



Perceived outcomes of public libraries and service design

Pertti Vakkari
School of Information Sciences
University of Tampere
Finland





Tampere



HELSINKI
VIINIKKA



The main entrance of Tampere city library



A wood grouse in mating display





Participants

- Pertti Vakkari
 - University of Tampere, Finland
- Ragnar Audunson, Svanhild Aabo
 - Oslo and Akershus University College of Applied Sciences, Norway
- Frank Huysmans¹, Marjolein Oomes²
 - University of Amsterdam¹; Institute for Public Libraries², The Netherlands
- Sei-Ching Sin
 - Nanyang Technological University, Singapore (The US data)
- Nahyun Kwon
 - Myongji University, Seoul, South Korea

The outline of talk

- Introduction
- Research methods
- Basic library statistics in the 5 countries
- The structure of perceived benefits
- Models explaining the perceived benefits in Finland
- Discussion from the angle of service design

Introduction

- *Outputs* are the products delivered by a system, whereas *outcomes* are the benefits the system produces to its users (Rossi & al. 2004)
- In evaluating systems or services it has been typical to count the # of outputs
 - # of book loans, # of relevant documents retrieved
- Increase in one's knowledge or recovery from daily responsibilities are examples of benefits (outcomes) produced by the (outputs of) libraries

Research questions

- How frequently do people benefit from public library services in various areas of life in the countries compared?
- Does the structure of benefits vary between these countries?

Data

- A random sample of population aged 15(18)-80 years in each country
- *Finland*: Postal survey 5-6/2010 (N=1000)
- *Norway*: Web panel 9/2011 (N=1001)
- *The Netherlands*: Web panel 9/2012 (N=1502)
- *The US*: Web panel 12/2012 (N=1010)
- *South Korea*: Web panel 2013 (N=1000)
- For the analysis *18-80 years old library users were included*

Measurement

- Major areas of life: 1) education, 2) work and business, 3) everyday activities, and 4) leisure time were differentiated into 19 sub-fields in total based on earlier studies
- The respondents were asked *how frequently they have benefited from public library services* in the 19 segments of life listed
 - Scale: often - sometimes - seldom - never - cannot say

Areas of life 1-2

- Work and business
 - Finding jobs
 - Executing specific work tasks
 - Developing job skills
- Education
 - Finding educational opportunities
 - Completing formal education (obtaining a degree)
 - Work related educational development
 - Self-education during leisure time

Areas of life 3-4

- Everyday activities
 - Household
 - Childcare and schooling
 - Housing including home repairs
 - Consumer issues
 - Health
 - Travel and vacation
 - Social relations
- Cultural activities
 - Reading fiction
 - Reading non-fiction
 - Cultural activities (e.g. going to theatre or a concert)
 - Creative activities (e.g. playing an instrument or singing)
 - Outdoor activities, exercise, sports
 - Interest in nature (e.g. picking mushrooms or bird watching)
 - Interest in history or society
 - Participating in and following current events



Basic data on public libraries in 2011

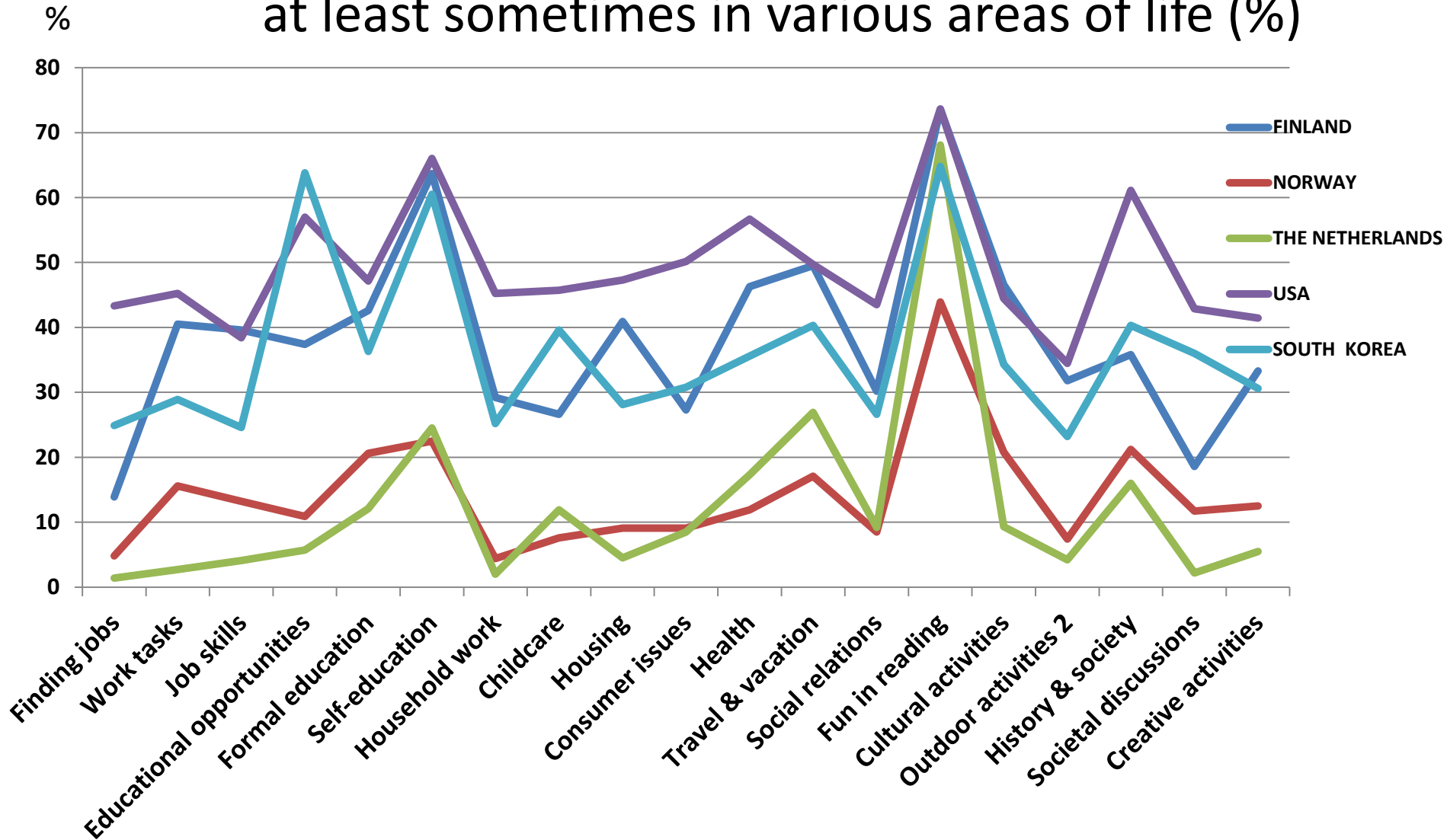
Indicator	Finland	Norway	The Neth'lands	South Korea	The US
Population	5 347 269	4 920 305	16 655 799	50 734 284	311 591 917
GDP per capita € ¹	28900	47500	32900	22666	36486
Municipalities	320	430	418	244	3141 Counties
Main libraries	308	430	163	574	9050
Branch libraries	486	314	736	212	7654
Libraries in total	794	744	899	786	16704
Book mobiles (stops)	153 (12378)	29 (1272)	³ - (927)	1126	696 (-)
Opening hours	1 399 355	805000	-	3 050 268	36 399 173
Manpower years	4756	1 783	5030	7369	137 364
Operation costs per cap. €	58.03	38.46	33.90	8.65	25.30
Collection items ⁴ per cap.	7.4	4.3	1.8	1.5	2.9
Collection books per capita	6.6	3.8	1.7	1.4	2.6
Loans per capita	18.2	5.1	6.0	2.4	8.1
% borrowers in population	39.2 ⁵	21.1	24.1 ²	35.3 ²	55 ⁵
Visits per capita (physical)	9.9	4.4	4.4	5.3	4.9



Differences in library statistics

- Library resources and supply per capita largest in Finland and smallest in South Korea
 - # of mobile libraries per capita in South Korea is large, while small in Norway and the Netherlands
 - The US has relative good manpower supply per capita
- % of borrowers in population large in the US in particular, and in Finland and South Korea
- # of loans and visits per capita largest in Finland
 - Loans per capita largish in the US and smallest in South Korea
- The larger the proportion of active users, the greater likely the benefits derived from library use

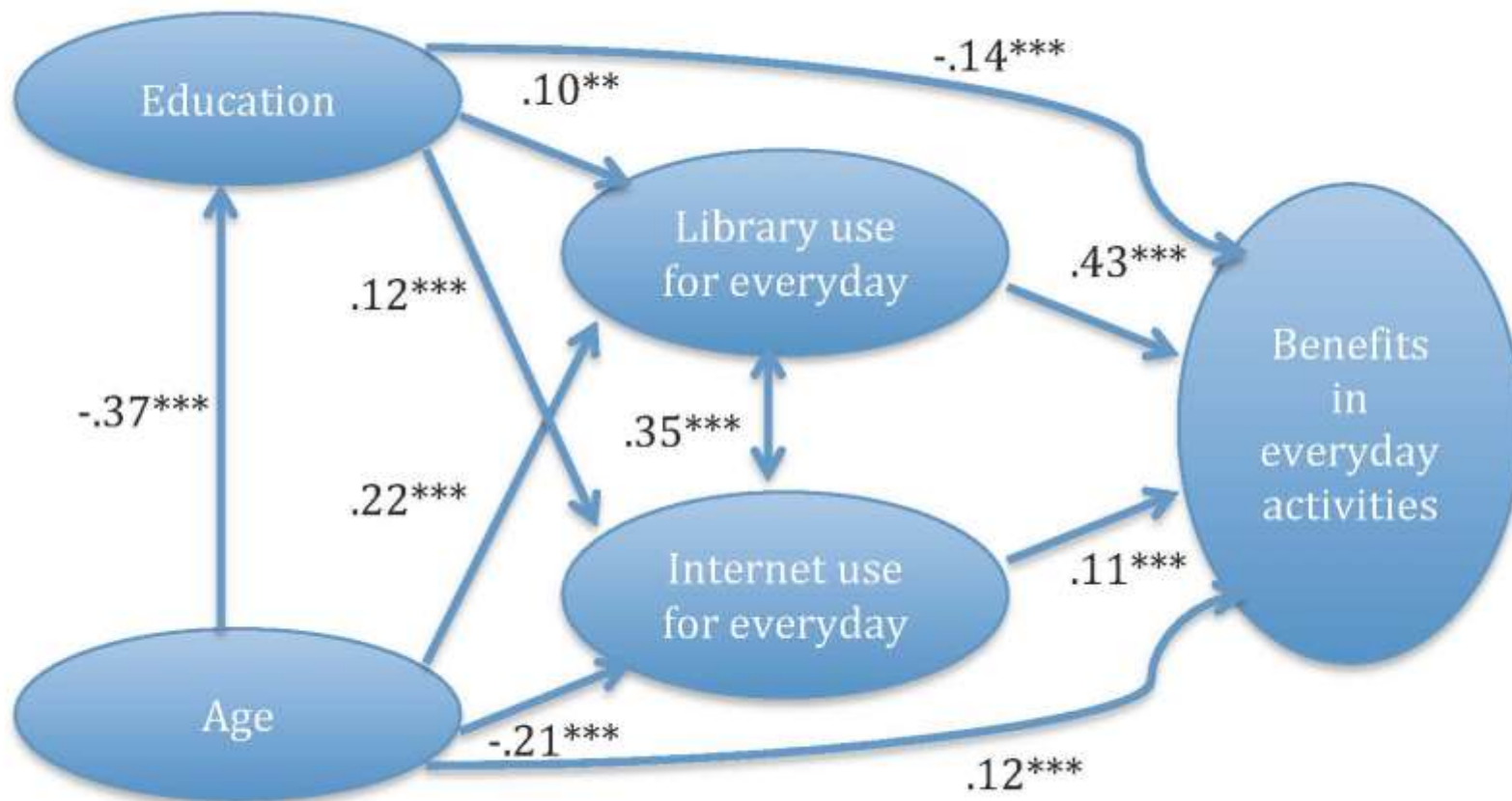
The proportion of users who have benefited from the public library at least sometimes in various areas of life (%)



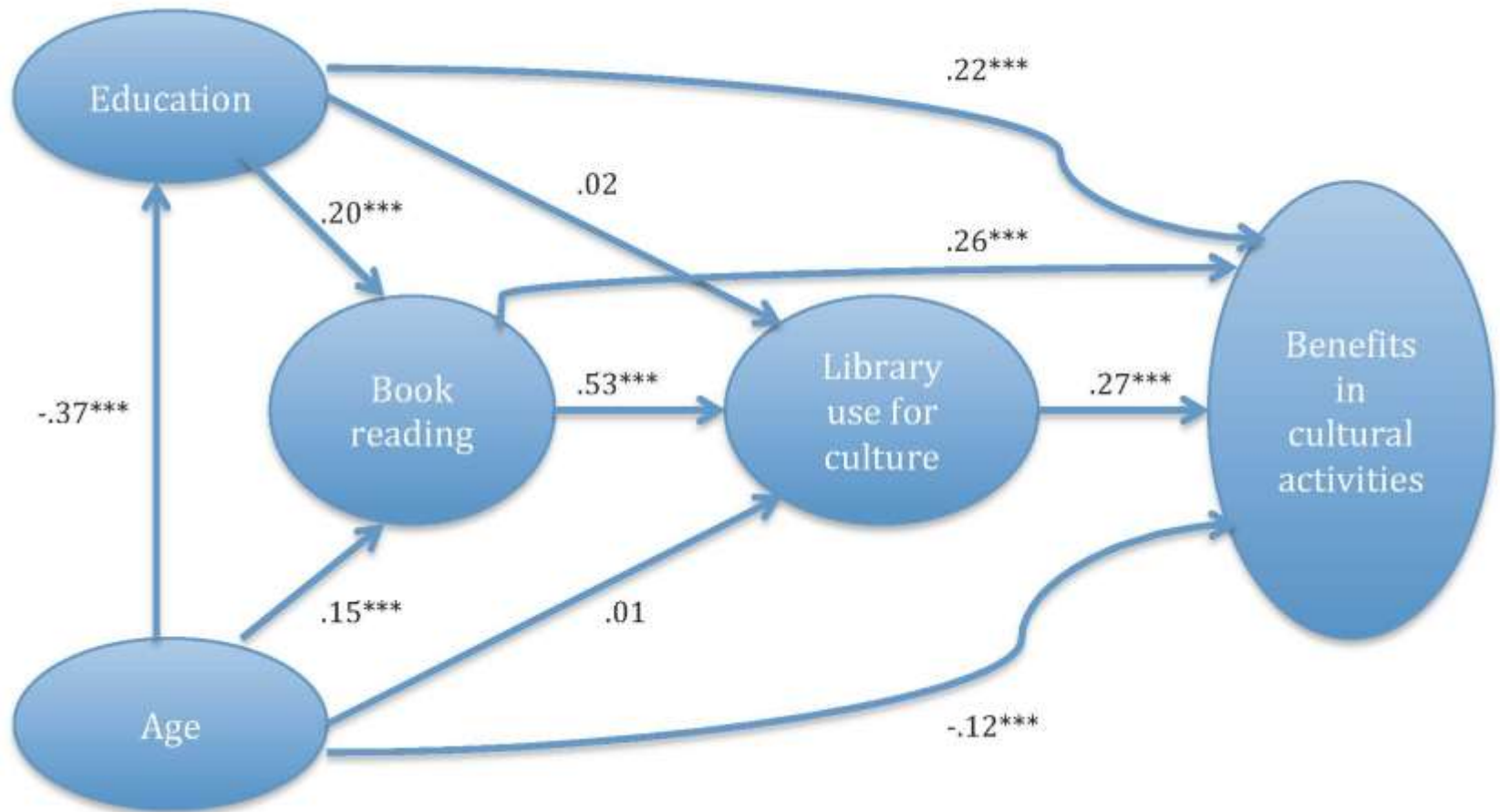
The five most popular benefits in the countries compared (% benefited at least sometimes)

Finland	Norway	The Netherlands	South Korea	The US
Fun in reading (74)	Fun in reading (44)	Fun in reading (68)	Fun in reading (65)	Fun in reading (74)
Self education (64)	Self education (23)	Travel & vacation (27)	Educational opportunities (64)	Self education (66)
Travel & vacation (50)	History & society (21)	Self education (25)	Self education (61)	History & society (61)
Cultural activities (47)	Cultural activities (21)	Health (17)	Travel & vacation (40)	Educational opportunities (57)
Health (46)	Formal education (21)	History & society (16)	History & society (40)	Health (57)

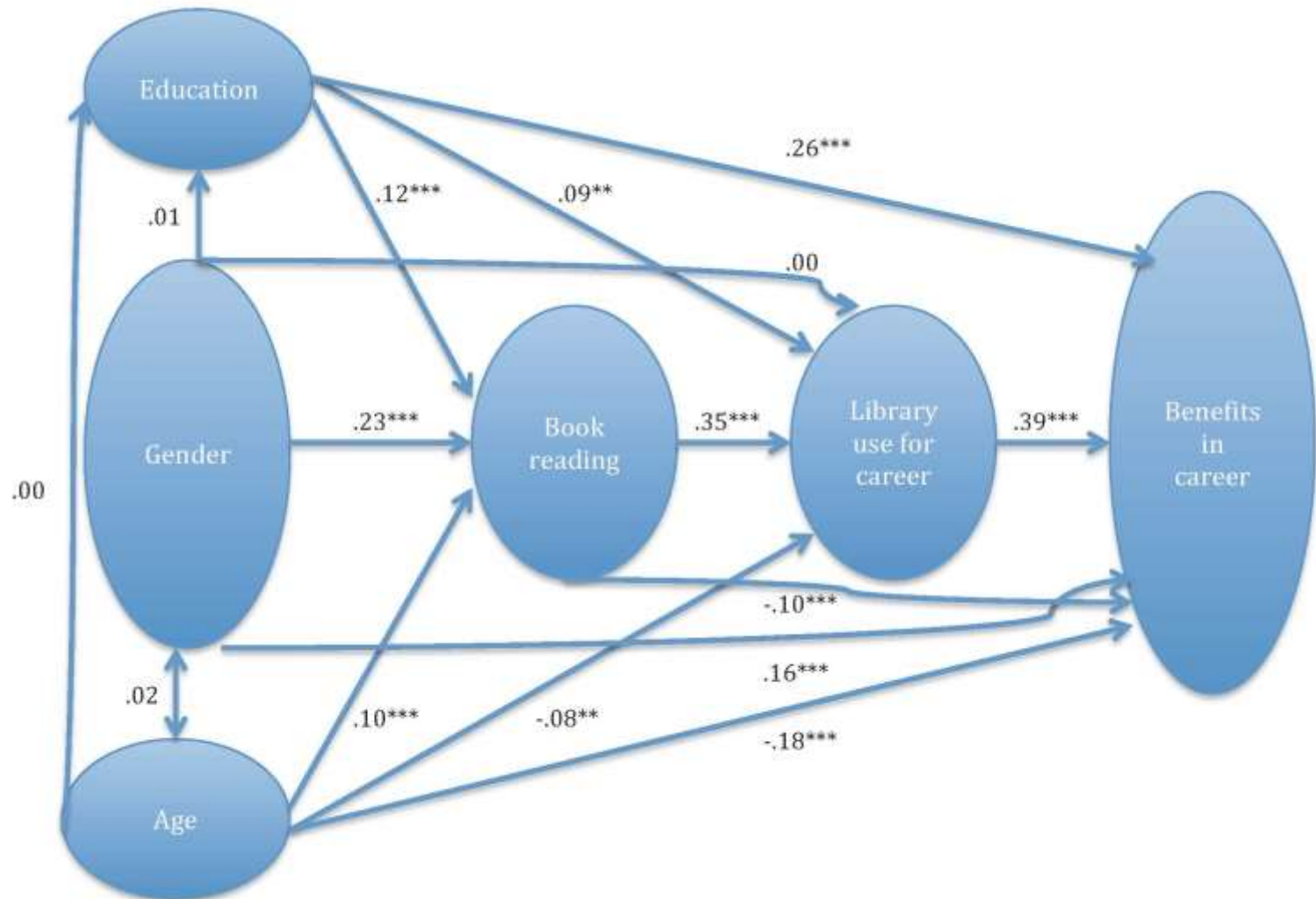
A path model for benefits in everyday activities in Finland (n=856)



A path model for benefits in cultural activities in Finland (n=856)



A path model for benefits in career in Finland (n=837)



Discussion

- The level of perceived benefits across all areas of life is notably higher in the US, Finland and South Korea compared to Norway and the Netherlands
- In Norway and the Netherlands benefits are perceived most in culture and then in education, while in the other countries education comes before culture
 - The role of the public library differs somewhat between these countries
 - In the former ones more emphasis on cultural benefits, while in latter one more on educational benefits
- The proportion of (active) users in the population an essential predictor of the level in perceived benefits
 - Differences in library resources and supply, and cultural differences contribute also to benefits

Discussion

- In all countries users derived most benefits from the public library in reading, self-education, and in the interest in history & society
 - These are the classical and established outcomes of the public library
- In service design emphasis on the services contributing to these benefits
 - Systems and services supporting fiction reading
 - E.g. recommender systems, browsing and serendipity
 - Large and versatile collections a basis for self-education in leisure time
 - Combine encounters and collaboration in libraries with people's wish to develop themselves by self-education

Discussion

- The mechanisms producing benefits from library use vary by socio-economic groups
 - Older and less educated groups benefit in everyday activities
 - Younger and higher educated groups benefit in career and cultural activities
 - The versatility of library use the major predictor for the level of benefits
- Diversify services accordingly

Thank you!



- Vakkari, P. & Serola, S. (2012) Perceived outcomes of public libraries. *Library & Information Science Research* 34(1): 37-44
- Vakkari, P. (2014). Models explaining the perceived outcomes of public libraries. *Journal of Documentation* 70(4): 640-657
- Vakkari, P., Aabo, S., Audunson, R., Huysmans, F., Oomes, M.(2014). Perceived outcomes of public libraries in Finland, Norway and the Netherlands. *Journal of Documentation* 70(5): 927-944