

Go Green or You Will Wither: On the Role of Access to Quality Green Areas in the City and Our Well-Being

Guerrero-Villanueva, Giampier Dario & Roszak, Jonna
SWPS University of Social Science and Humanities, Warsaw, Poland.



Background:

-Research indicates that exposure to natural stimuli may help reduce stress and improve our mental health (e.g., Martin et al., 2020, Marsell et al., 2020). Quantity and quality of green areas should be considered (Martin et al, 2020)

-According to Attention Restoration theory (ART) , exposure to nature will restore cognitive resources, it is said, reduces mental fatigue and improve concentration which in turn will enhance well-being (Berto, 2014).

-ART proposes environment has 4 properties: Extent (immersion in the nature), Being Away (the environment provides a escape), Fascination (the environment captures attention effortlessly) and Compatibility (effects are felt as long as individuals want to be exposed) (Kaplan, 1995)

-It is crucial to see how people benefits from green areas (quantity and quality) in their neighborhoods to see if they are livable and beneficial enough.

Aims:

To explore if quantity and quality of green areas will predict well being and if properties of ART will mediate this association.

Methods:

Participants:

117 people living in the Metropolitan Area of Lima, Peru (Mean age = 33, 55,6% women). Around 90% of the participants were living in neighborhoods below the recommended green areas per capita value (9%).

Measures:

-Quantity of green areas:

1. Objective -> Green Areas per Capita in the participant's neighborhood (Minam, 2018)//
- 2.Subjective -> Single question asking if participants think there are enough green areas in their neighborhood.

-Perceived quality of green areas:

Self-made questionnaire with 9 items including dimensions such as aesthetics, accessibility, biodiversity, etc.

-Restoration properties:

Being Away (1 single item) and Fascination (1 single item) (Dzhambov et al, 2020).

-Well-being:

Vitality: 7 items (SVS; Ryan & Frederick, 1997)

Life Satisfaction: 5 items (SWS, Diener et al, 1985)

Affect: 12 items (SPANE) 6 items positive affect, 6 items negative affect.

Results:

1. Correlations

Table 1

	GAPC-O	QGA-S	PQGA	BA	F	V	LS	PA	NA
Green Areas Per Capita (Quantity objective)									
Quantity of green areas - subjective	.45**								
Perceived quality of green areas	.34**	.44**							
Being Away	.24**	.29**	.61**						
Fascination	.16	.19*	.57**	.61**					
Vitality	.04	.04	.07	.27**	.13				
Life Satisfaction	.19*	.28**	.14	.18	.12	.34**			
Positive affect	-.05	.04	.00	.10	.12	.59**	.43**		
Negative affect	.03	-.02	.07	.01	-.04	-.44**	-.30**	-.57**	

Note *p<.05 **p<.01. GPAC-O: Green Areas per capita - quantity objective, QGA-S: Quantity of green areas, PQGA: Perceived quality of green areas, BA: Being Away, F: fascination, V: Vitality, LS: Life Satisfaction PA: positive affect, NA: negative affect

2. Mediation

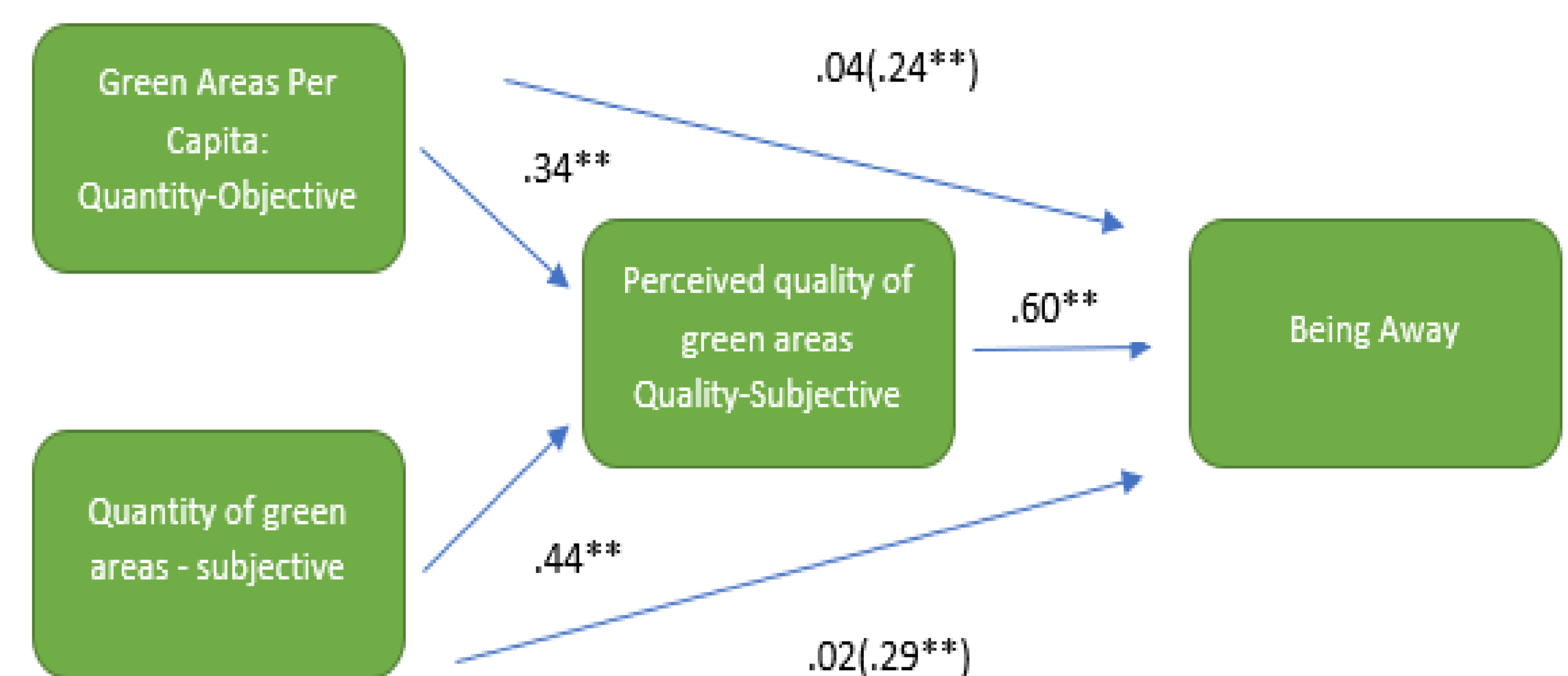


Figure 1: Standardized regression coefficients. The standardized coefficients in parathesis refer to associations controlling Perceived quality of green areas.

**p<.01

Conclusions:

- Quantity of green areas would be associated with some well being indicators such as life satisfaction.
- The quality of green areas would mediate the association between quantity of green areas and the sensation of being away.
- The sensation of being away would enhance some well being aspects such as vitality.

- Both quantity and quality of green areas should be considered by urban planners and policy makers to provide more livable cities with benefits for its inhabitants.

Contacts:

Guerrero Villanueva, G: gguerrero-Villanueva@st.swps.edu.pl

Rozzak, J: jroszak@swps.edu.pl