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Analytical Sociology:
Theory and Empirical Applications

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My house, my garden, my green neighbourhood. The influence of private and public green space on residential satisfaction and life satisfaction of city dwellers.

Aim of the project “Living with Green Spaces”

Migration research from a life-course perspective

Residential relocation as tool for achieving life-course goals and optimize well-being in life-domains.

(“Social Production Functions”, Lindenberg 1996; “Life course cube”, Bernardi et al. 2020)



Research on environmental influence on well-being



scenic



unscenic



scenic

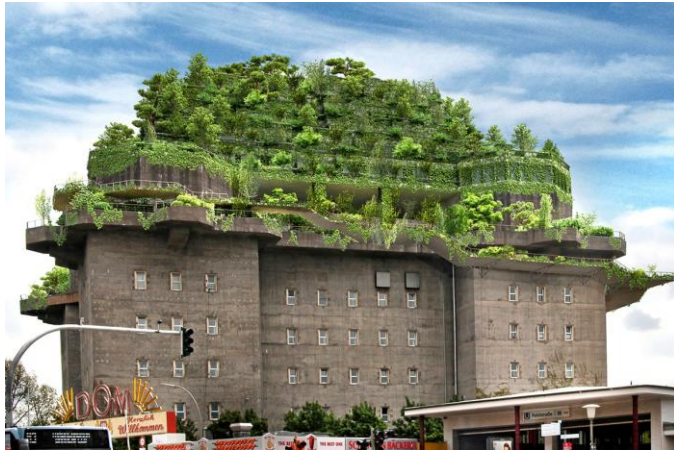
Scenic and unscenic images from *Scenic-Or-Not*.
(Sereshinhe et al. 2019; see also Ambrey and Fleming 2011)

Previous research

- **Biophilia hypothesis** / humans possess an innate need to affiliate with nature
(Wilson 1984; Ulrich et al. 1991; Kellert & Wilson 1993; Ambrey & Fleming 2011; Sereshine et al. 2019;)
- **Green spaces & health** / green spaces have positive effects on stress reduction, mental and physical health (Ulrich 1984; De Vries et al. 2003; Hartig et al. 2014;)
- **Green spaces & life satisfaction** / green spaces around the dwelling or window view on green are positively associated with life satisfaction or residential satisfaction, but also contra-intuitive findings; potential bias due to small case numbers, focus on public green only, lack of life events in migration study (Bertram & Rehdanz 2015; Kaplan 2001; White et al. 2013; Krekel et al. 2016)

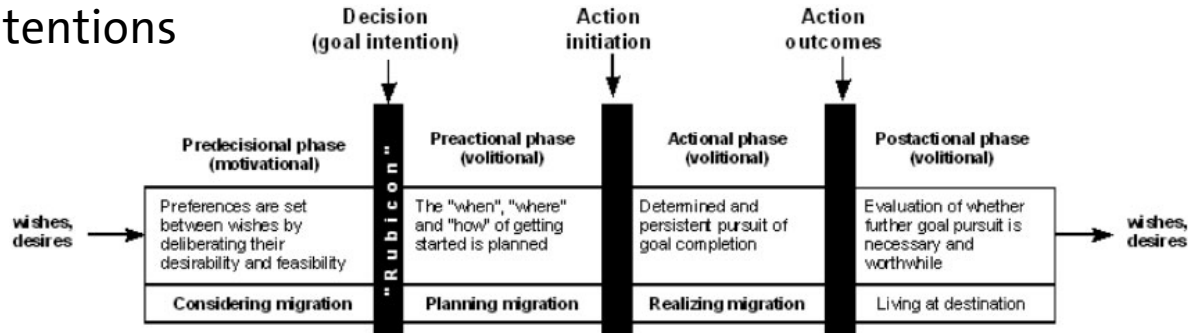
There is some evidence for direct effects of green spaces of city dweller's well-being, but little is known about how much green is needed.

- **More comprehensive analyses** needed regarding features of people's dwellings (e.g., balcony, garden, green window view) and residential area



Urban sprawl in Switzerland
Source: Pixabay.com

- **Understanding life satisfaction** as experienced utility corresponds well with life-course approach on residential relocation
- **Residential relocation** is a process and therefore studied best prospectively, i.e., moving intentions



Stages of a relocation process
 (Kley 2011; Heckhausen 1991; Gollwitzer 1996)



Outline and findings of the first paper with first-wave primary data

Kley, S.; Dovbishchuk, T. How a Lack of Green in the Residential Environment Lowers the Life Satisfaction of City Dwellers and Increases Their Willingness to Relocate. Sustainability 2021, 13, 3984,
<https://doi.org/10.3390/su13073984>

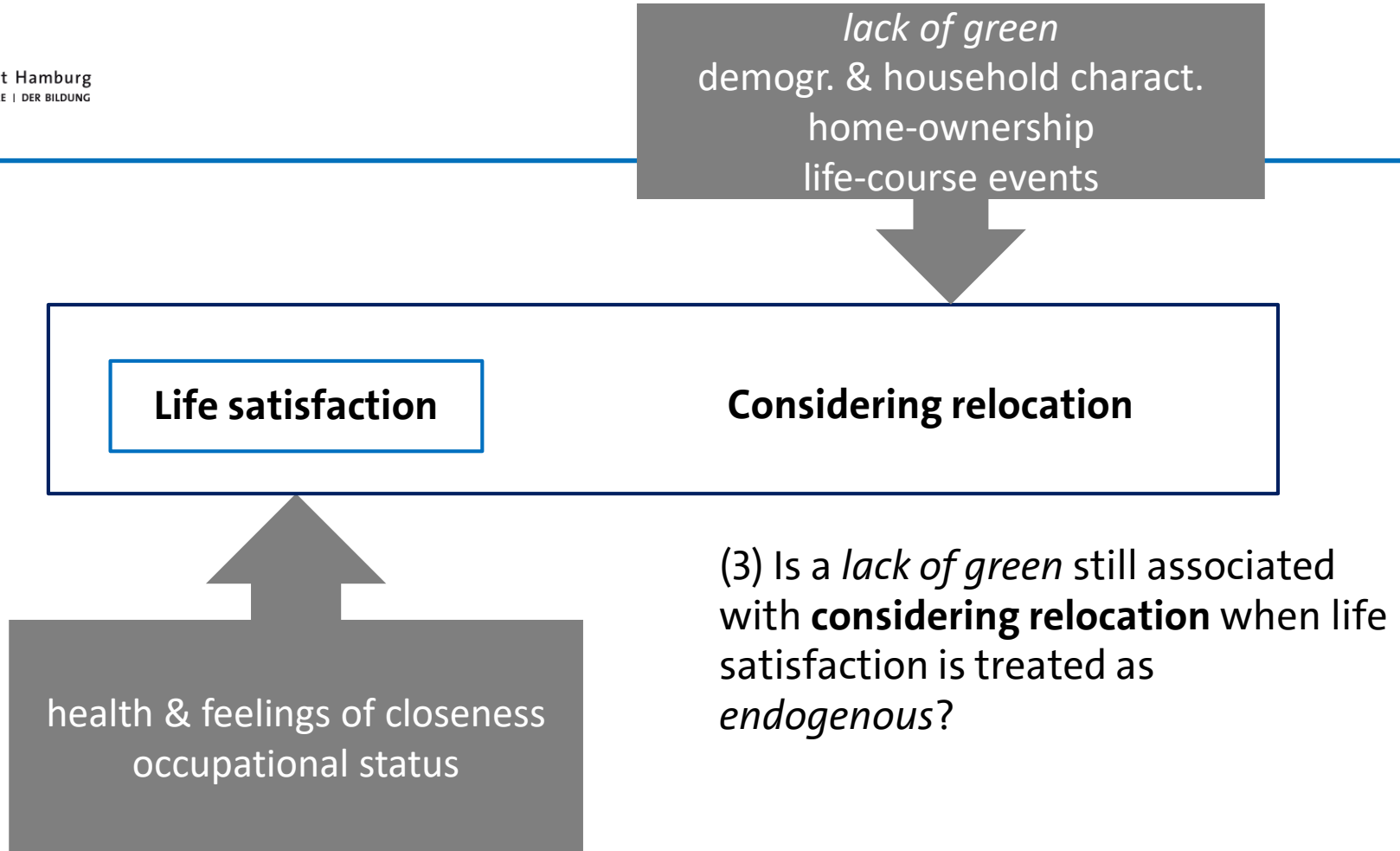
Research questions

(1) Is a *lack of green* in the residential environment connected with **decreased life satisfaction** of city dwellers, net of other influences?

(2) Is a *lack of green* in the residential environment connected with **considering relocation**, net of other influences?



demogr. & household charact.
home-ownership
health & feelings of closeness
occupational status
life-course events



Methods

- primary survey in Hamburg and Cologne
- 1st wave in Sep 2020 – Feb 2021, 2nd wave started recently
- CATI with random digit dialing
- approx. 900 respondents per city; pooled samples with N=1886 respondents
- ½ with and ½ without thoughts of moving away
- at least 18 years old and living in their current apartment for at least 12 months
- design weights applied to correct for oversampling and selection probability in household

Dependent Variables

Life satisfaction

“How satisfied are you—all in all—with your life at present?” (1 “not at all satisfied” to 7 “completely satisfied”)

Considering moving

“Have you recently thought about moving out of your apartment or house to live somewhere else?” (yes / no)

Predictors: (not) having green in the vicinity

- No green in the window view
 - “If you look out of the window of your current dwelling, do you see almost no green, some green or a lot of green, e.g., trees or lawn?” (“almost no green” / “some” or “a lot of green”)
 - Lack of green in residential area
 - Open questions about disliked features of the neighborhood and reasons for considering moving.
 - No garden or terrace
 - No balcony
 - No green yard
- “Do you have an own...?”

Findings

1. Linear regression, selected average marginal effects, design weighted. N = 1886

2. Probit regression with endogenous covariates predicting life satisfaction, selected average marginal effects, design weighted. N = 1886

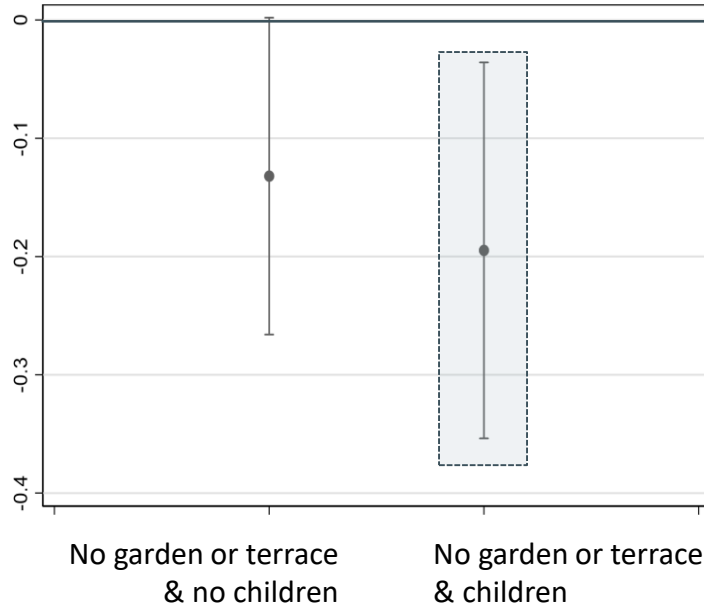
* p < 0.05

+ p < 0.1

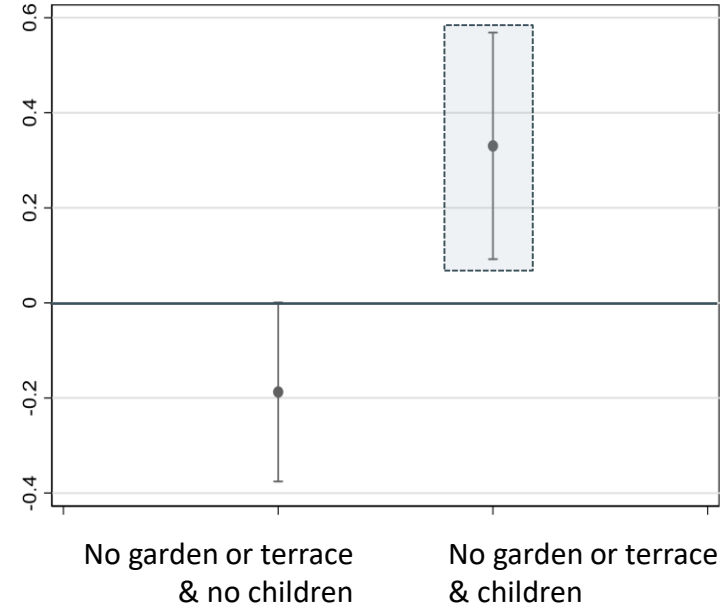
	Life satisfaction ¹	Considering relocation ²
No green in the window view	0.095	0.222 ← *
Lack of green in residential area	-0.048	-0.138
No balcony	-0.101 ← *	-0.013
No green yard	-0.053	0.170 ← *
No garden or terrace	-0.132 ← +	-0.187 +
Child(ren) & no garden/terrace	-0.063	0.518 ← *
Homeownership	0.056	-0.169 *
Complete school/start studying	0.181 +	0.359 *
Job change self/partner	-0.076	0.422 *
Marriage/cohabitation	0.146	0.674 *
Childbirth	0.423 *	0.033
Life Satisfaction	-	-0.576 *

Findings

Average marginal effects of having no garden while living with children or not
on life satisfaction, design weighted. N = 1886



Average marginal effects of having no garden while living with children or not
on considering moving, design weighted. N = 1886



Discussion I

- Residential buildings that allow direct access to green spaces and the open air are relevant for city dwellers' life satisfaction; experiencing a lack in this regard triggers people's willingness to relocate.
- Likely that experiencing a lack of greenery in large cities increases the demand for dwellings at the fringes of the cities and in the countryside.

➔ Considering direct access to urban nature as helpful tool to counteract city flight.



Looking for a house in the countryside.
Photo: B. Fröhlig

But ...

- This study failed to find effects regarding experiencing a lack of greenery in the wider residential environment.

Alternative instruments:

How often do you visit ... in your living environment? (within 15 minutes by foot)

(1) lakes, lakeshores, riverbanks	daily (...)	never	not at all	present
(2) a forest	daily (...)	never	not at all	present
(3) fields or meadows	daily (...)	never	not at all	present
(4) parks or public green areas	daily (...)	never	not at all	present
(5) Other:.....	daily (...)	never	not at all	present

Discussion II

- Study is purely observational; personal traits might be confounded with relationships in question



Resources controlled for (occupational status, household income, home-ownership)

Preferences indirectly considered (feelings of closeness with neighbourhood)

→ Consider “Nature relatedness” (11 items)

Discussion III

- The study relies on subjective assessment of green space
 - Make use of geo-coded address-data for environmental models of administrative data
 - Compare predictors for life satisfaction and residential relocation based on subjective and objective green space data.



Paper:

Kley, S.; Dovbishchuk, T. How a Lack of Green in the Residential Environment Lowers the Life Satisfaction of City Dwellers and Increases Their Willingness to Relocate. Sustainability 2021, 13, 3984, <https://doi.org/10.3390/su13073984>



Project website:

wiso.uni-hamburg.de/wohnstudie



twitter.com/Wohnstudie_UHH

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Thank you!

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