

## ABSTRACT

*(English)*

Public spaces are the heart of a city and can influence city dwellers with health, well-being and social capital. Sustainable design factors, based on human needs, are important for success of urban squares and their perceived urban quality by humans. Therefore, this study investigated the relevance of five livable dimensions of public spaces: comfort, access, function, maintenance and sociability and their effects on people's perceived and evaluated livability. A nonprobability sample of 601 subjects, most of them with German background, participated in a randomized online survey that showed experimentally-manipulated images of three Central European urban squares. Participants rated their subjectively-perceived livability regarding those images in a self-constructed questionnaire, conceptualized as the total of three scales detecting met human needs for health, well-being and social capital. Furthermore, personality traits and socio-demographic information were collected for explorative reasons. The findings revealed that success of public spaces is strongly related to its physical design and the compliance of comfort, access, function and maintenance. The effect sizes are illustrated in Table 3. Additionally, appearance and interaction with people in city plazas enhanced subjectively-perceived livability. Physical and social environment interacted and mutually influence their effects, too. Regarding the exploration of personal characteristics only age had a significant impact on the research results. Younger people (18 to 29 years old) rated the livability of public spaces significantly higher than older participants (30 to 65 years old). All other controlled factors (gender, relationship status, education level, job and income) did not show any correlations. All results were integrated in the Livability – Public Space - Model (LIV-PS Model) to gain a better understanding of user's environmental needs for a more healthy and pleased urban life.

Table 3

*Effect sizes about the impact of livable dimensions on subjective-perceived livability.*

Livable dimension	$\eta^2$	$r$	$p$
Comfort	.230	.48	< .001*
Maintenance	.159	.40	< .001*
Function	.079	.28	< .001*
Sociability	.056	.24	< .001*
Access	.013	.11	.006*

Note:  $p$  = significance level  $p < .05$ ; \* statistical significant in sample;

$\eta^2$  = variance in sample explained by livable dimension;

$r$  = standardized correlation between livable dimension and subjectively-perceived livability.