

Exploring the Value of Noise Visualization in Normalizing People's Behavior: a Living Lab Study



I Research Question

Do different degrees of noise visualization facilitate the development of normative behavior? Why?

" [...] If I could see my noise levels only, I would probably ignore it; But if others could see mine, then I would probably behave differently [...]"

I Abstract

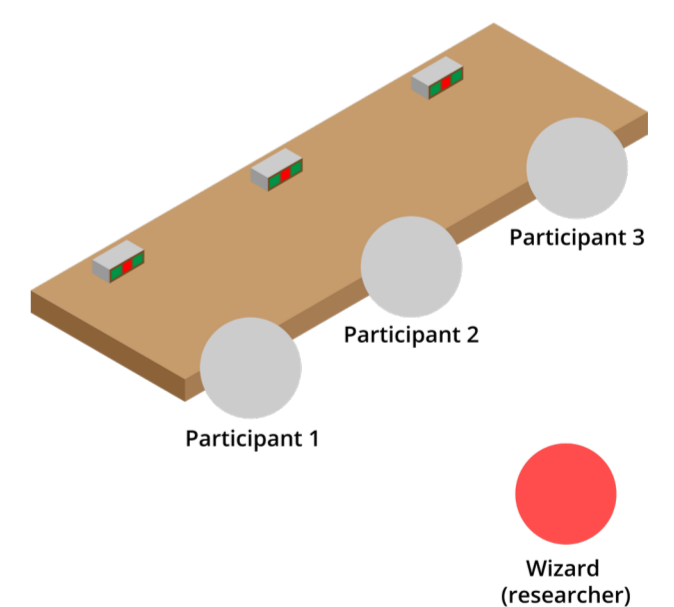
Situational norms can be acquired either from normative or informational social influence. However, in some cases, social influences may not always be perceived effectively. With a suitable intervention that enhances the visibility of social influences, the awareness of being socially accepted might be developed properly, which directs normative behavior in consequence. In this study, the visualization of noise is chosen and the effects of different degrees of visualization are evaluated through a series of field evaluations. Results show participants are able to interpret the purpose of both interventions and be aware of being quiet; Whereas distinct differences regarding decibel levels between the baseline test and tests with interventions have yet been found.

I Keywords

Normative Behavior;
Social Translucence;
Micro/Macro eadings;

I Method and Protocol

To answer the research question, both qualitative and quantitative research methodologies were applied. Prototypes were deployed in the quiet zone at MetaForum where students were supposed to be quiet. A researcher played as a wizard controlling the displays depending on how participants behaved. A number of eleven students who intend to sit in which the prototype was deployed, were informed via an informed poster and interviewed when they left. Salient behaviors and quotes were noted; The decibel levels during their tests were measured, analyzed, compared using data visualization tools.



I Preliminary Findings

From the field observations and simulated interviews, we found:

- *good usability of the prototype is the prerequisite of developing one's awareness;*
- *students in pairs or groups are more active in participating in the tests;*
- *participants do not mind being sampled as long as they are not filmed or voice-recorded;*
- *sensor data can be easily polluted by unexpected surrounding changes;*

I Info

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