Assessing the precursors and attainment of wellbeing in higher education using the Engine Model of Well-being.

Eranda Jayawickreme, Nicole Brocato, & Bridget Hayes
Wake Forest University

Assessing and supporting wellbeing in higher education settings requires measures that: (a) can be implemented on a large scale, (b) are tailored to higher education settings, and (c) can easily be translated into targeted interventions by end-users. We summarize here our progress in developing just such a measure of undergraduate student wellbeing.

The Engine Model of Well-being (Fig. 1; Jayawickreme, Forgeard, & Seligman, 2012) is a theoretical framework for assessing wellbeing across a variety of populations and contexts. This framework suggests that wellbeing measures should assess wellbeing achievement as well as the extent to which respondents possess the resources and skills necessary to achieve wellbeing.

Our application of the Engine Model of Well-being to the measure development process included adaptations to the Engine Model (Fig. 2 and Fig. 3).

**Output** items assess the extent to which respondents have achieved wellbeing in a particular dimension.

**Precursor** items assess whether respondents have the skills and resources needed to achieve wellbeing in a particular dimension.

**Outcome** items assess the extent to which people experience affective wellbeing and life satisfaction while also demonstrating indications of living well.

Fig. 1 (Jayawickreme, Forgeard, & Seligman, 2012)

![Adapted Engine Model](image)

Fig. 2. Adapted Engine Model

![Simplified version of adapted Engine Model](image)

Fig. 3. Simplified version of adapted Engine Model
Our criteria for selecting wellbeing dimensions are:

- University setting can and should support
- Relevant to this developmental period
- Responsive to intervention (in theory if not in evidence)

Current list of dimensions

- Meaning
- Purpose
- Belonging
- Engagement
- Positivity
- Friendships
- Romantic relationships
- Conscientiousness
- Intellectual curiosity
- Identification with all humanity
- Lifelong service
- Volunteerism
- Standing up to discrimination

We use structural equation and factor modeling in Mplus to determine whether items fit into their assigned places in the Engine Model (Fig. 4). The left-most blue box are precursor items; the central red box is output items. The right-most green box is outcome items.

Based on a pilot of WFU with 661 undergraduates, the dimensions of Meaning through Positivity have reliability coefficients of .83-.91; variance explained in the latent output factor ranges from 55% - 88%.

The remaining dimensions are in progress. They were edited before the spring 2017 administration, which included 11 schools nationwide and a sample of 3864 students.

Intervention strategies are currently under development. They will be informed by the precursor items and existing intervention literature, and will encompass multiple levels and targets of intervention.

Before we can begin testing interventions, we will conduct validation and magnitude research.

Contact information
Eranda Jayawickreme jayawide@wfu.edu
Nicole Brocato brocatnw@wfu.edu
Bridget Hayes hayebb16@wfu.edu