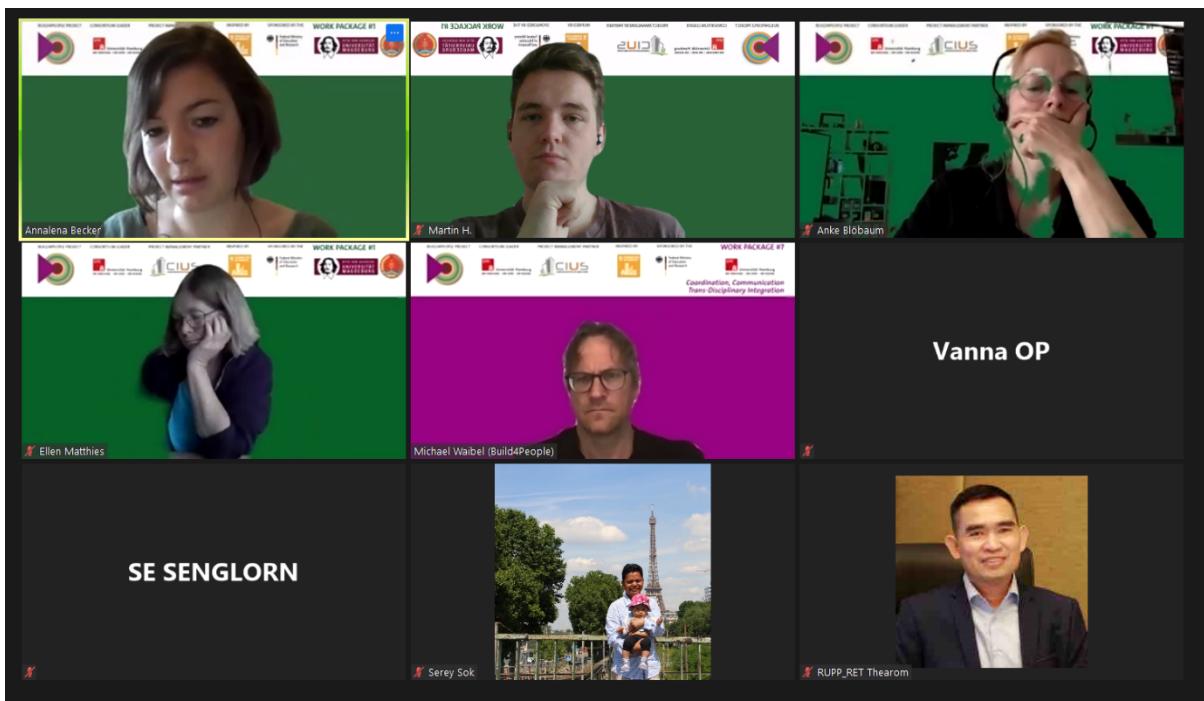


## Build4People WP#1 Science Workshop, 23 June 2021

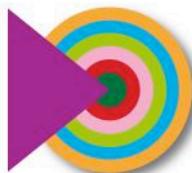
On the 23th of June 2021 the work package 1 Behaviour Change of the Build4People project met via an online conference. This meeting was an opportunity to present recent findings and discuss upcoming work with the local research partners.



This meeting was moderated by Anke Blöbaum and Annalena Becker, members of the WP#1 team, and started with a short, informal meeting that was conducted to catch up and get settled. The formal meeting started with a welcome round and the presentation of the agenda.

### Psychological aspects and envisaged measurements

The first input was given by Dr. Anke Blöbaum and MSc. Annalena Becker both residing at the Otto-von-Guericke University in Magdeburg. They focused on the psychological aspects of (Urban) Quality of Life and the envisaged measurements within the Build4People UQoL Survey. The overall goal of the project remains in enhancing the quality of life through sustainable urban transformation in Cambodia. Anke Blöbaum started with an input on the role of urban quality of life (UQoL). The holistic approach

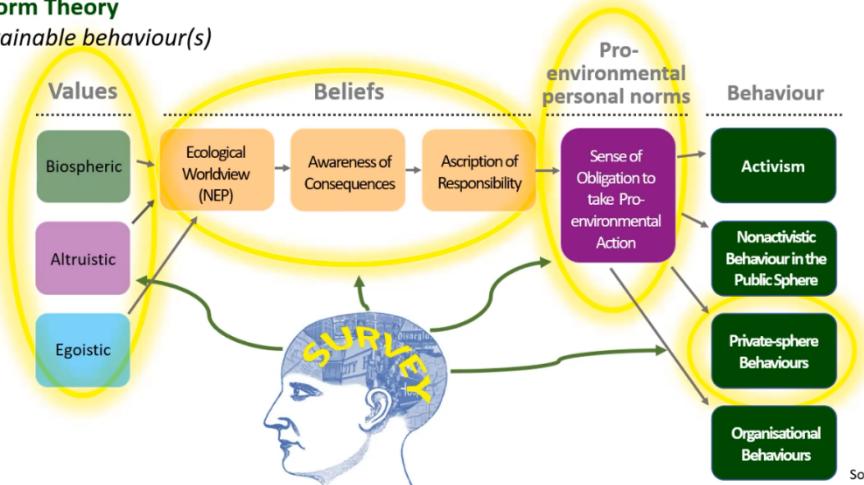


sees the role of UQoL in two ways. On the one hand, there is the analytic, research approach that asks for the relative impact of different factors on UQoL. On the other hand, there is the normative approach that understands sustainable transformation as an essential prerequisite for UQoL. Both approaches were further discussed and are to be represented in the survey. The normative approach will contain items asking for pro-environmental norms, values, beliefs and behaviors. The Value Belief Norm Theory will be essential in this approach.

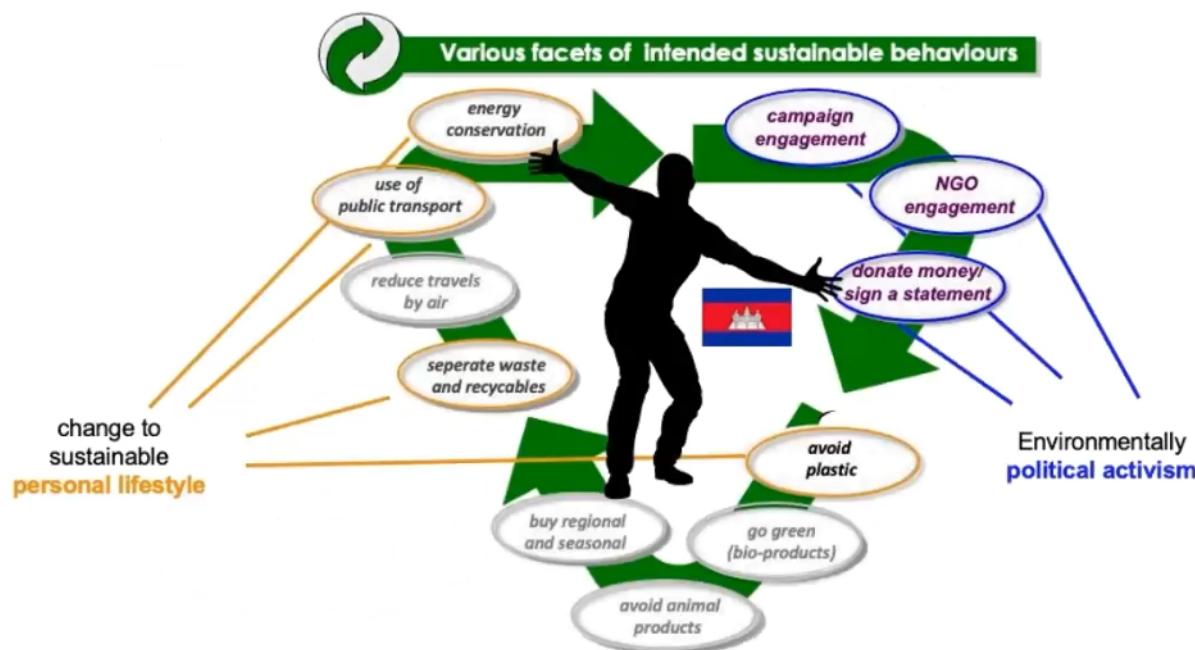
#### THE ROLE OF URBAN QUALITY OF LIFE

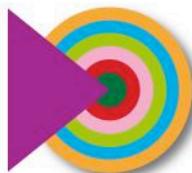
##### Value Belief Norm Theory

Explaining sustainable behaviour(s)



Source: Stern et al. (1999)



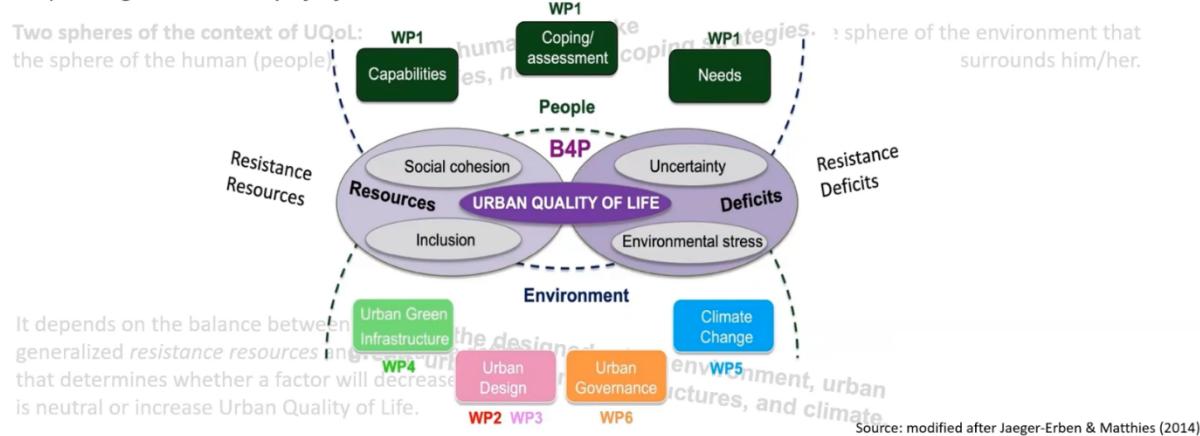


The analytic research approach explaining UQoL can be contextualized in two spheres. On the one hand there is the sphere of the human (people) and on the other hand there is the sphere if the environment that surrounds them.

#### THE ROLE OF URBAN QUALITY OF LIFE

##### Analytic research approach

###### Explaining Urban Quality of Life



Following this input Annalena Becker focused on how WP#1 can measure Quality of Life (QoL). She gave theoretical background on QoL and psychological functioning, QoL and resilience, QoL and Capability approach as well as the Capability Approach and psychological and cultural aspects. Lastly, insights on the results of the household study were presented. They showed a high correlation of QoL and UQoL at  $r = .68$ .

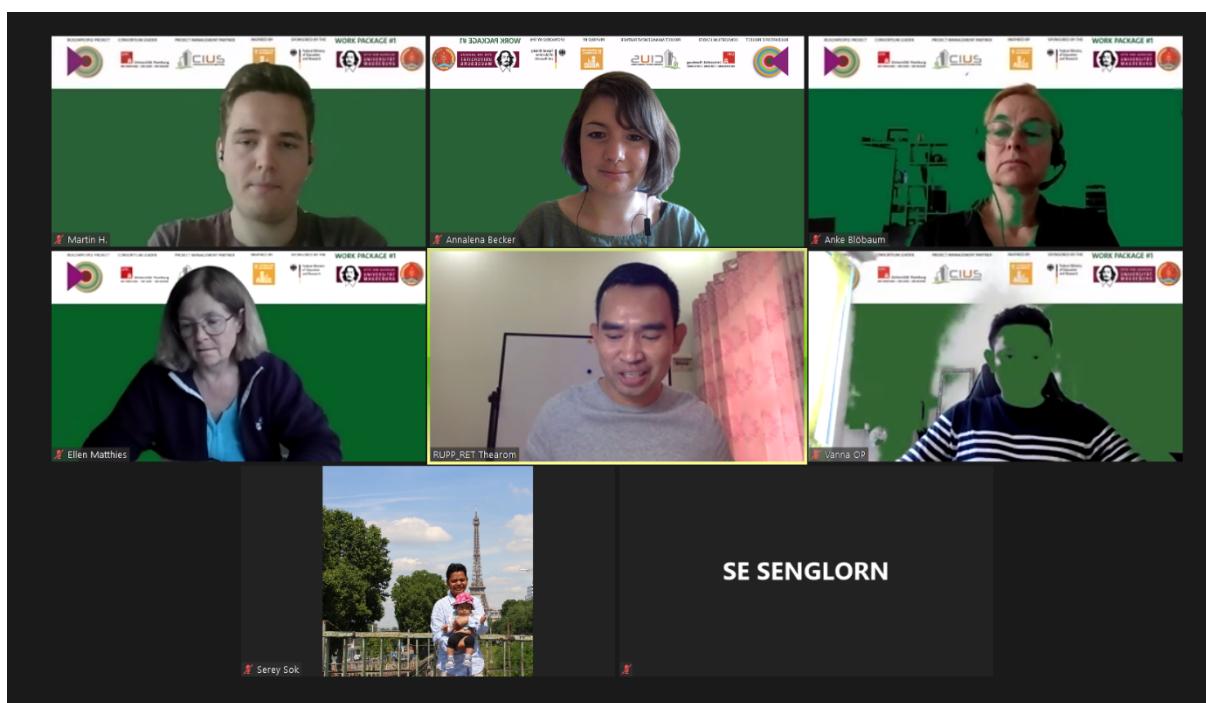
The following discussion centered on the question “what is (U)QoL?”. It became clear, that (U)QoL is not a standing concept that is easily accessible. There are different contexts to be considered (individual and physical). The stress model (Bell, 2001) was referred to as being a good starting point in having an overview on what factors have to be considered in a definition like that. The factors and their measurement have to be determined and elaborated with the other WPs of the Build4People project. The discussion led to the conclusion that those different factors have to be considered altogether and not separately. The Cambodian colleagues would like to conduct a survey that is goaled to find a cultural adapted definition of UQoL and social welfare with the help of focus groups. The literature review and a ground structure for this questionnaire are already in progress.

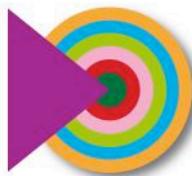


## Social welfare in Cambodia

After this discussion Dr. Op Vanna, Dr. Ret Thearom and MA. Se Senglorn gave an input to a survey on social welfare in Cambodia. They presented a pilot study that could support the upcoming process about creating a survey with overlapping items. The survey tried to determine the Cambodian households' socio-economic status, general health and medical, mental health, residential status, living cost, income, property, satisfaction of life, awareness of social environment, and family relationship. Their presentation gave the theoretical background, objectives and methodology as well as the findings. The focus in this input were the residential status and the satisfaction of life. The satisfaction with life-item showed that only 6.3% of the participants were "a little satisfied with life" and even less at 0.9% were "not at all satisfied with life". The items were measured on a 4-point Likert scale.

The discussion was first focused on the item "satisfaction with recreational area". Since the Cambodian colleges were introduced to the study later on, there were not yet able to give an answer to what was defined as recreational area. The discussion then focused on the answering scales. 4-point Likert scales were used, with each option labeled. Different suggestions were made on how to improve the answering scales. This included options like only labeling the extremes, account and correcting for the satisfaction paradox or using a middle option like "moderate".





## General discussion on how to measure well-being in Cambodia

The general discussion included a presentation by Prof. Dr. Ellen Matthies. The main question was to determine the indicators for UQoL as income, access to health care or the environmental quality that might also include walkability or urban green.

Objective Indicators For a city	Objective indicators/resources for individual QoL	Satisfaction with Objective indicators	Subjective Satisfaction of individual
Income Income inequality education Health care ...  Environmental quality (emissions), water, etc. ..... Urban green? Walkability?	Income Living conditions, housing Access to....health service  ... to urban green  Walkability Thermal situation	Income Living conditions, housing Access to....health service ... to urban green	

Prof. Dr. Ellen Matthies proposed that WP#1 should ask specific and individual questions that also contain these indicators. The survey should ask not only about objective indicators but also about the satisfaction with these objective indicators to get individual answers with a subjective content. A correlation between the objective indicators and the satisfaction with these objective indicators could provide additional information.

## Analyses of the Household Survey and most interesting findings

Annalena Becker presented the survey development, as well as the survey structure. The survey structure presented how the different WPs would concentrate on what questions, in the case of WP#1 it would be the ecological worldview; problem awareness; value system; personal, social and societal norms as well as pro-environmental behavior. The analysis of the findings revealed that the survey items referring to (Urban) Quality of Life might load only on one factor. WP#1 would like to link the UQoL and walkability as well as to sustainable lifestyles. The theoretical background for this hypothesis was given, as well as how to measure walkability in general and specific in this survey. The findings



show that UQoL, QoL both had a negative correlation with walkability and a walkability scale that also included urban green aspects as “having the option to walk to a green area”.

Table 9  
*Correlations of walkability and quality of life*

		walkability	walkability green	UQoL	QoL	QoL_all
walkability	Pearson's r	1.000				
	p-value (2-tailed)	.				
	N	510				
walkability_green	Pearson's r	.939**	1.000			
	p-value (2-tailed)	.000	.			
	N	510	510			
UQoL	Pearson's r	-.132**	-.189**	1.000		
	p-value (2-tailed)	.003	.000	.		
	N	510	510	510		
QoL	Pearson's r	-.097*	-.180**	.678**	1.000	
	p-value (2-tailed)	.028	.000	.000	.	
	N	510	510	510	510	
QoL_all	Pearson's r	-.121**	-.199**	.875**	.949**	1.000
	p-value (2-tailed)	.006	.000	.000	.000	.
	N	510	510	510	510	510

\* $p < .05$ . \*\* $p < .01$ .

The discussion first focused on the number of items in the subscales. Since the survey was very long from the beginning, it will be difficult to increase the number of items per subscale. The discussion then shifted to the negative correlation between Quality of life and walkability. The Cambodian colleagues mentioned different factors that could influence the correlation. There could be factors like social status, monthly income, education or district location that should be taken into consideration. Another factor might be the different attitude and social norm towards walking as walking by foot is associated with a sign of low standards or no access to a car. Walking is considered to be no privilege but rather a burden in Phnom Penh. It was mentioned that a low internal consistency in the dependent variable would create follow up problems when analyzing the data. Controlling for the subjective norms will be important when conducting the survey.

## Final Questions

The final discussion and questions focused on the use of Likert scales. There were different options mentioned like gradually increasing Cronbach's Alpha with a facilitated quality process or only using the extremes in the answering scales to decrease the possibility of an unspecific translation that could decrease the internal consistency. Another option was to use a visual aid like a growing diagram for



each option. This would present the options as gradually rising and as continuous. Lastly it was pointed out that the interviewer will play a key role in the success of the survey. Their training will have to be extensive to the point where they can answer most, if not all, questions the participants might have about the questions, their intent or content.

Finally, we would like to thank everyone participating and supporting the Build4People WP#1 Science Workshop and we are looking forward to our next collaborative working steps and further Science Workshops.

*Authors: Build4People WP#1 “Behaviour Change” Team*