Pathways between Housing and Homelessness of Young Income Support Recipients in Helsinki, Finland

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- ➤ Abstract_ This study analyses the pathways between housing and homelessness of young income support recipients in Helsinki. The data used is unique in the Nordic and European context. The data covers all young (19-27 years at the end of 2008) single people in Helsinki, who received income support for at least one month during 2008-2010. Subgroups of the homeless young adults, based on the duration of homelessness and the stability of the homeless pathway, were compared against several psycho-social factors. The study adds to knowledge about young homeless recipients of income support in Helsinki, and participates in the academic debate about methods for quantifying homelessness.
- Keywords_ Homelessness, income support, young adults, pathways, transitions

Introduction

Homelessness is a difficult social problem. It is an extreme violation of human rights and basic human needs (United Nations, 1948). Nevertheless, there are thousands of homeless people in all European countries and over a million globally, and the prevalence rates are rising almost everywhere (Buch-Geertsema *et al.*, 2014; United Nations, 2015).

The definition of homelessness can vary from street-homelessness to a young adult not being able to move away from the parental home because of financial problems (FEANTSA, 2007; Edgar, 2009). The academic debate about the definitions has calmed down in recent years and the "ETHOS light" definition has been widely accepted as a common ground (it was also used in the estimates mentioned previously) (Buch-Geertsema et al., 2014). Of course, different variations of this definition are used for different purposes. According to the ETHOS Light definition, homelessness includes people living 1) on the streets, 2) in emergency accommodation, 3) in accommodation for the homeless, 4) in institutions (staying longer than needed due to lack of housing or no housing available when being released), 5) in nonconventional dwellings (such as mobile homes or abandoned houses) and 6) temporarily with family or friends. According to the Finnish homelessness statistics there were 6 650 homeless single households and 325 family households in Finland in November 2016. Of the single homeless, 82% live temporarily with family or friends (Ahola 2017).

This study aims at increasing knowledge of young homeless adults in the capital of Finland. As the state-of-art research on homelessness emphasizes, homelessness is a period or periods in an individual's life rather than a defining characteristic of an individual. This study focuses on this sequential nature of homelessness. The study also contributes to the global debate about challenges in quantifying homelessness, and participates in increasing the knowledge on the psycho-social profiles of the homeless.

The data used is 719 young individuals (born between 1981-1989) who had been homeless and received income support as a single household for at least one month in Helsinki during the years 2008-2010. The data was created by joining together two different administrative registers in Finland. The aim of the analysis is threefold: 1) to describe the pathways of young single homeless recipients of income support between different forms of housing and homelessness, 2) to recognize subgroups of the homeless based on the combined duration of homelessness and the number of homeless periods, and 3) analyze the differences between the groups with regard to types of transitions into and out of homelessness. The statistical methods used are descriptive with statistical significance testing, and include drawing sequence index plots.

Quantifying Homelessness

Several attempts have been made to quantify homelessness. These attempts include different kinds of regional and national statistics and academic studies. Data collection has been based on registers (Buch-Geertsema et al., 2014), surveys targeted to either homeless people themselves (often filled during face-to-face interviews) (Caton et al., 2005; Patterson et al., 2012) or employees working with them (Warnes and Crane, 2006; Benjaminsen and Laurizen, 2013; Dyb and Johannessen, 2013), and so-called street counts (Presland, 2014; City of Melbourne, 2014). In most data collection processes, homeless people have been accessed through homelessness service providers, for example night shelters, drop-incenters or benefit and housing agencies (Weinreb et al., 2010; Chamberlain and Johnson, 2013). Sometimes other broader registers or service providers have been used, such as extensive drug research projects (Cheng et al., 2013; Linton et al., 2013), data on youth ageing out of foster care (Dworsky et al., 2013) or national surveys of housing insecurity (Scutella et al., 2013). There have been some attempts to study homelessness through general population registers, but several problems are inherent in this form of data collection (such as people living abroad or in institutions being counted as homeless, and many homeless still having their previous address as current address in the register) (Kostiainen and Laakso, 2012; Buch-Geertsema et al., 2014).

When studying homelessness, especially through registers, the availability of relevant background variables may be restricted. There are greater opportunities for this in survey-based research, but homeless people themselves and homeless support workers tend to provide differing answers to the same questions. For example, in the study of Warnes and Crane (2010), heavy drinking was a central reason for homelessness for 25% of the homeless according to the homeless themselves and for 36% according to their support workers. Most homelessness data is cross-sectional point-in-time data, but in recent years longitudinal surveys (McQuistion et al., 2014) and register-based panel data (McAllister et al., 2010) have become more popular. Cross-sectional data tends to overemphasize the prevalence of long-term homelessness, because at any given time, the long-term homeless are more likely to be reached than the short-term homeless (Buch-Geertsema et al., 2010).

Homeless Pathways

Kuhn and Culhane (1998) in their groundbreaking study, identified chronic, episodic and transitional homeless subgroups, with 80% in the transitional category. In 2010, McAllister *et al.* replicated and suggested improvements for the study of Kuhn and Culhane (1998). Their improved methodology for determining the duration of homelessness, and their division of homeless people into ten, rather than just three subgroups, was more accurate in describing the diversity in the homeless population.

In Norway and Denmark, about 25% of homeless people had been homeless for 1-3 months, about 35% for 4-12 months and about 40% for over a year, according to the latest statistics (Benjaminsen and Laurizen, 2013; Dyb and Johannessen, 2013). Long-term homelessness is a central part of homelessness in many European countries: 35% of homeless people had been homeless for over 10 years in Hungary, 31% for over 8 years in Poland, 24% for over 5 years in Czech Republic, 15% for over 4 years in Italy and 15% for over 3 years in France (Buch-Geertsema et al., 2014). However, caution is required in interpreting these numbers, because the definitions and methods for data collection vary greatly between the countries.

This understanding of the importance of temporal differences in homelessness, has led to the development of the concept of 'homeless careers' and 'homeless pathways'. The homeless career emphasizes the different small steps an individual takes before he/she becomes homeless in official terms and/or identifies himself/ herself as homeless. The homeless pathway emphasizes homelessness as a period or periods in a person's continuum of different forms of housing (Fopp, 2009; Fitzpatrick *et al.*, 2013.) A homeless pathway may consist of just two periods, for example living in a parental home and thereafter chronic homelessness, as well as perhaps several periods of different forms of independent living and one short period of homelessness in between.

The main forms of housing in homeless pathways are independent living, living in an institution or supported housing and living in a parental home. Becoming homeless after being released from an institution ranges from 2 to 16% of the homeless in European and American studies (Caton *et al.*, 2005; van Laere *et al.*, 2009; Weinreb *et al.*, 2010) and from 10 to 15% in the Scandinavian homelessness statistics (Socialstyrelsen, 2012; Benjaminsen and Laurizen, 2013; Dyb and Johannessen, 2013). Few studies provide empirical information on the rate of becoming homeless after leaving the parental home, but theoretical literature suggests this to be one of the central forms of transition into homelessness, especially among young homeless adults (Hutson *et al.*, 1994; Kim, 2014). However, it seems that the large majority of homeless people have lived independently prior to becoming homeless.

In the Nordic countries, eviction is the trigger for becoming homeless for 20-25% of homeless people, followed by family conflict or the end of a relationship for 15-20% and release from an institution for 10-15% of those who are homeless (Socialstyrelsen, 2012; Benjaminsen and Laurizen, 2013; Dyb and Johannessen, 2013). The remaining triggers for homelessness include becoming homeless after immigration, the ending of a rental contract, or having to move away from unsuitable housing (for example, new needs related to location, size, costs etc.). Previous literature does not shed light on the prevalence rates of these latter triggers. When considering triggers, it is important to remember that only a minority of people experiencing any of the triggers will become homeless. This means that the majority of people who divorce, leave an institution or are evicted, do find a new place to live and do not become homeless (Buch-Geertsema et al., 2014).

Psycho-social Profiles

This study focuses on five aspects of the psycho-social profile of the studied homeless: sources of income, drug and mental health problems, sanctions in receiving income support and nationality. This section provides an overview of what is previously known about four of these factors among the homeless. Sanctions are not further discussed, as it is not a factor addressed by existing empirical literature. The five factors in this study have been chosen partly because of their central theoretical association with homelessness and partly because of their availability in a suitable form in the data.

The life-time prevalence of having had a paid job was 50-60% among the homeless in two studies from New York (Caton *et al.*, 2005; McQuistion *et al.*, 2014). The rate of unemployment during homelessness has varied between 75 and 97% (Weinreb *et al.*, 2010; Chamberlain and Johnson, 2013; McQuistion *et al.*, 2014). Unemployment was a central trigger for becoming homeless for 24-31% of homeless in Sweden (Socialstyrelsen, 2012), decrease of income was the trigger for 9% in Norway (Dyb and Johannessen, 2013) and economic problems for 32% in Denmark (Benjaminsen and Laurizen, 2013). In theoretical literature homelessness is closely linked with poverty, the level of housing costs, and the supply of affordable housing (Fitzpatrick, 2005; Culhane and Metraux, 2008; Buch-Geertsema *et al.*, 2010).

The prevalence rates of drug and mental health problems among homeless people vary greatly between studies and statistics depending on the definitions of both homelessness and these problems. About 50-60% of the homeless seem to have addiction problems and about 30-50% suffer from mental illnesses (Caton *et al.*, 2005; Socialstyrelsen, 2012; Benjaminsen and Laurizen, 2013; Dyb and Johannessen, 2013; McQuistion *et al.*, 2014). According to a recent literature review (Philippot *et al.*,

2007) several studies show that 70-80% of the homeless with substance abuse problems had these problems when entering homelessness. Addiction problems seem to be associated with longer duration of homelessness among homeless families (Webrein *et al.*, 2010), with recurrent homelessness compared to successful transitions out of homelessness and with entering homelessness after eviction compared to after relationship problems (val Laerer *et al.*, 2009).

Between 15-40% of homeless people are immigrants, depending on the size and multiculturality of the region being studied (Caton *et al.*, 2005; Warnes and Crane, 2006; van Laere *et al.*, 2009; Benjaminsen and Laurizen, 2013; Dyb and Johannessen, 2013).

Context

The homeless people we focus on in this study (1) live in Helsinki, Finland, (2) receive income support and (3) are young single adults. In this section, we provide commentary on these aspects of the empirical context of this study.

The housing markets in Finland have traditionally been strongly based on home ownership. The proportion of rental housing among all housing units was 30 percent in Finland and 47 percent in Helsinki in 2013. Social housing accounted for 45% of rental housing (about 67 000 apartments) and the rate has declined from 47% in Helsinki during the last decade. Demand for social housing exceeds supply and the waiting lists for social housing are long. Average rents in the metropolitan area of Helsinki have risen 28% from 2005 to 2012, while the average income of households has only risen by 7% (Statistics Finland, 2013). The age at which young adults move away from the parental home in Finland is among the youngest in European Union. Half of the age group has moved at the age of 22 in Finland, whereas for example in Spain and Slovenia the corresponding age is almost 30 years of age (lacovou and Skew, 2010).

Households with low income and means are entitled to housing allowance and income support in Finland. The criteria for housing allowance is different for students, pensioners and other households, but the basic idea is that the allowance covers part of the housing costs for those whose income and means are low, and in relation to these, housing costs are high. The income support is a last-resort form of income security in Finland. The amount of the total income support is calculated by subtracting the amount of reasonable costs from the income and means of the household at a monthly rate. If the remainder of these two is negative, the household receives income support for that amount.

In 2008, 11% of households in Helsinki received income support, and 13% in 2009 and 2010 (estimations based on Ahola, 2013 and Statistics Finland, 2013). The rates of receiving income support were relatively highest among men in single households (26-32% of the households) and families with one parent (17-19%). In about half of all households receiving income support, the claimant was unemployed or laid off (Ahola, 2013). Even though income support is meant to be a temporary and last resort benefit, dependency on it is known to be easily prolonged, especially among young recipients. In 2010, only one in three of 24-year-old recipients of income support in Helsinki had received income support combined for less than 13 months (Ylikännö, 2013).

The unemployment rate for 15-29-year-olds was 3.1% in the metropolitan area of Helsinki in 2008, which was less than the Finnish average (3.9%). Recently in Finland, there have been concerns about young people who are completely outside of the workforce and education, rather than about youth unemployment. The rate of these was 11% of the young people (15-29 years old) in the metropolitan area of Helsinki in 2008 (Myrskylä, 2011).

The young homeless are a heterogeneous population. Differences between subgroups of young homeless people can be more significant than those between the young and the older homeless. Much of the international research on homelessness focuses on the so called run-away or throw-away youth, who enter homelessness during a family conflict (Nebbit et al., 2007; Slesnick et al., 2009; Kim, 2014). Short-term homelessness and exiting homelessness via moving back to the parental home is typical among this group (Nebbit et al., 2007). Homelessness of young adults has been described as both a more and a less severe social problem than the homelessness of older people (Fitzpatrick, 2000). On the one hand, a young person has not had time to become long-term homeless and deeply marginalized, and social networks and society may be more understanding towards a young person in trouble than with someone older. Moreover, there tends to be more social services and projects available for marginalized young people. On the other hand, a young homeless person has less life experience and may have fewer skills to cope when being homeless. Becoming homeless at an early age may also be a more severe sign of exclusion, since young adults are assumed to still have more people and networks to support them, for example family and educational services.

Data and Methods

The aims of the study are threefold: (1) to describe the pathways of young single homeless recipients of income support between different forms of housing and homelessness, (2) to recognize subgroups of the homeless based on the combined duration of homelessness and the number of homelessness periods, and (3) to analyze the differences between the groups as regards the types of transitions into and out of homelessness, and several psycho-social factors.

The data covers the years 2008 to 2010, on a monthly basis. The total data was of individuals who filled the following criteria: were born in 1981-1989, lived in Helsinki in the end of each year during 2008-2010 and received income support as a single household for at least one month during that time. Receiving income support as a single household means that the person did not live with a spouse or child(ren) when receiving the income support. They could, however, live in a parental home, in an institution or with a roommate. We will later refer to the recipients as single, and by that we mean the status as a single household receiving income support, not the relationship status. The individuals were 19-27 years old at the end of the year 2008 and, of course, the cohort aged every year. The size of the data was 7 102 persons, of which 719 (10%) had been homeless when receiving income support for at least one month during the studied time period.

The data was created by joining together data from the registers of the Social Insurance Institution of Finland and the register of the City of Helsinki Social Services and Health Care Department. The information on the year of birth, nationality, and entitlements for special reimbursements of medicines were obtained from the registers of the Social Insurance Institution of Finland. The data drawn from the register of the City of Helsinki Social Services and Health Care Department was based on the register of the income support: the information regarding a housing type, being a client in municipal substance abuse service, and receiving different benefits and other forms of income were obtained for the months when the person received the income support.

The data comprises five housing types: homeless, independent living (main tenant, subtenant, owner-occupied housing, company housing), living at relative's or friend's house, living in an institution or supported housing and unknown. According to the information from the City of Helsinki Social Services and Health Care Department, there could be delays when the housing type was updated, because the income support recipients' situations changed so often. The social worker classified the income support recipient as "homeless" if they lived on the streets or in a shelter or moved from one friend's or relative's house to another. If a person lived in a friend's or relative's house permanently, he was classified as "housing at relative's or friend's house". The final decision between these two classes was

made according to the income support recipient's own interpretation. In addition, it is worth noting that the adult income support recipients, who lived with their parents, were classified as "housing at relative's or friend's house".

The data was first analyzed by descriptive statistical methods, including drawing sequence index plots. Second, subgroups of the homeless were formed based on a theoretical approach of homelessness. During this phase, K-means-clustering with different number of clusters was also attempted in order to find the best possible criteria for forming the subgroups. Third, the homeless subgroups were compared using different psycho-social factors. Statistical significances were tested with Pearson's chi-squared test or Fisher's test. All the analyses were conducted using SAS Software (version 9.3), except for the sequence index plots, which were drawn using Stata Software (version 13.1).

Results

Housing pathways

The data included 719 young adults who were homeless while receiving income support as a single household for at least one month in Helsinki during the years 2008-2010. Table 1 describes the durations, number of homeless periods and transitions between homelessness and other housing statuses in the data.

Housing status was only known for the months when the person received income support. Of the homeless young adults, 98% had at least one month when they did not receive income support and 22% received income support only during those months with a homeless status. For the purposes of the analysis in this study, this feature of the data is, however, not a problem. We are not studying only homelessness, but rather the stability of housing pathways and the receipt of income support of young homeless social work clients.

Table 1: Duration of homelessness, number of homeless periods and transitions into and out of homelessness in the data.

	Number of people	% of the young homeless in the data		
Combined duration of homelessness (months)				
1-3	246	34		
4-6	147	20		
7-9	111	15		
10-12	65	9		
13-18	61	8		
19-24	48	7		
25-30	21	3		
31-36	20	3		
Total	719	100		
Number of homeless periods				
1	308	43		
2	173	24		
3	106	15		
4	54	8		
5	29	4		
6	20	3		
7	15	2		
8 or more	14	2		
Total	719	100		
Transitions into homelessness				
no transitions	36	5		
from not receiving income support	412	57		
from independent living ^a	97	13		
from living with relatives or friends ^a	59	8		
from institution or supported housing ^a	43	6		
from receiving income support, but housing status unknown ^a	66	9		
other combination of transitions	6	1		
total	719	100		
Transitions out of homelessness				
no transitions	65	9		
to not receiving income support	440	61		
to independent living ^b	135	19		
to living with relatives or friends ^b	30	4		
to institution or supported housing ^b	44	6		
to receiving income support, but housing status unknown	0	0		
other combination of transitions	5	1		
total	719	100		

^a Of the cases 37-55% only include these kinds of transitions into homelessness (one or several transitions). The rest of the cases, in addition include one or more transitions from not receiving income support.

^b Of the cases 50-57% only include these kinds of transitions out of homelessness (one or several transitions). The rest of the cases, in addition include one or more transitions to not receiving income support.

The results can be interpreted to indicate more about short-term or long-term homelessness during the receipt of income support, depending on the perspective taken. On the one hand, one third of homeless young adults were homeless for three months or less during the studied time period; 54% were homeless for six months or less and only 6% were homeless for more than two years. On the other hand, as many as 150 young adults (21%) were homeless while receiving income support for more than a year during the time period studied. One year is a long time to be homeless, especially for a young person. Furthermore, since they received income support, they had contact with social services and their homelessness status was known in the system.

It is important to note that the data does not contain information on whether the individuals studied had been homeless before the year 2008 or after the year 2010. Hence, a person would be registered as short-term homeless in the data if his/her long-term period of homelessness ended in January 2008. However, this problem with measuring the duration of homelessness is prevalent in most homeless data. For example, in most national homeless surveys (Socialstyrelsen, 2012; Benjaminsen and Laurizen, 2013; Dyb and Johannessen, 2013), the information of duration is based on an estimate given by a professional working with the homeless person, and the professionals may not be aware of the complete housing histories of all clients. In this study, different subgroups of homeless, based on the duration of homelessness and the stability of the housing pathway, are compared. The analysis will shed light on the heterogeneity of different subgroups compared to several factors and can, hence, give more information about the reliability of the variable of duration in this data.

Of the homeless young adults in this study, 43% had just one period of homelessness during the studied years. This single period was short for many, but the longest of these periods lasted for over 30 months. Of the homeless, 19% had four or more homeless periods. Fifty-five percent of the homeless had at least one situation whereby between two homeless months, they had one month when they did not receive income support. In many of these cases, the month in between was probably also a homeless month, and the people would also have been entitled to income support that month, but for some reason they did not receive the support.

Fifty-seven percent of the homeless young adults in this study transition into homelessness while not receiving income support, and 61% transition out of homelessness not receiving income support. The rest of the homeless people either had no transitions into or out of homelessness at all (were homeless when the studied time period started or ended) or entered homelessness from independent living, living with relatives or friends or living in an institution or supported housing – or they exited from homelessness into one of these statuses. Even though the majority had

several periods of homelessness, only 1% had several kinds of transitions into or out of homelessness (for example, entered homelessness first from supported housing and then from independent living).

As mentioned earlier, it is likely that in many cases, the actual homelessness continued when the person stopped receiving income support, and so it appears that they were no longer homeless in the data. In other cases, this transition into not receiving income support may have meant actually exiting homelessness. However, it is likely that in many of these situations, the person would still have been entitled to income support at least for some months after the transition, but they, again, for some reason no longer received the support. It is unlikely that all the homeless transitioning from homelessness to not receiving income support, for example, obtained a job at the same time or moved away from Helsinki.

Figure 1 shows a visualization of the housing pathway for each homeless individual during the studied time period (a sequence index plot). Each line represents one person and the different scales of gray represent different housing statuses.

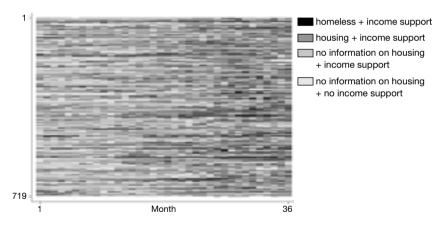


Figure 1: Visualization of the housing pathways with a sequence index plot.

Homeless subgroups

It is well known, that homeless people, even the young homeless, are not a homogenous group. Housing pathways vary greatly, and homeless people have different psycho-social backgrounds and life situations. Hence, it is important to analyze the data not only as a whole, but also in different subgroups. In previous studies, the subgroups have usually been formed based on the duration of the homelessness

(Caton *et al.*, 2005; Weinreb *et al.*, 2010). Sometimes the number of homeless periods and the homelessness triggers have also been used as criteria for forming subgroups (van Laere *et al.*, 2009; McAllister *et al.*, 2010).

Table 2 describes the criteria and basic characteristics of the subgroups used in this study. The criteria for defining the subgroups were formed theoretically. The aim was to create subgroups that would differ from each other when compared to the duration of the homelessness and the stability of both the housing pathway and recipient status in the income support services. It is a very different kind of experience to be homeless for just one month compared to several years. However, it is also very different to be homeless for several years continuously compared to exiting and entering homelessness (and/or being in receipt of income support services) several times.

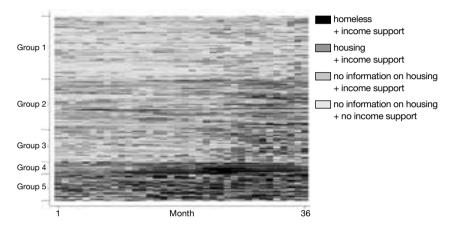
Table 2: Description of the homeless subgroups.

	Subgroups						
	1	2	3	4	5		
	Short	Medium	Medium	Long	Long		
	duration	duration,	duration,	duration,	duration,		
		stable	episodic	stable	episodic		
		pathway	pathway	pathway	pathway		
Combined duration of homelessness (months)	1-3	4-12	4-12	13-36	13-36		
mean	2,0	6,7	7,8	20,5	21,4		
std dev	0,8	2,4	2,3	7,2	6,2		
Number of homeless periods	any (in practice 1-3)	1-2	3 or more	1-2	3 or more		
Mean	1,3	1,5	3,7	1,5	5,1		
std dev	0,5	0,5	0,9	0,5	2,0		
Size (n)	246	196	127	46	104		
Size (% of the homeless)	34	27	18	6	14		

Before choosing the theoretical approach for forming the subgroups, K-means-clustering based on the duration of homelessness and the number of homeless periods with different number of clusters was attempted. The problem with these clusters was that the grouping based on the duration fitted badly with what is already known about homelessness. When studying homeless, it is important to

be able to separate the very short homeless from a wide range of longer-term homeless, even if other cutting points would be preferred from a statistical perspective. Figure 2 visualizes the housing pathways for the final subgroups.

Figure 2: Visualization of housing pathways in the homeless subgroups with a sequence index plot.



Psycho-social Profiles

The homeless subgroups were compared with each other with regard to several psycho-social background variables. Table 3 describes the differences between the subgroups with reference to these factors.

Table 3: Prevalence rates of different transitions into and out of homelessness, sources of income and psycho-social factors in the homeless subgroups (%).

	Subgroups						
	1	2	3	4	5	total	p-value
Male gender	72	75	79	78	84	76	0,196 a
Age (years in December 2008)							
19-21	33	38	39	17	21	33	
22-23	24	20	19	30	21	22	
24-25	22	20	20	20	34	23	
26-27	21	21	22	33	24	22	
total	100	100	100	100	100	100	0,024 a

from not receiving income support	65	51	59	57	69	60	
from independent living ^d	16	14	11	24	11	14	ĺ
from living with relatives or friends d	7	14	8	7	6	9	
from institution or supported housing d	3	9	6	5	10	6	1
from receiving income support, but housing status	10	10	15	5	4	10	
unknown ^d							
other combination of transitions	0	2	1	3	1	1	
total	100	100	100	100	100	100	0,004
Transitions out of homelessness °							
to not receiving income support	74	54	80	35	72	67	
to independent living ^d	18	29	12	43	14	21	1
to living with relatives or friends d	5	5	2	8	4	5	1
to institution or supported housing d	2	10	6	14	8	7	
other combination of transitions	0	1	0	0	2	1	
total	100	100	100	100	100	100	<0,001
Sources of income during homeless months •							
income from paid work	11	11	17	2	14	12	0,096
unemployment allowance or labor market subsidy	13	17	23	26	28	19	0,005
study benefits	6	8	6	13	8	7	0,457
sickness allowance	2	6	6	9	10	5	0,017
pension	5	3	5	4	5	4	0,815
housing allowance	8	19	17	48	27	18	<0,001
other	5	6	15	20	14	9	<0,001
had at least one month, when income support was the only source of income	73	87	95	91	95	85	<0,001
Sources of income during housing months °							
income from paid work	22	14	10	14	6	15	0,024
unemployment allowance or labour market subsidy	31	34	28	14	19	29	0,059
study benefits	15	14	14	9	7	13	0,624
sickness allowance	7	8	9	3	4	7	0,641
pension	5	7	8	6	0	5	0,260
housing allowance	51	60	45	66	44	53	0,051
other	12	17	13	14	11	14	0,763
had at least one month, when income support was the only source of income	83	83	79	74	87	82	0,571
Psycho-social factors							
clienthood in substance abuse services	17	33	29	54	50	31	< 0,00
entitlement for special reimbursement of medicines for mental illnesses	10	10	10	28	9	11	0,004
reduction of income support	8	15	17	17	16	13	0,067
not Finnish nationality	17	29	18	24	10	20	0,006

^a Pearson's chi-squared test

^b Monte Carlo estimate for the Fisher's test, 100000 samples

^c Counted only among those who had at least one transition into/out of homelessness.

^d For exact definitions, see Table 1.

Income from the specified source was among the five main sources of income during the months when receiving income support.

Statistically significant differences were found between subgroups according to age, transitions into and out of homelessness, some sources of income, clienthood in substance abuse services, entitlement for special reimbursement of medicines for mental illnesses and nationality.

The homeless subgroups did not differ from each other regarding gender. However, a clear majority in all of the homeless subgroups were men. Not surprisingly, there tends to be higher rates of older homeless in the long-term subgroups and higher rates of younger homeless in the short- and medium-term groups. The younger recipients are less likely to have had time to be homeless for a long time.

Transitions into and out of homelessness in the total data were described in more detail in the section on housing pathways. The groups did differ from each other with regard to the distribution of different transitions from a statistical point of view. The results are, however, difficult to interpret, because in all the groups such a high rate of the homeless had only transitions from or to not receiving income support.

There were statistically significant differences between the groups receiving unemployment benefits, sickness allowance and housing allowance during the homeless months. Overall, in cases in which there were differences in receiving benefits, it seemed, that the rates were higher the longer the homelessness lasted. This could indicate that receiving these benefits was associated with longer-term homelessness. However, the longer-term homeless may also be more likely to receive benefits during the homeless months simply because they were homeless longer and hence had more possible months for receiving the benefits. The rates of having at least one homeless month when income support was the only source of income were higher in both subgroups with episodic pathways compared to the corresponding group with stable pathways. Moreover, the rates of having income from paid work during the not homeless months was lower in these groups. In theory, one should not be able to receive housing benefits during homeless months, but in practice this was true for almost 20% of the studied homeless people during at least one month. This may be due to delays in the registers in our data, but the housing allowance may also have been granted based on false information of the housing status, which would be an important possibility to study more closely.

The variable 'clienthood in substance abuse services' meant that the income support recipient had been identified as a client in the register of substance abuse services of the City of Helsinki at least once during 2008-2010. In the two groups of long-term homeless (groups 4 and 5) about half of the homeless were clients of substance abuse services. This was least prevalent in the group of short-term homeless (group 1). In the subgroups of medium- and long-term homelessness the

rates were higher among those with stable homeless pathways, compared to those with episodical pathways. The corresponding rate among income support recipients who were not homeless and of the same age in the data was 7%.

Entitlement for special reimbursement of medicines for mental illnesses is a unique variable in homelessness research. In Finland, when a person buys certain medicines from the pharmacy, part of the expenses is reimbursed by the National Health Insurance system. This applies to medicines that a doctor has prescribed for the treatment of an illness and which fill certain other criteria. The data includes a variable that defines whether the person was at some point during 2008-2010 entitled to the special reimbursement of 100% of the price for medicines, which were used for treating severe psychotic or other severe mental disorders. The rate of this entitlement was 11% among the homeless and 12% among other young single income support recipients.

Interestingly, there was only one subgroup that differed from the others as regards entitlement for special reimbursement of medicines for mental illnesses. The rate for this was 28% among the long-term homeless with stable pathways (group 4), while it was about 10% in all other groups. Higher rates of serious mental disorders among the long-term homeless supports findings in previous literature. The interesting question is, why did the other groups, including the long-term homeless with episodic pathways, not differ with regard to this variable. One explanation could be that mental problems are associated with longer duration of homelessness, but those with episodic pathways in housing and/or receiving income support may be less likely to use health care services and hence less likely to have a diagnosis or use medication.

Reduction of income support is a way of sanctioning the income support recipient. If the recipient, for example refuses to apply for work, take a job offered, or participate in specific social services, the income support can be paid with a reduction of 20-40% (Act on Social Assistance, 1997/1412). Among young homeless adults in this study, 13% had at least one month in which their income support had been reduced. The corresponding rate among income support recipients of the same age who were not homeless was 5%. The differences between the five groups in this study as regards reduction of income support were not statistically significant. However, the prevalence rates show clearly that the short-term homeless (group 1) had lower rates of income support reduction than the others. Factors leading to reduction of income support may be associated with more severe forms of homelessness.

About 20% of the homeless people in this study were not Finnish nationals. The corresponding rate among young income support recipients who were not homeless was 10%. A non-Finnish nationality seemed to be associated more with the stable nature of the pathway than with the duration of the homelessness. Both

stable subgroups (2 and 4) had higher rates of homeless people with non-Finnish nationality compared to the groups with an episodic pathway and the same duration (groups 3 and 5). In fact, the long-term episodic homeless (group 5) had the lowest rate of homeless people who were of non-Finnish nationality. One explanation for this could be that young immigrant homeless may have smaller networks and less available sources for income compared to the homeless with Finnish nationality. Hence, they may be less likely to have occasional months when they stay with a friend or do not receive income support.

Conclusion and Discussion

This study suggests a new method for quantifying homelessness. Traditional homeless surveys and street counts have their place in quantification, but the need for more detailed and reliable administrative data on homelessness is clear in many countries. This study provides an example of how different administrative registers can be combined in order to create rich and detailed panel data describing a specific group of homeless people.

In this study, the focus was on young homeless recipients of income support in Helsinki. However, the data would also allow analysis of homeless income support recipients of any age group, and also allow comparison of income support recipients who are homeless or not. Other cities could have been included using the corresponding registers of the income support recipients in other cities. However, this might be challenging, because registers differ very much between cities. In addition, different time periods could have been defined. Creating this kind of data takes some effort and requires co-operation between organizations. In the case of this study, the data had been created for other research purposes and utilizing it for studying homelessness was quite easy. The responsibility for paying basic income support recently changed from municipalities to the Social Insurance Institution of Finland. Hence, the analyses in relation to basic income support will now be easier to conduct in the future because the same register will cover the whole country.

Register-based panel data provides new methodological possibilities for homelessness research. The paths of different types of homelessness can be followed through time and the stability of the pathways can be analyzed. Transitions, sequences, and different turning points in life can be studied in much more detail than, for example, in traditional questionnaire-based research.

The results of this study indicate that the young homeless recipients of income support are a heterogeneous population. One third were homeless for less than four months and one fifth for more than a year in the data. About 40% of homeless

young adults had just one period of homelessness and about 20% had more than three periods. Subgroups based on the duration of homelessness and the number of homeless periods differed from each other as regards many factors: age, transitions into and out of homelessness, some sources of income, clienthood in substance abuse services, entitlement for special reimbursement of medicines for mental illnesses and nationality.

An important result of this study for social work is also the fact that long-term homelessness of young income support recipients exists, and many of these individuals receive income support in a very unstable way. One would hope for much lower rates of transitions from homelessness into not receiving income support, and higher rates of transitions from homelessness to independent living – and then possibly later into not receiving income support. In an ideal world, there would be no transitions into homelessness from institutions or supported housing, because the clienthood in the previous institutions should prevent the homelessness. Essentially, in an ideal world, there would not be any transitions into homelessness when receiving income support at all, because the clienthood in social work would also be able to prevent the homelessness. In practice, this is of course not always realistic.

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