

Overview

In what follows, we will detail the various phases of the proposed project, providing context from the literature as needed. The first phase concerns Psychometric tools for longitudinal measurements of SWB. In this phase, we will develop and test a novel measurement tool to quantify elements of well-being, based on Seligman's PERMA framework (see, e.g., Seligman, 2011). This way, we depart from the typical definition of SWB (Diener et al, 1999) and we adopt a multifaceted approach with emphasis on eudaimonic elements. The new tool will adopt from existing questionnaires of well-being components. However, we acknowledge in the tool construction that well-being components can change dynamically (i.e., we take a multivariate state variable approach) and hence the instrument will be specifically geared towards *longitudinal measurements* (e.g., restricted total number of items to allow for frequent sampling). We approach human flourishing as a *process in time*.

In the second phase, we will elaborate extensively on the “positive relationships” dimension of the PERMA framework, approaching it from a novel cognitive angle. We will interpret positive relations by considering Cognitive evaluations of feeling loved, and devise a measurement instrument for this element as well. Broadly, we will explore cognitive aspects of how the feeling of being loved is experienced by the receiving individual. Specifically, we will evaluate through the use of *cultural consensus theory* (Romney & Batchelder, 1999), what respondents think makes people feel loved, and explore whether respondents agree on indicators of feeling loved. Moreover, we examine whether an individual's *ability to recognize the state of being loved* (i.e., the degree to which they correspond to the intersubjective consensus) is related to demographic factors such as their age, gender, socio-economic status, or life philosophy.

The third phase will focus on Modeling the dynamics of SWB in daily life. We will collect longitudinal data through a daily-life study using the instruments developed in the first phase, and apply novel *stochastic process modeling* techniques to translate subtle changes over time in component measures into interpretable, stable characteristics of SWB. With the use of a dynamic process model (a hierarchical Ornstein-Uhlenbeck model, see, e.g., Oravec, Tuerlinckx, & Vandekerckhove, 2009, 2011) we will describe inter-individual differences in terms of quantified short-term and long-term adaptation mechanisms in SWB, and potentially explain these individual differences through personality or environmental characteristics. This way we will contribute to the understanding of human flourishing as we quantify relevant properties of temporal dynamics in our SWB measurements.

The fourth phase revolves around a field experiment on The effect of positive psychology interventions on SWB dynamics. Having fine-tuned both the measurement instrument and the dynamical modeling framework for SWB in the previous phases, we will now evaluate the effects of *acts of kindness* and *gratitude journals* in terms of SWB dynamics (including dynamics of felt love) and inter-individual differences therein.

Throughout, we will tailor state-of-the-art *hierarchical Bayesian* inference methods (Gelman & Hill, 2007) to SWB research. The Bayesian framework allows for a principled and coherent approach to the inclusion of prior information, confirmatory testing of hypotheses, and parameter estimation in potentially highly complex models. Bayesian methods are rapidly causing paradigmatic shifts in a variety of fields but have so far not been exploited in the study of SWB.

References

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