

To what extent does commercial co-living match user preferences of young adults in The Netherlands?

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22 June 2023

AR3MBE100 MSc 4 Graduation Laboratory Management in
the Built Environment

P5 Presentation

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Introduction

Introduction

- **What is commercial co-living?**
- **Why do we analyse user preferences?**
- **How to analyse housing preferences?**
- **Who is the target group?**



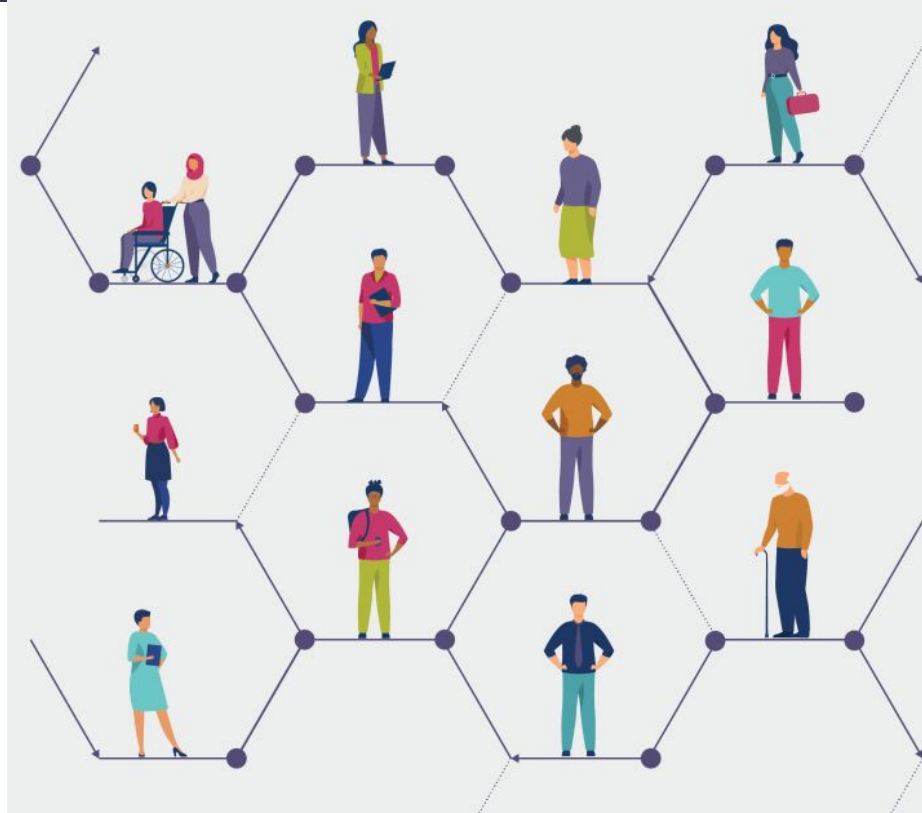
The Rise of Commercial Co-Living



- People are looking for more flexibility in housing offering
- Sharing is a way to lower the global cost of living in the city
- Current population need to bond with one another, but also need the appropriate amount of private space for their specific lifestyle
- **Commercial co-living:** residential community living model that accommodates unrelated individuals willing to share common area amenities with preserving their privacy

Analysing User Preferences

- Studies from across the world attempt to characterise, forecast, and explain user preferences, as well as to understand '*why people move?*' and '*what does the user want?*'
- **User Preference:** preference analysis evaluates relative attractiveness; this study focuses on analysing stated preferences that reflect hypothetical choices/user willingness
- **Young Adults:** a person between 18 to 25 years old including such groups as young professionals or students



Problem Statement



Surge of interest in housing choices among EU young professionals and students



Commercial co-living combines flexibility, convenience, and social ties



Amsterdam is Europe's second largest commercial co-living market



Preference analysis reveals the best-case scenario for housing satisfaction

Research Questions & Design

Research Questions

Main RQ:

To what extent does commercial co-living match user preferences of young adults in The Netherlands?

Sub RQ's:

- Which commercial coliving attributes are preferred by the young adults?
- What is the least preferred attribute that young adults have of commercial coliving?
- What type of amenities are typically provided in commercial coliving housing designed for young adults in The Netherlands?

Goals & Objectives

Main Research Objectives

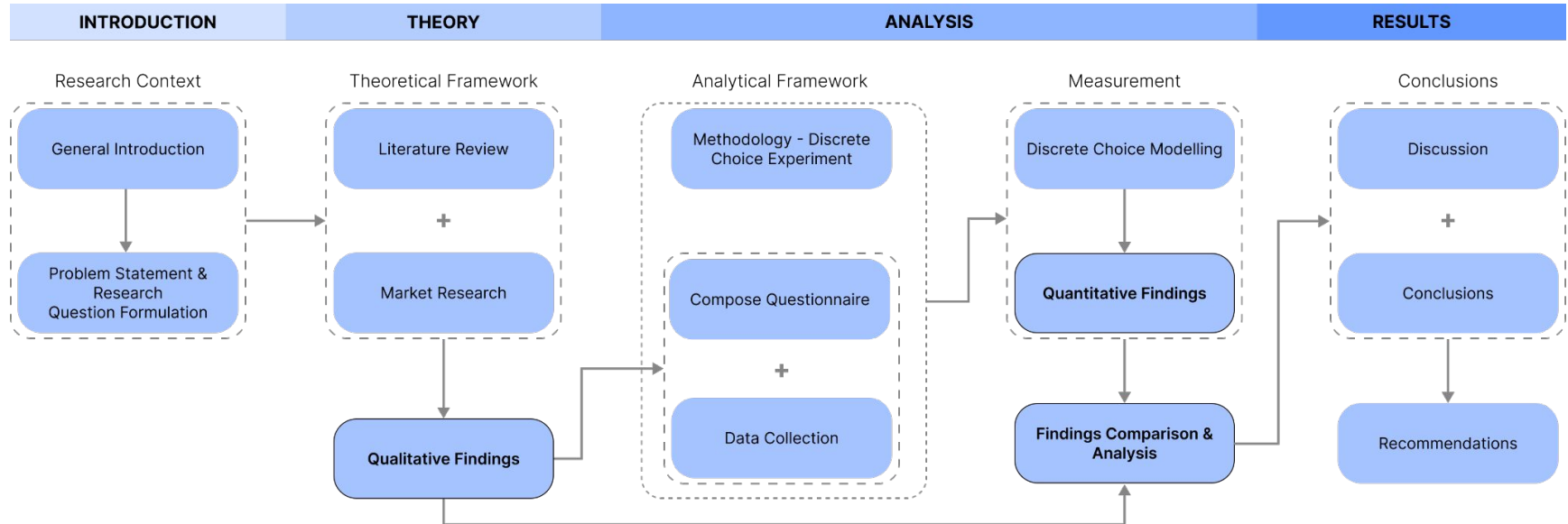
Understand the needs and preferences on coliving of young adults

Provide the best guidelines for policy makers and developers to match user needs and built supply

Create lasting societal value through the Built Environment

Understand how does co-living contribute to satisfying the demand and tackling housing crisis

Research Design



Literature Review & Market Research

Literature Review

Key topics from the Literature Review:

Urbanisation

Socio-Demographics

Housing Market in the EU

User Preferences

Studying User Preferences

Housing Expectations
of Young Population

Sharing Economy

Co-living

Commercial Co-living

Co-living Critics

Market Research



Figure 2 - Popular student and young professional cities across The Netherlands; Own work based on OpenStreetMap

OurDomain Rotterdam is a centrally located commercial coliving building in the heart of Rotterdam (1 minute away from Rotterdam Blaak). In the 24 story-high building there are 612 studios and apartments. Base rent varies between €620 to €920 a month, with up to €250 in service fees. Allowance application is possible. There is a possibility for both fully furnished and unfurnished apartments. OurDomain has an enormous rooftop terrace, three community lounges, music room, cinema room and gym. Additionally, there is a restaurant and a hairdresser located in the building. Indoor bicycle shed is present in the building, however interestingly, it is the only building in the area without parking, since the architects have persuaded the municipality that due to its central location it is unnecessary and buildable area can be used to facilitate other use cases.



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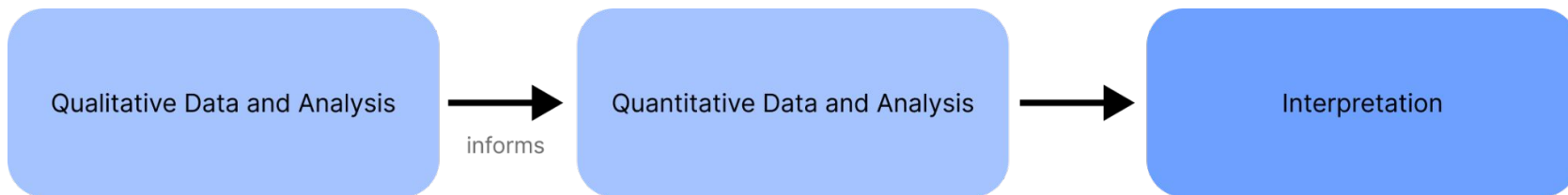


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Research Methods

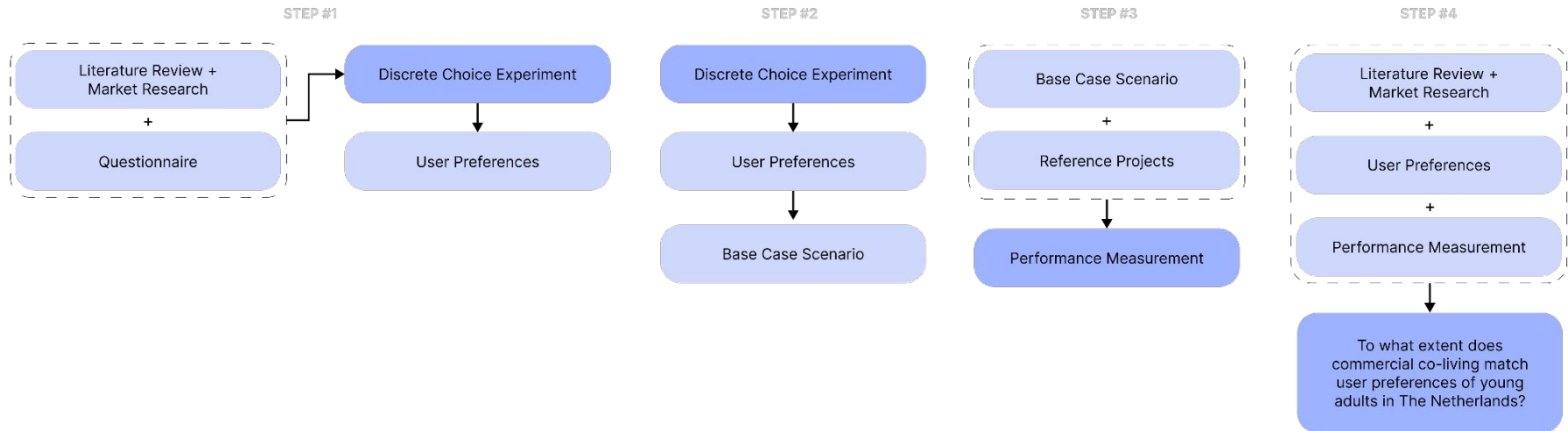
Research Methods

- Only a framework that includes both quantitative and qualitative studies is a powerful approach for understanding complex phenomena
- Literature review & market research
- Discrete Choice Analysis
- Performance Measurement Analysis



Research Methods

Analytical Framework:



Results, Analysis & Discussion

Results

Data Collection & Descriptive Stats

- Data collected through a questionnaire in the Netherlands using the Qualtrics platform
- Questionnaire distributed to the target group over a period of 30 days
- Total of 172 people opened the survey, and 119 filled it in
- Age restrictions resulted in 88 valid responses from young adults
- Goal was to gather at least 56 responses, which was achieved

		Questionnaire Respondents	Young Adults in The Netherlands (CBS, 2022)
Gender	Male	51%	51%
	Female	49%	49%
Age	18	0%	12%
	19	6%	13%
	20	3%	13%
	21	16%	13%
	22	23%	13%
	23	22%	13%
	24	23%	12%
	25	8%	12%
Income	less than €19.999	36%	44%
	between €20.000 - €24.999	10%	15%
	between €25.000 - €29.999	20%	6%
	between €30.000 - €34.999	10%	8%
	between €35.000 - €39.999	5%	6%
	more than €40.000	9%	21%
	Prefer not to say	9%	//
Education	HBO/WO	92%	29%
	HAVO/VWO/MBO	2%	31%
	PhD	6%	0.60%
Occupation	Employed	55%	74%
	Student	43%	22%
	Unemployed or other	2%	4%

Results

DCE - Experiment Results

Attribute	Level	B0	Significance
Accessibility/Location	Distance to city centre $\geq 1.5\text{km}$	-0.062	0.496
	$500\text{m} \leq \text{Distance to city centre} \leq 1.5\text{km}$	0.318	0.004
Private Living Area	Distance to city centre $\leq 500\text{m}$	0.063	0.001
	Area $\leq 25\text{m}^2$	-0.16	0.0176
	$25\text{m}^2 \leq \text{Area} \leq 40\text{m}^2$	0.376	0.001
	Area $\geq 40\text{m}^2$	0.144	0.036
Sharable living space	None	0.711	0.001
	Only Kitchen	0.676	0.001
	Kitchen & Bathroom	0.692	0.001
Community Space	No space	-0.714	0.001
	One communal space	-0.343	0.002
	More space	0.55	0.001
Outdoor Facilities	No facilities	-0.472	0.001
	One outdoor facility	-0.132	0.024
	More outdoor facilities	0.311	0.001
Sport Facilities	No facilities	0.046	0.0494
	One sport facility	0.435	0.001
	More sport facilities	0.218	0.025
Leisure Facilities	No facilities	-0.306	0.008
	One leisure facility	-0.355	0.002
	More leisure facilities	0.368	0.001
Commercial Services	No services	-0.084	0.46
	One commercial service	-0.203	0.076
	More commercial services	0.117	0.227
Price	Price $\geq \text{€}850$	-0.769	0.001
	$\text{€}500 \leq \text{Price} \leq \text{€}850$	-0.149	0.0177
	Price $\leq \text{€}500$	0.478	0.001

- if an attribute has a positive coefficient, it implies that the survey participants are more likely to prefer the attribute, whereas if it is negative, one can assume that the survey participants are less likely to prefer it
- 95% confidence interval was taken
- Most of the model is significant, apart from 'Commercial Services' category and 'Distance to city center $> 1.5\text{km}$ ' attribute

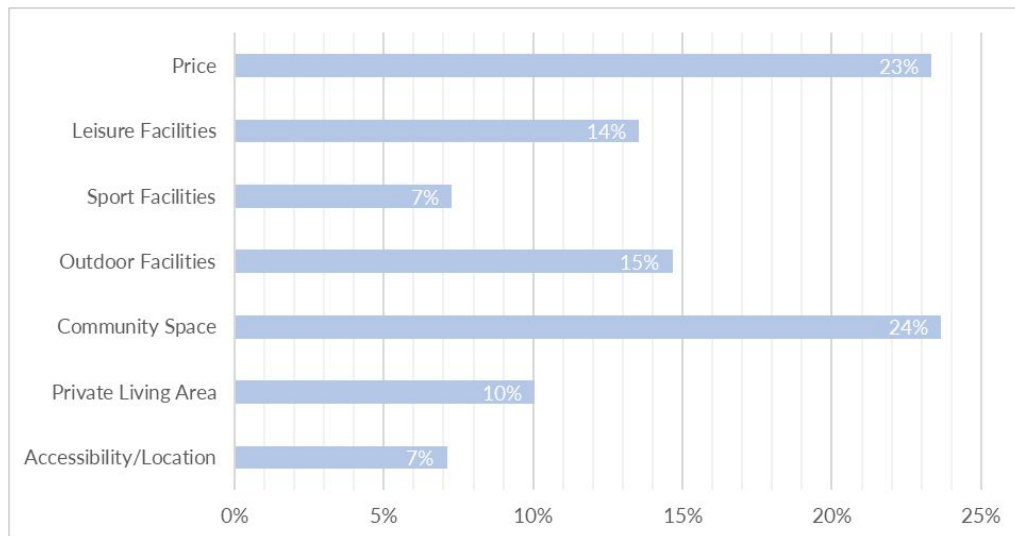
Discussion

Sub RQ1: **Which commercial coliving attributes are preferred by the young adults?**

Sub RQ2: **What is the least preferred attribute that young adults have of commercial coliving?**

Results

DCE - Relative Importance



- Part-worth utilities analysis helps determine the relative importance of different attributes in the discrete choice analysis
- Policymakers, developers, and operators can utilize these findings to create co-living spaces that align with the preferences and needs of young adults.
- 'Community Space' and 'Price' most important, whereas 'Sport Facilities' or 'Accessibility/Location' do not play big role

Results

DCE - Willingness to pay

- Attributes with low willingness to pay (WTP) values, such as larger areas and lack of facilities, should be compensated for or offered at a reduced price
- Young adults are willing to pay the most for more communal spaces
- Young adults would look for a reduced price or compensation in other attribute if no communal space would have been provided at all



Discussion

Sub RQ1: **Which commercial coliving attributes are preferred by the young adults?**



- Developers, regulators, and operators in the co-living industry should prioritize communal spaces, smaller living areas, and outdoor facilities
- Adequate living space is still considered important for comfort
- Young adults prefer not to share anything with others, but interestingly sharing the kitchen or kitchen & bathroom is still positively perceived

Discussion

Sub RQ2: **What is the least preferred attribute that young adults have of commercial coliving?**



- young adults are willing to pay the least for larger living rooms (above 40m²) and may seek compensation or a lower price if a home lacks community facilities.
- Prices above €850 have the highest negative utility.
- Surprisingly, proximity to the city center or commercial services does not influence young adults' willingness to pay

Discussion

Sub RQ3:

What type of amenities are typically provided in commercial coliving housing designed for young adults in The Netherlands?

Research Methods

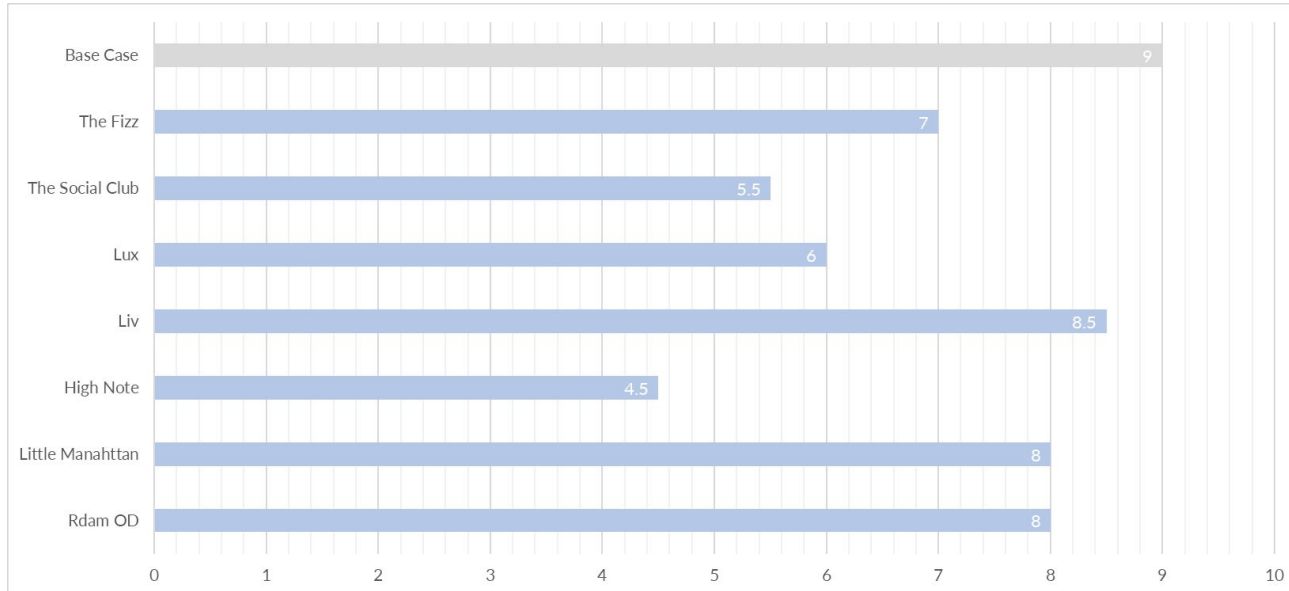
Performance Measurement

Attribute	Level	Score	Base Case	OurDomain	Little Manahitan	High Note	Liv	Lux	The Social Club	The Fizz
Accessibility/Location	Distance to city centre ≥ 1.5 km	0	0	0	0	0	0	0	0	0
	500m \leq Distance to city centre ≤ 1.5 km	1	1	0	0	1	1	0	0	0
	Distance to city centre ≤ 500 m	0.5	0	0.5	0	0	0	0	0.5	0
Private Living Area	Areas ≥ 25 m ²	0	0	0	0	0	0	0	0	0
	25m ² \leq Area ≤ 40 m ²	1	1	1	1	0	1	1	0	1
	Area ≥ 40 m ²	0.5	0	0	0.5	0.5	0	0.5	0	0
Sharable living	None	1	1	1	1	1	1	1	1	1
	Only Kitchen	0	0	0	0	0	0	0	0	0
	Kitchen & Bathroom	0.5	0	0	0	0	0	0.5	0	0
Community Space	No space	0	0	0	0	0	0	0	0	0
	One communal space	0.5	0	0	0.5	0.5	0	0.5	0	0
	More space	1	1	1	0	0	1	0	1	1
Outdoor Facilities	No facilities	0	0	0	0	0	0	0	0	0
	One outdoor facility	0.5	0	0.5	0	0.5	0	0	0	0.5
	More outdoor facilities	1	1	0	1	0	1	1	0	0
Sport Facilities	No facilities	0	0	0	0	0	0	0	0	0
	One sport facility	1	1	1	1	0	0	0	1	1
	More sport facilities	0.5	0	0	0	0	0.5	0	0	0
Leisure Facilities	No facilities	0.5	0	0	0	0	0	0	0	0
	One leisure facility	0	0	0	0	0	0	0	0	0
	More leisure facilities	1	1	1	1	0	1	0	1	1
Commercial	No services	0.5	0	0	0	0	0	0	0	0
	One commercial service	0	0	0	0	0	0	0	0	0
	More commercial services	1	1	1	1	1	1	0	0	0
Price	Price \geq €850	0	0	0	0	0	0	0	0	0
	€500 \leq Price \leq €850	1	1	1	1	0	1	1	1	1
	Price \leq €500	0.5	0	0	0	0	0	0.5	0	0.5
Sum			9	8	8	4.5	8.5	6	5.5	7

- Quantitative assessment of the reference projects' findings is based on predetermined attributes
- Understanding the relative importance of these attributes allows for comprehensive evaluation
- The table provides an overview of the attributes present in the reference projects
- 1 is indicating highest score and 0 is indicating lowest score

Results

Performance Measurement - Comparison with the Reference Projects



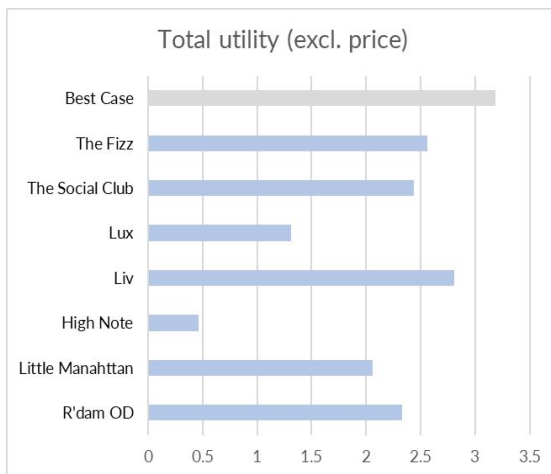
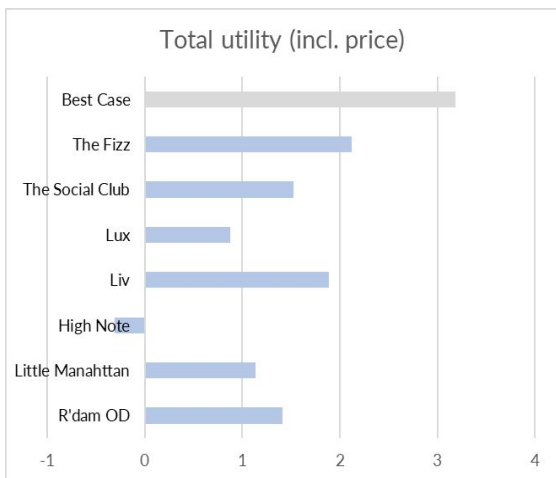
Discussion

500m ≤ Distance to city centre ≤ 1.5km	✓	✓	✗	✗	✗	✓	✗	✗
25m ² ≤ Area ≤ 40m ²	✓	✗	✓	✓	✗	✓	✓	✓
No Shared Facilities (Kitchen or Bathroom)	✓	✓	✓	✓	✓	✓	✓	✓
More space	✓	✗	✓	✗	✓	✓	✗	✓
More outdoor facilities	✓	✗	✗	✓	✗	✓	✓	✗
One sport facility	✓	✗	✓	✓	✓	✓	✗	✓
More leisure facilities	✓	✗	✓	✓	✓	✓	✗	✓
More commercial services	✓	✓	✓	✓	✗	✓	✗	✗
Price ≤ €500	✓	✗	✗	✗	✗	✗	✓	✓
	Best Case Scenario	Almere High Note	Rotterdam OurDomain	Amsterdam Little Manhattan	Eindhoven The Social Club	Leiden Liv	Eindhoven Lux	Utrecht The Fizz

- Developments often lack outdoor facilities, which are highly valued by respondents
- Location and accessibility should be carefully considered for coliving complexes
- Affordability is important, with limited options below €500
- High Note in Almere needs considerable improvements
- Liv in Leiden has the greatest alignment with the base case scenario

Results

Performance Measurement - Comparison with the Reference Projects



- The Fizz in Utrecht performs the best in terms of total utility, considering the price attribute
- High Note in Almere receives a negative utility score, indicating that existing amenities do not outweigh the price paid.
- Reference projects generally scored lower than the base case when price is considered. Without monetary constraints, more projects score high utility scores

Discussion

Sub RQ3: **What type of amenities are typically provided in commercial coliving housing designed for young adults in The Netherlands?**

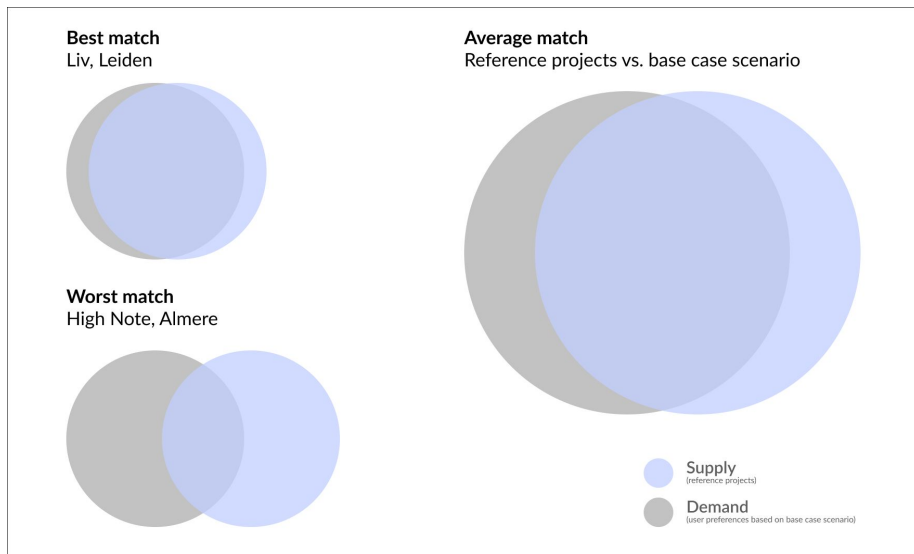


- Most of the existing projects provide enough communal spaces and provide wide range of options when it comes to the private living area
- Existing commercial co-living housing stock lacks affordable options
- There is a lot to improve on the 'Outdoor Areas' characteristics, especially considering their high relative importance

Conclusions & Recommendations

Conclusions

Main RQ: **To what extent does commercial co-living match user preferences of young adults in The Netherlands?**



- Commercial co-living supply in the Netherlands aligns to a significant extent with the preferences of young adults, as demonstrated by the discrete choice experiment and comparison with reference projects
- Some coliving projects showed a better match with user preferences than others, raising questions about the role of research and supply-demand dynamics in shaping the development

Conclusions

- Most of the existing projects provide enough communal spaces and provide wide range of options when it comes to the private living area
- Affordability is a crucial factor, as only two reference designs offer housing alternatives for less than €500
- Pricing and location seem to correlate to some extent, suggesting the need for further research to find cost-effective solutions that accommodate tenants' interests while keeping rent reasonable.
- Sharing living spaces, such as kitchens and bathrooms, is not significantly preferred by individuals, despite most co-living buildings in the Netherlands offering private facilities.
- Developers should consider including outdoor amenities in co-living complexes to meet the preferences of their target demographic.

Affordability



Shared Kitchen & Bathroom Areas



More Outdoor Areas



Limitations & Further Research



- Researchers should recognize and address limitations in their research to ensure validity and reliability of the results
- Statistical constraints, such as sample size, can impact research findings and should be considered in the interpretation of the results
- Increasing the sample size in future research would improve the accuracy and significance of the findings, allowing for a more comprehensive understanding of user preferences
- Considering multilingual versions of the survey would enhance accessibility and capture a wider range of experiences and viewpoints, particularly for non-English speakers and immigrant communities in the Netherlands

Thank you :)

Questions?