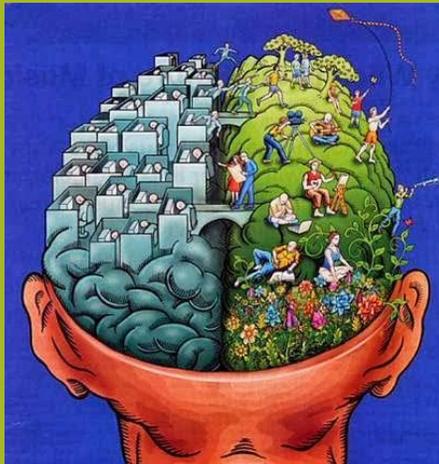


SELF-REPORTS ASSESSED BY META-ANALYTIC STRUCTURAL EQUATION MODELING

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Introduction

- Environmental Psychology is a field of study centered around:
 - The environment
 - Built- human-made space
 - Natural- the interaction of all living species
 - Mental health
 - “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.” (WHO, 2014)
 - There has been a link established between the socio-economic position of an individual with their health (Tzoulas et al., 2007)



Research Question

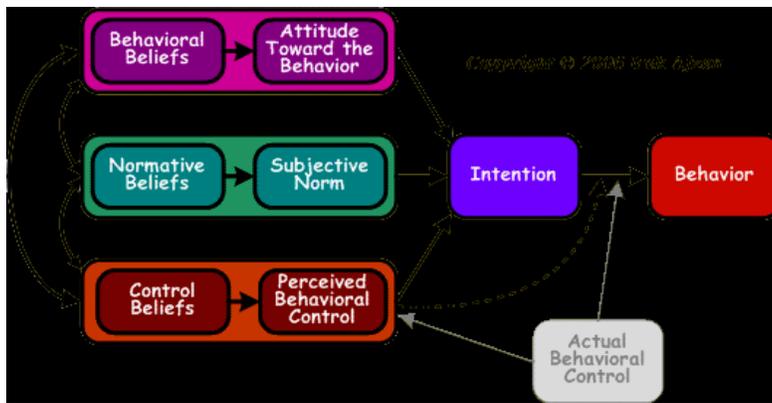
- What is the correlation between the built environment and human health?
- Which result yielded the most benefits, views of natural environments, or being in physical proximity of natural environments? (Tzoulas et al., 2007)



<http://agrisolarsolutions.com/wp-content/uploads/2015/03/environment.jpg>

An extended theory of planned behavior model of the psychological factors affecting commuters' transport mode use

- Tested extended theory of planned behavior (TPB) (Donald et al., 2014)
- Identified the most important factors determining intention and habit
- Environmental concern was shown to influence intention and behavior
- Review papers indicated that subjective norm was the weakest predictor in the TPB (Donald et al., 2014)
 - How can this be strengthened?



The validity of self-report measures of proenvironmental behavior: A meta-analytic review

- Self-reports on proenvironmental behaviors
 - Energy use
 - Water consumption
- Used up to 15 studies
- Large effect size ($r = .46$)
- P-value was less than .001
- Utilized small sample sizes
- Pearson's: Positive r : positive relationship, negative r : negative relationship. A coefficient of 0 indicates no relationship at all. A non-linear relationship may exist



<http://theteachersdigest.com/wp-content/uploads/2014/07/shutterstock-110.png>

Validity of self-reports

- The accuracy of self-reports as measures of PEB is important, because they are used as the key variable in research and theory development
- The TPB often uses self-reports as the dependent variable and assumes that behavioral intention is the closest/most direct psychological determinant of behavior
- Females typically report engaging in more proenvironmental behaviors than men
- Women tend to under-report their weight more than men, while men tend to over-report their height more than women (Elgar & Stewart, 2008)
- Younger people tend to report being more environmentally concerned than older people (Van Liere & Dunlap, 1980)
- Age-related discrepancies (Rolnick et al., 2013)

Validity of self-reports (cont.)

- Some studies that have utilized a non-dichotomized scales have yielded weaker correlations (Corral-Verdugo, 1995)
- Self-reports have been shown to be either greater or lesser than peer ratings, depending on the type of proenvironmental behavior examined (Lam & Cheng, 2002)
- Whether or not the validity of self-reports has changed over the time period of which most studies have occurred in is something to look at

What constitutes as a self-report?

- Self-report measures ranged from individuals' assessment of their water usage, energy consumption, and recycling habits to land deforestation estimation
- These reports were based on past and present behavior, as opposed to their future behavioral intentions
- Available on certain databases: PsycINFO and ProQuest Dissertations and Theses

Hypotheses

- H_1 : If a positive relationship is established between a built environment and human health, then there will be no need to determine if there is a negative one
- H_2 : If the aforementioned statement is proved true, then the theory of planned behavior (TPB) will need to be tested
- H_3 : If the Kaplan's' model of the Attention Restoration Theory (ART) is utilized (Kaplan & Kaplan, 1989), then there will be no need to establish a separate theory such as a second one (Pals et al., 2014)
- H_0 : There will be no difference found between presiding in a green space or simply viewing it

Statistical Analysis

| Author | Model/Theory | GI aspect | Human health aspect |
|--|--|--|--|
| Freeman (1984) | Model of Environmental Effects on Mental and Physical Health | Physical, social and cultural factors | Nervous system and manifested illness |
| Henwood (2002) | Psychosocial Stress and Health Model | Poor environment | Chronic anxiety, chronic stress and high blood pressure |
| Pickett et al., 1997 and Pickett et al., 2001, Grimm et al. (2000) | Human Ecosystem Framework | Ecosystem structure and processes and cultural and socio-economic resources | Socio-ecological systems |
| WHO (1998) | Arch of Health | Environmental, cultural, socio-economic | Working and living conditions, community, lifestyle and hereditary factors |
| Paton et al. (2005) | Healthy Living and Working Model | Environmental, cultural, socio-economic | Living and working conditions |
| Millennium Assessment (2003) | Links between ecosystem services and human well-being | Provisioning, ecosystem services, regulating and cultural | Security, basic resources, health, social relationships, and freedom of choice |
| Macintyre et al. (2002) | Framework based on basic human needs | Air, water, food, infectious diseases, waste disposal, pollution | Human needs (biological, personal, social, and spiritual) |
| van Kamp et al. (2003) | Domains of livability and quality of life | Natural environment, natural resources, landscapes, flora and fauna, green areas | Health all aspects (physical, psychological, social) |

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