit different patterns of behavior => study adds evidence to ANT, STS and theory of human empowerment
- Study adds to the growing trend to consider theories of practice an appropriate framework to study changes in consumption
- Accounting for culture in studies of everyday consumption, though methodologically challenging, is worth pursuing

Questions? Comments? Suggestions?

Thank you for your attention!

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