Sharing Sustainability

The Concept of Sharing in Collaborative Housing for more sustainable Cities

Annalena Meixner, 25.07.2020
UN Sustainable Development Goals
Loneliness, affordability, social exclusion
Scientific

More research on social, environmental AND economic sustainability in CH is required. 
(Daly, 2017; Williams, 2005; Jarvis, 2011)

Relationship between three concepts
(Lang et al., 2018)

Sharing Economy and Collaborative Consumption
(Agyeman et al., 2013; Belk, 2013; Teubner, 2014)
How does the concept of sharing in collaborative housing increase the sustainability of cities?
Literature Review

Selection Criteria
- Intentional community
- Strong focus on community
- Autonomous housing units
- Shared spaces and facilities
Literature Review

Sharing of...
- Spaces
- Goods

Impact on
- Social
- Environmental
- Economic

Sustainability within Collaborative Housing
1. What is the impact of sharing on sustainability?

Increase
## 6 Assumptions

<table>
<thead>
<tr>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents of the community have more frequent and intimate interactions.</td>
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<tr>
<td>The building has a smaller total floor area per person.</td>
</tr>
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<td>Households spend less on energy and maintenance due to a smaller total</td>
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<td>The residents consume less goods.</td>
</tr>
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<td>The residents save costs for goods by sharing goods efficiently.</td>
</tr>
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<td>Households pay less rent compared to their desired alternative setting.</td>
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Literature Review

1. What is the impact of sharing on sustainability?
   - Increase
2. Research Methods
   - Case Studies
3. Theoretical Framework

Collaborative Housing  Sustainability  Sharing  Measurement
Impact of sharing of spaces and goods in collaborative housing on sustainability.
Research Methods

Case studies

Document research

Interviews with residents and the architect

Resident survey

Social

Environmental

Economic
Pegasus
- 26 units
- 4.034 m²

LiSA
- 44 units
- 5.598 m²

Comparison of Pegasus and LiSA:
- Initiating members
- Subsidized housing
- Ownership
- GFA Building
- UFA Individual
- UFA Shared
- UFA Commercial

Motivation
- Case Studies
- Findings
- Conclusion

Questions
- Introduction
- Literature
- Methodology
- Case Studies
- Findings
- Conclusion
- Questions

19
Findings

Social
Environmental
Economic
<table>
<thead>
<tr>
<th>Literature suggests that by sharing…</th>
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</table>
Groups and Networks due to sharing

Pegasus

LiSA

<table>
<thead>
<tr>
<th>All</th>
<th>Participating</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended</td>
<td>Participation is</td>
<td>Expected</td>
</tr>
<tr>
<td>1,75</td>
<td>Hours/week</td>
<td>7,77</td>
</tr>
</tbody>
</table>
Perception of the impact of sharing

**Pegasus**

- Safety and security: 7.1
- Overall: frequent and intimate interactions: 6.9
- Proudness, place attachment: 4.6
- Average: 6.2

**LiSA**

- Safety and security: 8.4
- Overall: frequent and intimate interactions: 8.7
- Proudness, place attachment: 7.3
- Average: 8.2
Downsides

- Feeling of injustice and emotional pressure through different engagement
- Too much closeness
- Social exclusion, clique formation, ...
Total floor area per person

- **Pegasus**
  - Current GFA: 1.686 m²
  - Desired GFA: 1.496 m²

- **LiSA**
  - Current GFA: 2.260 m²
  - Desired GFA: 2.286 m²

- Household needs (guest room/office/gym ...)

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**Findings**

**Introduction**

**Motivation**

**Literature**

**Methodology**

**Case Studies**

**Conclusion**
Energy use

- Bigger surface area
  - => higher costs on heating, electricity and maintenance

- Low consumption
Lower rent

- Subsidized housing
Less goods consumption

<table>
<thead>
<tr>
<th>Pegasus</th>
<th>LiSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBQ grill</td>
<td>5 = 5</td>
</tr>
<tr>
<td>Washing machines</td>
<td>15 &lt; 21</td>
</tr>
<tr>
<td>Table tennis table</td>
<td></td>
</tr>
<tr>
<td>Bench saw</td>
<td>3 &gt; 0</td>
</tr>
</tbody>
</table>
Downsides

- Different understanding of use, care and maintenance
- Damage, untidiness, ...
- Social tension and conflict
- Clear & extensive communication (emotional and time-consuming)
Save costs for goods

- Things that are not needed
- Costs for collaborative purchases (if not donated)
- Informal sharing
Conclusion

What is the impact of sharing on sustainability?

Motivation?

Social
- Social Capital

Environmental
- Resource consumption

Economic
- Affordability
Catalyst for more sustainable cities

1. Presence

2. Role model & experiment

Effectiveness depends on user participation
Recommendation

For research
- Longer period of time
- Effectiveness of sharing on bigger scale

For future development
- Purposely implement sharing practices

For CH communities
- Put sustainability on your agenda
- Share your experiences
- Support each other’s initiatives and fight social exclusion
Sharing Sustainability

- How sharing can increase the sustainability of cities

The opportunities of sharing for urban spaces are currently being overlooked.

(Agyeman et al., 2013)
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Questions?
[References]


