

## Perceived outcomes of public libraries in Finland, Norway and the Netherlands

### Introduction

Public libraries are no longer the taken-for-granted institutions they were some decades ago. The increasing availability of information and, broader content on the world wide web has provided citizens with ample alternatives to paying a visit to a library branch. Search engines like Google and recommender functions on sites of e-book vendors like Amazon have partly taken over the information and advisory function of front-office staff. Add to that the public spending cuts due to the current economic recession in large areas of the world, and it becomes quite understandable that local and other authorities have begun to question the self-evidence of their investment of taxpayers' money in the public library systems.

A parallel trend is the advent of evidence-based policy. For public library advocates, it no longer suffices to come up with assertions that 'keeping up a public library provision is an investment in the economy' or 'closing a public library branch deprives children of development and career opportunities'. Increasingly they are asked to support these and similar claims with evidence, be it quantitative or qualitative. From a management point of view, this evidence also serves as a yardstick for quality improvement. Both internally and externally, the library organization has to show its increasing 'public value' (cf. Moore 1995).

Measuring the public value of libraries is an emerging field in library and information science (LIS). The trends described above are not the only impetus for this shift 'from output to outcome measurement'. Scholars themselves have grown dissatisfied with the limited validity of library 'outputs' (e.g., number of registered members, visits, loans, special activities) as measures for 'value'. Increasingly they are looking for alternative measures of 'outcomes', trying to get a grip on what memberships, visits, loans and activities bring about in the lives of the library patrons and their communities (Hernon & Dugan 2002; Huysmans & Oomes 2013; Poll 2012; Rubin 2006).

Different terms - outcome measurement, impact assessment, value assessment, (social) return of investment assessment - are used for what is roughly the same practice: trying to arrive at indicators for what good the library brings about for its patrons, their communities and society at large. In Poll (2012), a first attempt is made to bring these terms together in a conceptual framework, which exemplifies the nascent state of the field.

Empirical research on the perceived outcomes of public libraries beyond the evaluation of individual programs or libraries is scarce (Vakkari & Serola 2012; Huysmans & Oomes 2013). There is only a handful of studies surveying the benefits derived from the use of public libraries on a national scale. Vakkari & Serola (2012) to our knowledge is the first nationwide survey of public library outcomes, which covered comprehensively the benefits perceived by adults in the central areas of life. The results of this study indicate, that Finns seem to benefit to varying extents from the library in different fields of life. The study also found out that the benefits produced by the public library could be reduced to three major outcome types: everyday activities, cultural interests, and career. However, it is an open question whether or not these patterns of benefits hold in other countries as well. Do citizens in other comparable countries perceive benefits similar to Finns and to what extent do the pattern of benefits vary between the countries compared? Norway and the Netherlands were chosen for comparison, because all the three countries are small or medium-sized Northern European established welfare states with many similarities. Each of them has also a well-developed public library system (Huysmans & Hillebrink 2008).

In this contribution, the Finnish study is complemented with replications in two other European countries, in Norway and in the Netherlands, to see what cross-cultural comparison can teach us about the benefits these societies' members derive from the public library services. The aim of the study is to compare the perceived outcomes of public libraries in Finland, Norway and the Netherlands. The research questions addressed are:

1. How frequently do people benefit from public library services in various areas of life in Finland, Norway and the Netherlands?
2. Does the structure of perceived benefits vary between the countries?
3. If so, which factors could explain the possible variation in perceived benefits between the countries?

The first and second questions will be answered by statistical analysis of survey data collected in the three countries. The third question will be answered tentatively by looking at factors likely to influence public library provision and hence the perceived outcomes, like historical and policy differences.

### **Literature review**

'There is a growing body of national and international studies that have attempted to measure the impact of the public library in various aspects of life of individuals and on communities, often as an instrument in advocacy efforts on behalf of public libraries' (Oomes & Huysmans 2013). These studies often report on what Poll (2012) calls 'soft measures'. These measures base statements on outcomes on the respondents' estimation of actual or potential benefit of the

library. The so-called 'solicited evidence' that stems from these measures (Streatfield 2002 in Poll 2012) is more subjective than 'observed evidence' that stems from studies using observation instead of questioning people.

Measures of solicited evidence can be divided roughly into two approaches. The first focuses on the extent to which outcomes are actually experienced by people themselves. For instance, in the US Impact study (Becker, Crandall, Fisher, Kinney, Landry & Rocha 2010) respondents were asked for what purposes they had used the library's digital services and to what extent they had actually experienced benefits from this use in their societal welfare (did they use a library computer to look for work? if yes, did they find a vacancy, apply for a job and in the end get a job? etc.). The latter type of solicited outcome focuses on the respondent's opinion on broad statements about what outcomes or benefits they associate with the library or how they think the public library contributes to the community or to people in general. For example, respondents are asked whether or not they believe that public libraries contribute to sustaining their communities or to what extent they agree with statements like "the library is important for democracy" (EIFL, 2011; Library Council of New South Wales, 2008). As a consequence, reported outcomes arising from the first approach are mostly more concrete or tangible than the ones stemming from the second approach. Furthermore, in the former case outcome statements are made at the individual level, while the latter reports on outcomes at the level of community or society.

All in all, both these methods inquire the respondents' perception of outcome, but the first shows the actual *experience* of outcome while the latter touches more upon someone's general opinion about library outcome, or what people *think* the library's contribution is or can be. In a substantial part of the studies, moreover, both measures are combined. Discrepancies between the individual and the community/societal outcome statements, with the latter outcomes estimated larger, may hint at resemblance with a phenomenon observed in research on mass communication research, i.e. the 'third person effect' (Davison 1983; Perloff 1999). In this case, it could be that individuals feel that others are experiencing greater benefits from the public library than they themselves.

Various studies not only vary in the method of asking for perceived outcomes, but also differ in scope as they examine libraries at the country, city and state levels. Recently, studies have even made cross-national comparisons (EIFL 2011). Furthermore, they showcase outcomes in a variety of fields or domains, using both quantitative and qualitative methods. In the following the focus is on studies, which survey large populations and observe a broad range of outcomes.

Becker et al. (2010) report on survey responses from nearly 50,000 patrons of over 400 public libraries across the USA and 319 interviews with users, non-users, staff, administrators, funding agencies, and other community agencies in four case study sites from all over the country. The variety of fields where library influence was perceived, was reduced to seven categories: social connection; education; employment; health and wellness; e-government; community and civic engagement and personal finance.

EIFL (2011; Elbert, Fuegi & Lipeikaite 2012) has asked users and non-users, librarians, local and national government officials in six African countries in questionnaires and interviews for their perception of the (potential) benefits and impact of public libraries. Findings show that the main fields of impact as perceived by the respondents correspond to a large extent with the ones in the US impact study: education; economic development; health; communication; culture; social inclusion and community development; citizen empowerment, democracy and e-government; agriculture outcomes; information society and digital divide.

In Australia, the State Library of Victoria (2005) reports on interviews, surveys and focus groups with almost 10,000 persons (library users, non-users, library staff and community leaders such as local councillors, bureaucrats, business people, school principals and teachers, and people working in key community organizations). The authors group the observed outcomes into four key areas: overcoming the digital divide; creating informed communities; convenient and comfortable places of learning; and building social capital. Findings show that on the individual level, the library contributes by providing access to information and helping individuals to develop their skills. On the community level, libraries are perceived to add value in the fields of: social interaction; promoting social inclusion; bridging the generation gap and providing a focal point for the community.

Also in Australia, the Library Council of New South Wales (2008) set up a study to find out how public libraries benefit other institutions. A variety of methodologies were utilized including a survey among library managers of all public library services, ten in-depth case studies among stakeholders, and interviews with representatives from nine external organizations. The findings demonstrate that public libraries sustain the community and contribute positively to four types of well-being in society: social, cultural, economic and environmental.

In her extensive literature review on the value of public libraries in the UK Rooney-Browne (2011) identified eleven potential outcomes and impacts making up social value: improved self-esteem, empowerment, improved life

chances, employability, social networks, promoting civic values, sense of place, informed citizens, community engagement, social cohesion, and social, human and intellectual capital.

In an early study, Linley and Usherwood (1998) used a social process audit to evaluate the social impact of the public libraries in an English city and a county. They found that the recognized and established functions of the public library in terms of culture, education, reading and literacy, leisure, and information remain important. In addition, they identified social and caring roles of public libraries. Public libraries were shown to strengthen community identity and promote social cohesion and community confidence by fostering connections between groups and communities.

There are also studies focusing on specific benefits like social or economical outcomes, e.g. on the role of the public library in the creation of social capital (Aabø & Audunson 2012). National studies of public libraries' economic value or impact have been conducted, for instance in Britain (Morris et al., 2001), Norway (Aabø 2005), Latvia (Economic value and impact of public libraries in Latvia 2012), Korea (Man Ko et al. 2012) and USA (Holt and Elliott, 2003; McClure et al., 2001).

Taken together, these studies have shown that public libraries, as perceived by users and non-users, contribute to the wellbeing of communities and to several aspects of the lives of individuals. It seems that the outcomes registered most often are found in the fields of education or cognitive skills development; social connection and inclusion, social capital and civic involvement; economic and labor market support; health and welfare; the cultural climate and entertainment and enjoyment. From the literature on library outcomes Huysmans & Oomes (2013) derived 5 main domains of outcomes in which outcome areas can be grouped: educational, cultural, social, economical and affective domain. Vakkari & Serola (2012) clustered aspects of daily life into five major areas. The same areas - studying, work and business, everyday activities, leisure activities, and social relations - are taken as point of departure in this study.

The Finnish study has, to our knowledge, been the first in Europe to try to empirically determine, on a nationwide scale, the whole range of benefits people derive from the public library. As the Finnish public library system is one of the frontrunners in Europe and elsewhere (Huysmans & Hillebrink 2008), the Finnish outcomes cannot simply be deemed valid to the situation in other European countries with different public library services and government policies. It would be a remarkable finding indeed if persons in countries with a lower service level would report the same level of benefits. For this reason, it is necessary to replicate the study in other countries to find out to what extent

these benefits have a broader applicability and reflect possible factors for explaining potential differences in benefits.

### **Basic facts on public libraries**

It is likely that the level of library services has an influence on their use (Vakkari 1988; Sin 2012) and consequently, on the perceptions of benefits produced by the services. Also more general social factors like legislation likely affects the differences between the countries in behavior and attitudes (Ragin 1987). In the following basic statistics on library systems and major characteristics of library law in the countries compared are presented.

Table 1 indicates large differences between public libraries in the three countries in resources and, probably as a result of that, in library usage. Norway and the Netherlands both lag far behind Finland in operational costs per capita. The cost of operation per capita in Norway is 66 % and in the Netherlands 58 % compared to Finland.

[Table 1. Basic data on public libraries in 2011 in the countries compared]

Accessibility to library services can be expressed by several measures. In table 1 the density of branch libraries, opening hours, manpower years and items per capita measure different dimensions of accessibility, for example access to help from library professionals, access to media, access to a library. The accessibility the Finns enjoy measured by these indicators is far better than what it is in Norway and the Netherlands:

- The number of hours Norwegians have access to an open library is only 58 % of the number of hours when Finns have access to an open library.
- Finland has 1124 inhabitants per every full time employee. The corresponding figures in Norway and the Netherlands are 2760 and 3311 inhabitants respectively.
- Norway and Finland are relatively close to each other when it comes to number of inhabitants per library unit and number of items per capita: 6734 inhabitants per unit in Finland compared to 6613 in Norway and 7.4 item per capita in Finland. Norway is situated in the middle with 4.3, and the Netherlands are last with only 1.8 items per capita. Along these dimensions of accessibility the Dutch seem to lag far behind, with more than 22000 inhabitants per library unit.

The high score we find in Finland on these accessibility indicators is paralleled by dramatically higher figures in library usage compared to Norway and the Netherlands. Loans per capita, visits per capita and the proportion of borrowers in the population are considerably higher in Finland than in Norway and the Netherlands. In the Netherlands we find a very peculiar profile in the

composition of the members (unlike in the other countries, the Dutch statistics refer to library card holders, not borrowers), with a very high percentage of the children and teenagers (62,5 %) and a very low proportion of the adult population being borrowers (13,8 %). One important explanation is possibly the fact that in the Netherlands adult inhabitants must pay a membership fee to use the public library, while membership is free for children and youths up to 16 years for most Dutch public libraries. In Finland and Norway as in most countries, public library use is free of charge for all inhabitants.

The proportion of registered borrowers as a measure of library use underestimates library use. The proportion of borrowers in Table 1 does not correspond to the proportion of the population who report being library users in surveys. According to a representative nationwide survey in Norway in 2006, 48 per cent of the adult population used the library at least once during the last 12 months, (Buskoven, 2006). Other surveys, among them the surveys on which this paper is based, report similar or higher proportions. It is known, that a large proportion of the visitors are engaged in activities not related to the lending of books and other material (ABM-utvikling, 2008; Huysmans & Hillebrink 2008; Serola & Vakkari 2011). Against this background, the proportion of borrowers in Table 1 becomes less surprising.

The legal framework in Finland and Norway is similar to each other in the sense that both these countries have a public library law stating that the provision of library services is a local government responsibility, that the services shall be free of charge and laying down some standards regarding the professional education of the library staff. In the Netherlands there has been no public library law since 1987, although there have been so-called 'charters' in which local, regional and national authorities laid down their respective responsibilities. The general practice in the Netherlands is that users from 16 years and up have to pay for library services. Local library organizations have different payment schemes, but a usual model is that users can choose between three levels of membership: One reduced level, where they are charged for all items they borrow, one standard level where books can be borrowed free of charge (as opposed to CDs and DVDs) and one top level where there are no fees for lending any kind of material (Huysmans & Röst 2009).

The essential structural differences regarding legislation and individual payment of library fees between the Netherlands on one side and Finland and Norway on the other will probably be reflected in the inhabitants' perceived outcomes of their public library use. It is to be expected that fewer of the adult population in the Netherlands will use the public libraries due to the fees and that those who do will use fewer of the services, perhaps focusing on core public library services

related to the reading and borrowing of books. The outcomes they perceive may then be related to fewer areas of life.

The level of public library services between the three countries is another significant difference that probably has a strong effect on perceived outcomes of public libraries. Finland has considerably higher operational costs per capita, better accessibility, longer opening hours and more professional librarians. Hence, the perceived outcomes of the Finnish inhabitants are expected to be clearly higher than for the lower levels of Norway and the Netherlands.

Does our study confirm these expectations and, if so, to which extent?

## **Research design**

### *Data collection*

In all three countries, random samples drawn from the adult population were surveyed. The methods and procedures used varied somewhat: In Finland a postal survey was undertaken. A random and stratified sample consisting of 6000 persons between 15 and 80 years of age was drawn. One thousand questionnaires were returned, yielding a low response rate of 16,7 percent, which is typical for mail surveys (Groves, 2006). The Finnish data collection took place between May 18 and July 31, 2010.

The Norwegian data was collected via a web panel. The sample consisted of 1001 respondents and was drawn from a universe consisting of citizens 18-80 years of age. The data collection took place during the last week of September 2011.

The Dutch data set was collected via an online panel. The panel consisted of approximately 130.000 persons. First, a screening took place with a question on whether or not the respondents had visited the public library in the 12 months preceding the interview, either physically or online. In total, 68.742 persons responded to the screening, of which 44,0% said they had used the public library the year before. In a second step, a sample was drawn from the 68.742 persons responding with users being deliberately oversampled. The users were oversampled so as to obtain information on the nature of public library use and outcomes from a larger group than would have been the case had the actual distribution been met. A web questionnaire was completed by 1.025 public library users (68,2%) and 477 non-users (31,8%; target numbers were 1.000 and 500 respectively). The data collection period was 21-28 September 2012.

### *Comparing the samples*

The data in Norway and in the Netherlands was collected via online panel, whereas mail was used in Finland. The low response rate in Finland might cause bias between the three samples. Response rates in surveys have continuously

decreased during the last decades (Groves 2006). This has generated studies on the relations between response rate and non-response bias. Studies seem to show, that changes in non-response rates do not necessarily alter survey estimates. There is little empirical support for the notion that low response rate surveys de facto produce estimates with high non-response bias (Groves 2006). Therefore, it is assumed that the difference in the response rate between Finland and the two other countries does not bias the comparison.

All three samples were relatively well represented by age and geographic region (Table 2). In the Finnish data females were strongly overrepresented, whereas in the Norwegian and the Dutch data the gender distribution was well balanced. The Finnish and the Norwegian samples were biased towards the highly educated. In the Dutch sample the weighting variable corrected the data in this respect.

[Table 2. The samples compared to the population in the countries observed]

Library users were deliberately strongly overrepresented in the Dutch sample. This was corrected for with post-hoc weighting, but a comparison with registration data shows an upward bias even after weighting.

Overrepresentation of the highly educated in the Finnish and Norwegian data implies that library users were overrepresented in those samples as well, although the proportion in the Norwegian sample who report having used the library at least once in the last 12 months (53,8%) is *relatively* close to the proportion of users in the last public library survey undertaken by the National Bureau of Statistics (Buskoven, 2006). The bias towards females in the Finnish sample implies also that active library users were overrepresented in the data. It is known, the highly educated use the public library more frequently compared to less educated groups, and that females are more frequent library users compared to males (Huysmans & Hillebrink, 2008). Therefore, library users were overrepresented in all samples.

The sample was biased towards more active library users. The greater response rate of those interested in the phenomenon observed is a common feature in surveys (e.g. Groves, 2006; Lance et al. 2001). The bias in the sample implied that the effect of both gender and educational level would need to be controlled in the results.

In order to have comparable data, we excluded from all datasets those respondents who have not used the public library within the previous twelve months. This makes sense not only from the viewpoint of comparability. Probably one has to be a library user to experience benefits from library use.

The criteria for age in the samples varied somewhat. The range of age in the Finnish and Dutch samples was 15-80 years, in the Norwegian sample 18-80. For the sake of comparison we included in the analysis the participants within the range of 18-80 years.

After these exclusions the Finnish sample included 805 respondents, the Norwegian 538 respondents and the Dutch 1025 respondents.

### *Measurement*

The aim of this study is to compare the perceived outcomes of the public library in Finland, Norway and the Netherlands, measured by the extent to which the outcomes are actually experienced by the respondents. Outcomes are benefits a system or service produces to its users (Rossi et al., 2004). The point of departure was the pattern of questions in the Finnish study measuring the perceived benefits from public library services in 22 areas of their lives (Vakkari & Serola 2012). Thus, respondents' perceptions of these benefits were surveyed.

The chosen level of measurement concerning the perceived benefits was ordinal since ordinal classification was considered a more realistic task for the respondents than asking them to report an exact number (Fowler, 1984; Vakkari & Serola 2012). The respondents were asked to rate how frequently they have benefited from public library services in the 22 areas of life. For each of the areas, a five-point rating scale was used: "often," "sometimes," "seldom," "never," and "cannot say". In order to facilitate analysis, the categories "never" and "cannot say" were collapsed. It was considered very likely that those unable to report the benefits had not perceived them. The categories were scored from one to four, with "often" given the value of one and "never" the value of four.

The categorization used in the comparison is based on the study by Vakkari and Serola (2012), where the procedure for forming the categories is described in detail. As a point of departure for the delineation, the major categories of human daily life found in several studies (Chulef et al., 2001; Meegan & Berg, 2001) were used: studying, work and business, everyday activities, family and social relations, and leisure time. The family and social relations category was included in the category of everyday activities. These areas were divided into subareas, based on McClure and Bertot (1998), Chulef et al. (2001):

#### Work and business

- Finding jobs
- Executing specific work tasks
- Developing job skills

#### Education

- Finding educational opportunities

- Completing formal education (acquiring a degree)
- Work related educational development
- Self-education during leisure time

#### 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

In the Dutch questionnaire the questions concerning “developing job skills” and “work related educational development” were combined as well as the variables “outdoor activities” with “interest in nature”. To maintain comparability, in the Finnish and Norwegian data in both cases the two variables were merged by adding them up and dividing by two. The first merged variable was called “developing job skills” and it was placed in the major group “education”. The second merged variable was called “outdoor activities”.

In the Dutch questionnaire the benefit for reading was measured by asking benefits for fun in reading books. In the surveys of the two other countries a distinction was made between reading fiction and reading non-fiction. We merged these two variables in the Finnish and Norwegian data by adding them up and dividing by two. The new variable was called “fun in reading”.

### **Findings**

The profiles of benefits are compared first followed by the comparison of the structure of benefits between the countries observed.

### *Profiles of benefits*

To present the distribution of benefits, the proportion of respondents who have benefited from public library services at least “sometimes” (often and sometimes) were calculated. Figure 1 indicates the average proportion of those perceiving benefits sometimes over all outcomes, and in the major fields of life, i.e. work, education, everyday activities, and cultural activities.

Figure 1. The proportion of those benefiting at least sometimes from the public library in the major fields of life in Finland (N=805), Norway (N=538) and the Netherlands (N=1025) (%)

On average, Finns perceive considerably more commonly benefits from using the public library compared to Norwegians and Dutch. While 38.3 % of Finns derive sometimes benefits from the public library, the corresponding figure is among the Dutch 12.4 % and among Norwegians 14.4 %. These figures are relatively low. On average, over all areas of life users in the countries compared do not feel that they benefit very commonly from the library.

The popularity of outcomes varies between the countries. In Finland users perceive most common benefits in education (47.9 %), followed by cultural activities (40 %), everyday activities (35.7 %) and work (31.3 %), whereas in Norway and the Netherlands cultural activities (19.6 % vs. 17.6 %) are most perceived as benefiting by users, followed by education (18 % vs. 14.1 %). In the Netherlands, users benefit hardly at all (2.7 %) in work and business from services provided in the library.

In all, there is a considerable difference in the level of perceived outcomes in the major fields of life between Finland and the two other countries observed. Compared to the Norwegians and the Dutch among Finns it is about twice as common to benefit from the library in cultural activities, and almost three times more common in everyday activities, education, and in work and business. Thus, it seems that the outcomes of the public library cover more comprehensively the major fields of life in Finland compared to Norway and the Netherlands. While the benefits focus mostly in cultural activities in Norway and the Netherlands, in Finland they scatter strongly over all major fields of life.

Users in Norway perceive more commonly benefits at least sometimes compared to users in the Netherlands in three of the four areas of life. However, differences in the outcomes between these countries are modest in all areas except work and business. Among the Finns outcomes in education have the top priority followed by outcomes in culture, whereas the priority is vice versa among the Norwegians and the Dutch.

Users perceive most commonly benefits in Finland compared to Norway and the Netherlands in all nineteen areas of life (Figure 2). The profiles of benefits vary also somewhat between Norway and the Netherlands. The Norwegians perceive benefits more often in work and business, and in education, whereas the Dutch do so in everyday activities.

Figure 2. The proportion of those who have benefited from the public library at least sometimes in different areas of life in Finland (N=805), Norway (N=538) and the Netherlands (N=1025) (%)

In all three countries fun in reading is clearly the most common outcome. However, there are large differences between the countries. The proportion of those perceiving at least sometimes fun in reading produced by the public library is 73.6 % in Finland, 68.1 % in the Netherlands and 43.9 % in Norway. The Norwegians derive much less benefit from reading books than do the Dutch and Finns.

The order of other top benefit areas varies somewhat between the countries. In Finland self education (63.7 %) is the second most popular area, followed by travel and vacation (49.5 %), cultural activities (46.6 %), health (46.3), and formal education (42.6 %). In Norway self education (22.5 %) is the second most popular area, then interest in history and society (21.2 %), cultural activities (20.8 %) and formal education (20.6 %). In the Netherlands travel and vacation (26.9 %) is the second, followed by self education (24.5 %), health (17.3 %) and interest in history and society (16 %).

In all, although there is variation in the popularity of outcomes between the countries compared, the top outcomes are about the same. The most striking variation between the countries is the difference on the level of perceived benefits between Finland and the other two countries across all nineteen areas. These differences are largest in education and work and business. Users also perceive in Finland benefits across all major areas of life, whereas in the two other countries benefits are perceived mostly in education and culture. Compared to the Dutch the Norwegians derive somewhat more common benefits in work and business, and cultural activities, but less common in everyday activities.

#### *The structures of perceived benefits*

In the Finnish study (Vakkari & Serola 2012) a factor analysis was performed on the list of 22 perceived outcomes, to see if these could be grouped into a smaller number of overarching outcome domains. From the analysis three factors emerged, which were termed 'everyday activities', 'cultural interests' and

'career'. With the availability of the Norwegian and Dutch replications of the study, an assertion as to whether this structure has a wider validity comes within reach.

An exact replication, however, was not possible due to deviations in the Dutch study. The questions regarding perceived outcomes were administered with those respondents who had visited the public library (either 'physically' or online) in the past year only (oversampled, N=887). Also, as described above, some items were grouped in the Dutch questionnaire. The 19 remaining items, however, could be used in a comparative factor analysis after selecting the same category of respondents from the Finnish (N=777) and the Norwegian (N=538) data sets.

Of those who had used the public library at least once in the past year, a majority did not report having derived benefits from the library in most respects. The response on the 19 remaining items was severely skewed towards zero. In a factor analysis 'generalized least squares' was used as extraction method to account for the skewedness of the data. Using the eigenvalue >1 criterion, initially the analyses yielded a different number of factors (Finland 4, Norway 3, Netherlands 1). When trying to replicate the three-factor solution of Vakkari & Serola (2012) in a second step, however, a remarkable similarity between Finland and Norway was found (Table 3).

[Table 3. Three factor solutions for each country (rotated factor matrix)]

The three factors everyday activities (1), career (2) and cultural interests (3) re-appear in this analysis for Finland and also show up in the Norwegian case. What is more, the items loading highest and lowest are roughly the same in both countries. On the everyday activities factor, 'housing' loads highest. On the career factor, 'developing job skills in general' and 'completing formal education' are the two highest loading factors. Finally, on the cultural interest factor, 'cultural activities' and 'interest in history or society' are the most prominent items. A further remarkable finding is that the items loading on more than one factor are the same in both cases. Only two dissimilarities are found in this respect.

As the descriptive analyses already showed, the Dutch public library users appear to derive so little benefit from the library in most respects, with the notable exception of 'reading for pleasure', that the correlations between the items are very low. Consequently, it is not quite possible to find a sensible factor solution for the Dutch case. With a single exception ('finding educational opportunities'), all items load at best moderately strong on the three factors. The Dutch factor solution deviates considerably from the Finnish-Norwegian one. It is not immediately clear how this finding should be interpreted. A post-hoc

hypothesis could be that the service provision in the two Scandinavian cases is broader, offering citizens more services in work, leisure and culture than in the Netherlands. The stress on the reading function in the Dutch case could also be connected with government policy, which has steered the public library much more strongly in the direction of promotion of reading skills and the literary culture than would be the case in Norway and Finland.

### **Discussion**

In the research presented here, contributions have been made to the research on the value of public libraries in the following ways:

- It contributes to expand the methodological repertoire of research as well as the field of practice by proposing and testing an instrument to measure the benefits of public libraries across different areas of life. Thereby it contributes to establishing a basis for evidence based policies in librarianship.
- Whereas research on the effects of public librarianship across a wide range of life spheres mainly have been qualitative, and quantitative studies on the value of libraries, for example contingent valuation studies, have tried to elicit the aggregated total value of libraries, this piece of research is to the researchers' knowledge one of the first quantitative studies aiming at measuring benefits across different areas of life.
- The findings, in particular the considerable difference between Finland and the two other countries, highlight intriguing questions for future research about the relationship between public library policy regimes and benefits.

The findings have shown large differences between Finland on the one hand and Norway and the Netherlands on the other. In Finland, substantial proportions of users report having experienced benefits across a broad spectrum of life spheres -work and education, every day life, leisure and travel in addition to the traditional area of reading and cultural activities. In Norway and the Netherlands the experienced benefits tend to be much more concentrated to these traditional areas. Typically, the proportion of Finns experiencing benefits in other areas than those related to reading and cultural activities are around three times higher than is the case in Norway and the Netherlands. Also when it comes to culture, the proportion of Finns having experienced benefits at least sometimes is twice as high compared to what is found in the two other countries.

These differences between Finland on the one hand and Norway and the Netherlands on the other are striking. It is tempting to relate them to the differences in resources invested in public libraries (cf. Vakkari 1988; Sin 2012), where Norway and the Netherlands are lagging far behind Finland. The findings

might indicate that public libraries are institutions with a substantial potential for being beneficial across a broad spectrum of life spheres, but realizing those potentials is very much dependent upon resources invested. If, for example, the usefulness of libraries in solving problems for people in their work and in helping them develop their professional competencies – benefits which are closely related to innovation and creativity in society – increases significantly when investments in libraries are larger, that is a very interesting finding. It could however also be that lower perceived outcomes are connected with a varying presence of other services and institutions (e.g., in health care) on the local level (cf. Ragin 1987). This piece of research, however, only *indicates* such correlations. Testing them presupposes comparing experienced benefits in a larger sample of countries differing along the dimension of resources spent on public libraries.

In addition to the difference between Finland, and Norway and the Netherlands, the findings also show a difference between Finland *and* Norway on the one hand and the Netherlands on the other regarding the *structure* of benefits. For Norway and Finland, the factor analysis resulted in three very similar factors, one related to career (work and education), a second related to everyday life and a third one related to cultural activities. The same items distributed into the three factors in both cases, and factor loadings of the items in the three factors were also very similar in Finland and Norway. In the Dutch case, however, the factor analysis did not yield any meaningful pattern. Benefits were very much concentrated around reading for pleasure. How can this be interpreted? Again, the findings give a background for formulating hypotheses for further research, not for any definite conclusions. One fundamental difference between library policies in the Netherlands compared to Finland and Norway is that in the Netherlands one has to pay a yearly membership fee in order to borrow material from the library. In Finland and Norway all kind of library services are free of charge. Does a fee based regime draw library usage in a direction where the users focus upon that which they pay for, i.e. borrowing books and other media? If that is the case, that is also a finding with important policy implications, meaning for example that fee based regimes might narrow library usage and thereby represent a barrier towards realizing the library's potential of being useful across a wide range of life spheres. Testing out such a hypothesis presupposes a comparison of experienced benefits between a larger sample of countries with different regimes with regard to fees.

This article started with referring to the advent of evidence based policy and the need for libraries to document their public value in a situation characterized by cuts in public budgets and increased competition for scarce public resources (cf. Moore 1995). One major goal of the research presented here has been to contribute in the development of a measurement instrument capable of eliciting

the benefits people have from using the public library. To the extent the research has succeeded in realizing that goal and is being used in the field of practice, it will contribute in promoting evidence based policies.

Also the empirical findings presented in this article might have policy implications: The case of Finland shows that libraries do have a potential of being beneficial across a broad range of life spheres. That potential is, however, not realized in the same degree in Norway and the Netherlands. This difference is a puzzling question. Within other institutionalized policy areas, e.g. health and education, one might also have significant differences between national policy regimes. But would that result in such large differences in perceived benefits from health or educational institutions as is found between the three compared countries with regard to public libraries? Intuitively there are reasons to doubt that. To the extent the differences in perceived benefits from public libraries cannot be traced back to some mystical and unexplainable differences in national character between the Finnish, Norwegian and Dutch nations, the answer to the question of why one finds these large differences must by nature be policy relevant. Further research, however, is needed to answer the question of why there are such large differences in perceived benefits from libraries.

The findings are limited due to the fact that the survey method was not identical in the three cases, with a postal survey in Finland and web surveys in the two other countries. Moreover, the items included in the questionnaire cover life areas where decisions have to be made daily, e.g. consumer issues, life areas where decisions are made only a few times in a person's life span, e.g. changing job, and life areas relevant in a limited period of life, e.g. bringing up children. The research relies on the respondents' capability to use the scale frequent, sometimes, seldom and never relative to these differences between the items and the life spheres to which they are linked. In future research, it might be necessary to test that presupposition.

Although these limitations might have had some effects, there is no reason to believe that they have affected the main findings, for example the considerable difference between Finland and the two other countries and the lack of structure in perceived benefits in the Dutch case compared to Finland and Norway, in any significant way.

Additional research is needed for answering the questions generated by the findings in order to test the robustness and refine the measurement instrument developed within the framework of this project. The future surveys should aim at including a larger sample of countries differing in library policies, e.g. resources spent on public libraries and fee regimes, in order to test the relationship between variation in policies and variation in benefits. The studies

should also use identical sampling and survey methods to as large an extent as possible. It is important to undertake a pilot study to test the presupposition that respondents are capable of handling questions with identical scales but relating to life spheres where the frequency of decision making situations differ.

## **Conclusions**

This study is the first to compare systematically the benefits users derive in the major areas of life from the public library in various countries. There was a great difference in the level and extent of the benefits between Finland, on one hand, and Norway and the Netherlands, on the other hand. Finns perceived benefits more frequently and across a broader range of life spheres compared to Norwegians and the Dutch. It is suggested that the major factor explaining these differences is the resources invested in library services and consequently, the level of those services. Comparing only three countries is too limited for producing valid results on the relations between the supply of library services and their use and the benefits derived from that use. Analyzing these associations in a larger sample of countries would create reliable results also for policy making.

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**Acknowledgements**

The project was funded in Finland by the Ministry of Education and the Finnish Library Association, in Norway by the National Library of Norway, and in the Netherlands by the Netherlands Institute for Public Libraries (SIOB).

Figure 1. The proportion of those benefiting at least sometimes from the public library in the major fields of life in Finland (N=805), Norway (N=538) and the Netherlands (N=1025) (%).

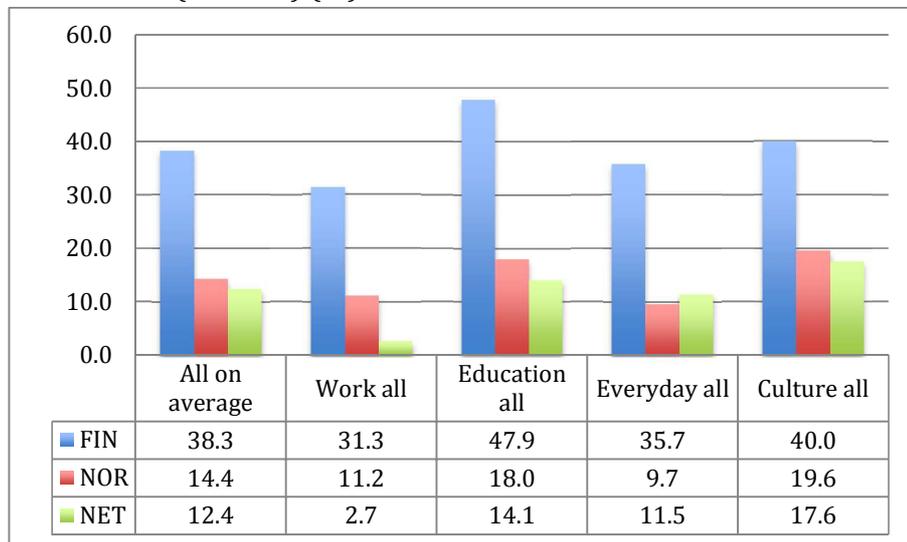


Figure 2. The proportion of those who have benefited from the public library at least sometimes in different areas of life in Finland (N=805), Norway (N=538) and the Netherlands (N=1025) (%).

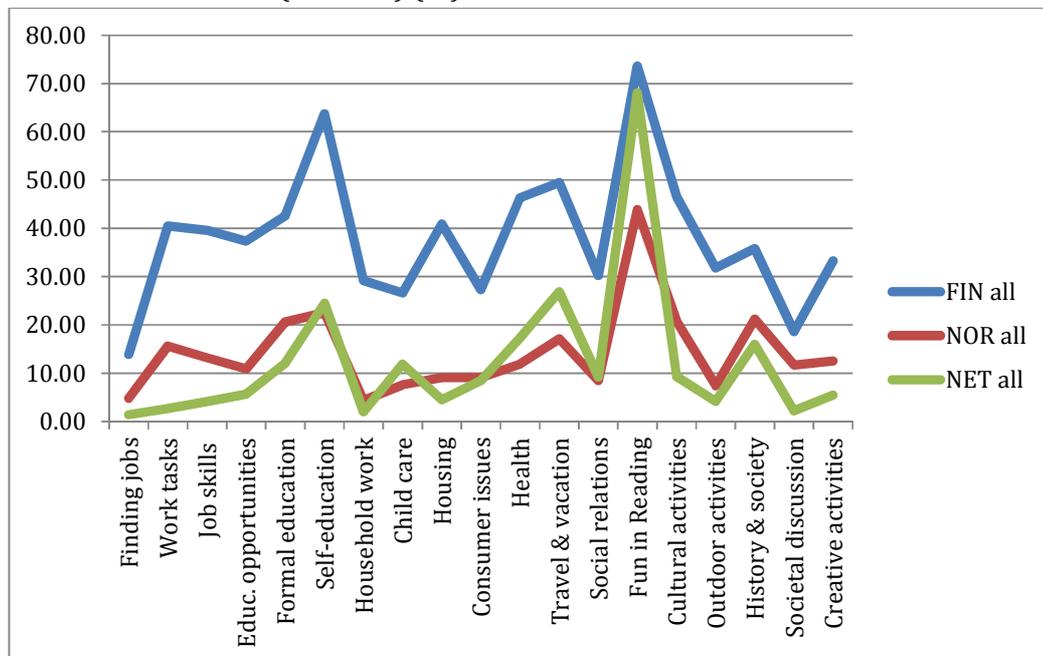


Table 1. Basic data on public libraries in 2011 in the countries compared

Indicator	Finland	Norway	The Netherlands
Population	5 347 269	4 920 305	16 655 799
GDP per capita € <sup>1</sup>	28900	47500	32900
Municipalities	320	430	418
Main libraries	308	430	163
Branch libraries	486	314	736
Libraries in total	794	744	899
Book mobiles (stops)	153 (12378)	29 (1272)	<sup>3</sup> - (927)
Opening hours	1 399 355	805000	-
Manpower years	4756	1 783	5030
Operation costs per capita €	58.03	38.46	33.90
Collection items <sup>4</sup> per capita	7.4	4.3	1.8
<b>Collection books</b> per capita	6.6	3.8	1.7
Loans per capita	18.2	5.1	6.0
% borrowers in population	39.2	21.1	24.1 <sup>2</sup>
- ages 0-17	-	25.6	62.5
- ages 18+	-	19.7	13.8
Visits per capita (physical)	9.9	4.4	4.4

Sources: Library statistics Finland 2011 (<http://tilastot.kirjastot.fi/en-GB/basicstatistics.aspx>); Library statistics Norway 2011; Statistics Netherlands, accessed 22 nov 2012; Library Monitor of the Netherlands ([www.siob.nl/bibliotheekmonitor](http://www.siob.nl/bibliotheekmonitor)); <sup>1</sup>[Eurostat Tables: Gross domestic product at market prices](#); <sup>2</sup>The Dutch statistics concern inhabitants with a membership card of a public library; <sup>3</sup> - = missing information; <sup>4</sup>[Collection items per capita include printed books, journal and newspaper volumes, and audiovisual media such as music \(CDs\), audiobooks and films \(DVDs\)](#).

Table 2. The samples compared to the population in the countries observed

Variable	Finland	Norway	The Netherlands
Geographic region	Representative	Representative	Representative
Age	Representative	Representative	Representative
Gender	Biased towards females	Representative	Representative
Education	Biased towards highly educated	Biased towards highly educated	Representative
Library use	Biased towards users	Biased towards users	Biased towards users

Table 3. Three factor solutions for each country (rotated factor matrix)

	Finland (N=777)			Norway (N=538)			Netherlands (N=887)		
	1	2	3	1	2	3	1	2	3
Finding jobs		.38			.44				
Executing work tasks		.66			.65		.34		
Developing job skills		.81			.74		.35		
Educational opportunities		.54			.65				.71
Formal education		.70			.74				
Self-education		.60	.47		.68		.34	.34	
Household work	.67			.53				.36	
Child care and schooling	.58			.55					
Housing	.73			.81					
Consumer issues	.66			.40			.45		
Health	.61		.33	.56		.39		.51	
Travel and vacation	.38		.45	.37		.50		.37	
Social relations	.43	.32	.38	.38		.48	.53		
Fun in reading		.34	.57		.30	.51		.38	
Cultural activities			.63			.62	.35		
Creative activities	.31		.48	.42		.44			
Outdoor activities	.44		.47	.54		.44		.31	
History or society			.64			.67	.39	.37	
Societal discussion	.31		.47	.30		.60	.44		

Note: Generalized least squares extraction, varimax rotation with Kaiser normalization; loadings < .30 not displayed