

## Appendix 1 - Conceptual Frameworks and Taxonomies

As mentioned above, a methodological challenge for this review is the abundance of potentially relevant self-report instruments. To address this challenge, an extensive preliminary review of theoretical frameworks and associated empirical work led to the development of a defensible framework of higher-level and mid-level terms to guide selection of studies was developed (see Figure 2).

The term ‘mental health’ is conceptualised in this review as two correlated but separate dimensions: mental illness and mental well-being (also known as “positive mental health”), based on the complete state model of mental health [Figure 1, 2, 34]. This model covers a large spectrum of phenomena in mental health depicted by the four quadrants in Figure 1, which is highly relevant to the context of this review targeting the general adult population. A recent review [71] also highlighted that this model explained more variance in mental health among clinical and non-clinical populations in Western and non-Western countries than the one-dimensional bipolar model [72], where mental illness and positive mental health are located at each end of the same continuum.

The construct of ‘mental illness’ in this review is based on the Hierarchical Taxonomy of Psychopathology [HiTOP, 73], which models psychopathology as dimensions of continuums. HiTOP represents psychopathology as hierarchies of elements with different granularities, from fined-grained transdiagnostic symptoms (bottom level) to syndromes (collection of symptoms) and super-spectrum as the highest level that represents the general factor of psychopathology [p-factor, 74]. Through factor analyses, several studies have provided empirical support for the HiTOP model in the general adult population and clinical adult population [58,75].

The construct of ‘mental well-being’ (positive mental health) was conceptualised through three prominent frameworks from the mental well-being and positive psychology literature: the Mental Health Continuum framework [69], Subjective Well-being [76] and the PERMA model [77]. The Mental Health Continuum framework [69] proposes that mental well-being consists of emotional well-being, psychological well-being and social well-being. According to this framework, a person is flourishing if they exhibit high levels of emotional, psychological and social well-being. The emotional well-being component, adapted from the subjective well-being concept [76], focuses on the hedonic (experiential) aspect, while the psychological well-being component [79] focuses on the eudaemonic (evaluative) aspect of individual well-being. [69] added the social well-being component and formed the Mental Health Continuum framework. In this review, we also consider the extended subjective well-being constructs proposed by [79]. In the positive psychology literature, [77] operationalised flourishing in the PERMA model, which consists of positive emotion, engagement, relationships, meaning and accomplishment.

## Appendix 2 - Search Protocols

### Concept 1: Mental health

*We adopt a broad definition of mental health, which includes positive mental health and mental illnesses. The search terms for mental disorders are adapted from [29].*

flourish\* OR languish\* OR "mental health" OR "mental disorder" OR "mental illness" OR agoraphobia OR panic OR "post-traumatic" OR posttraumatic OR ptsd OR trauma OR "obsessive-compulsive disorder" OR ocd OR adhd OR "attention deficit disorder" OR "attention deficit hyperactivity disorder" OR "substance use" OR psychosis OR schizophrenia OR distress OR hopelessness OR "self-harm" OR "self-injur\*" OR suicid\* OR anxiety OR depression OR depressive OR anger OR "alcohol use" OR "anorexia nervosa" OR "bulimia nervosa" OR "eating disorder" OR "bipolar disorder" OR hypomani\* OR mania OR stress OR "well-being" OR wellbeing OR "mental wellness" OR "emotional functioning" OR "emotional wellness" OR hedonic OR "affective valence" OR "negative affect" OR "negative emotion" OR "negative feeling" OR "positive affect" OR "positive emotion" OR "positive feeling" OR eudaimon\* OR "psychological functioning" OR "psychological wellness" OR "hierarchy of needs" OR maslow OR "self-acceptance" OR "self-actualisation" OR "self-actualization" OR "life meaning" OR "life purpose" OR "meaning in life" OR "meaning to life" OR "purpose in life" OR autonomy OR individuat\* OR "self-determination" OR "interpersonal relation\*" OR "meaningful relation\*" OR "social relation\*" OR "environment\* mastery" OR "sense of mastery" OR "personal growth" OR "social functioning" OR "social coherence" OR "social interest" OR "social acceptance" OR "social actualisation" OR "social actualization" OR "social growth" OR "community contribution" OR "social contribution" OR "social responsibility\*" OR "society contribution" OR "sense of belonging" OR "social belonging" OR "social cohesion" OR "social integration" OR "social isolation" OR "emotional stability" OR happiness OR "life satisfaction" OR "satisfaction with life" OR vitality OR "self-esteem" OR optimism OR resilience OR "sense of accomplishment" OR "self-worth" OR "life engagement" OR "psychological engagement" OR "social connection" OR "social relationship" OR "goal achievement" OR "self-efficacy"

**\*\* Concept 2: Instruments\*\***

assessment\* OR index\* OR indicator\* OR indices OR instrument\* OR inventor\* OR measure\* OR questionnair\* OR scale\* OR subscale\* OR survey\* OR tool\*

### Concept 3: Repeated measure

("pre\* post\*" OR "pre-post") OR ("random\*" AND "trial\*") OR baseline OR "cohort stud\*" OR "experience sampling" OR "follow up" OR "long term" OR longitudin\* OR monitor\* OR nation\* OR population OR prospective OR "public health" OR "quality of life" OR repeat\* OR routine OR screen\* OR surveillance\* OR "time point\*" OR timepoint\* OR wave\*

#### Concept 4: Digital/online

app OR apps OR "cell\* phone" OR computer OR "digital health" OR ehealth OR "electronic health" OR "health kiosk\*" OR "health station\*" OR internet OR mhealth OR "mobile device\*" OR "mobile health" OR "mobile phone" OR online OR "smart phone" OR smartphone OR web\*

**Filters** (Some of these filters will be incorporated into the main search query)

- Publication Year between 01 Jan 2010 - 31 Dec 2021 (inclusive)
- Language = English

## References

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