GSA Webinar Series

Approaches to Measuring Wisdom

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Webinar Panel

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Defining Wisdom

- There is still disagreement in the field concerning the definition of wisdom
- When defining wisdom, researchers tend to emphasize either cognitive or noncognitive aspects:
  1. Wisdom as a specialized body of broad and deep knowledge in the fundamental matters of life, including superior reasoning capacity with respect to life problems
  2. Wisdom as a complex and multifaceted personality characteristic or general attitude toward life that reflects psychological maturity and compassionate concern for others
- Wisdom manifests itself in difficult, uncertain, and personally important situations, which makes it hard to observe in the lab

Definition Determines Measure

- Different definitions of wisdom imply different measurement approaches
- Each measure of wisdom is based on a specific definition of wisdom that includes specific components
- To select the measure that suits your research question, it is important to look at the conceptual background underlying the various measures!
- Here, we present the most common measures—we start with the definition underlying each of them, then show sample items/problems, and finally describe some “technical” characteristics
Two Groups of Approaches

**Self-report measures**
Wisdom as a multifaceted personality characteristic or general attitude toward life.

**Performance measures**
Wisdom as a specialized body of knowledge and expertise in fundamental life matters.

Self-Report Measures

Self-report measures require participants to rate their agreement with statements that either describe general traits and motivations or statements that describe general ways of experiencing, thinking about, and reacting to persons and situations.

- Three-Dimensional Wisdom Scale (Ardelt, 2003)
- Self-Assessed Wisdom Scale (Webster, 2003, 2007)
- Adult Self-Transcendence Inventory (Levenson et al., 2005)
- Brief Wisdom Screening Scale (Glück et al., 2013)
Three-Dimensional Wisdom Scale (3D-WS): Definition

Monika Ardelt (2003) defines wisdom as a personality characteristic composed of three dimensions:

**Cognitive dimension**
- Strong desire to understand life thoroughly, leading to in-depth knowledge and understanding
- Acknowledgment of the inherent ambiguity, complexity, and uncertainty of life

**Reflective dimension**
- Ability and willingness to look at life situations from multiple perspectives
- Self-reflection, self-awareness, and self-insight; transcendence of subjectivity and projections

**Compassionate dimension**
- Presence of positive and caring emotions, and the absence of negative emotions toward others;
- Deep concern for others and motivation to foster their well-being

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3D-WS: Sample Items

**Cognitive dimension**
- “I prefer just to let things happen rather than try to understand why they turned out that way” (R)
- “There is only one right way to do anything” (R)

**Reflective dimension**
- “When I’m upset at someone, I usually try to ‘put myself in his or her shoes’ for a while”
- “When I look back on what has happened to me, I can’t help feeling resentful” (R)

**Compassionate dimension**
- “It’s not really my problem if others are in trouble and need help” (R)
- “Sometimes I feel a real compassion for everyone”

(R) = reverse-coded item
3D-WS: Scale Information

- Author: Monika Ardelt, University of Florida, USA
- 39 items are rated on one of two 5-point response scales
- Separate scores are computed for the three dimensions, then averaged to form an overall wisdom score
- Cronbach’s alphas for the subscales between .65 and .80; low negative or inverse U-shaped correlation with age; positive correlations with openness to experience, well-being, emotion regulation; low positive correlation with fluid intelligence (e.g., Ardelt, 2003, in press; Glück et al., 2013)
- 12-item short version is available (see Thomas, Bangen, Ardelt, & Jeste, 2015)

Self-Assessed Wisdom Scale (SAWS): Definition

Jeffrey Dean Webster (2003, 2007) defines wisdom as the motivation and ability to learn from critical life experiences and to apply this knowledge in ways that enhances the well-being of oneself and others. This entails five facets:

- **Experience**: Critical life experiences that are likely to foster wisdom
- **Openness**: Willingness to explore new and different life experiences
- **Reminiscence and reflectiveness**: Interest in learning from critical life experiences
- **Emotion regulation**: Ability to identify and manage emotion in adaptive ways
- **Humor**: A form of mature, nondefensive coping
SAWS: Sample Items

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Sample Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>• “I have lived through many difficult life transitions.”</td>
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<tr>
<td></td>
<td>• “I have dealt with a great many different kinds of people during my lifetime.”</td>
</tr>
<tr>
<td>Openness</td>
<td>• “I often look for new things to try.”</td>
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<td></td>
<td>• “I like to read books which challenge me to think differently about issues.”</td>
</tr>
<tr>
<td>Reminiscence and reflectiveness</td>
<td>• “I often think about my personal past.”</td>
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<td></td>
<td>• “I’ve learned valuable life lessons from others.”</td>
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<tr>
<td>Emotion regulation</td>
<td>• “I am good at identifying subtle emotions within myself.”</td>
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<td></td>
<td>• “Emotions do not overwhelm me when I make personal decisions.”</td>
</tr>
<tr>
<td>Humor</td>
<td>• “There can be amusing elements even in very difficult life situations.”</td>
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<tr>
<td></td>
<td>• “At this point in my life, I find it easy to laugh at my mistakes.”</td>
</tr>
</tbody>
</table>

SAWS: Scale Information

- Author: Jeffrey Dean Webster, Langara College, Canada
- 40 items in total, 8 items per subscale, each rated on a 6-point Likert scale
- Overall wisdom score is computed as the average of all items
- Cronbach’s alphas for the subscales between .70 and .90; inverse U-shaped correlation with age; positive correlations with openness to experience, psychological well-being, emotion regulation, ego integrity, generativity; low negative correlation with fluid intelligence, low positive correlation with crystallized intelligence (e.g., Webster, 2007; Webster et al., 2014; Glück et al., 2013)
Adult Self-Transcendence Inventory (ASTI): Definition

Michael R. Levenson and colleagues (2005) define wisdom as self-transcendence – a mature sense of self not dependent on external self-enhancement. There are four main facets that may form a developmental sequence:

- **Self-knowledge**: Awareness of the sources of one’s sense of self
- **Non-attachment**: Awareness of the transience and provisional nature of external sources of self
- **Integration**: Acceptance of unwanted or conflicting characteristics as part of oneself, not as threats to self-worth
- **Self-transcendence**: No need for self-enhancement, which enables people to truly care about others and feel that they are part of a greater whole

**ASTI: Sample Items**

- “I feel that I know myself.”
- “I can accept the impermanence of things.”
- “I am accepting of myself, including my faults.”
- “I feel part of something greater than myself.”
- “I feel compassionate even toward people who have been unkind to me.”
- “Whatever I do to others, I do to myself.”
ASTI: Scale Information

- Author: Michael R. Levenson and colleagues, Oregon State University, USA
- Several versions of the scale; the most recent one includes 24 self-transcendence and 10 alienation items
- Psychometric properties for the most recent version (Glück et al., 2013): Cronbach’s alpha for the total scale is about .80; zero correlation with age; positive correlations with openness, emotion regulation, meditation practice; zero correlation with well-being; negative correlation with neuroticism
- The content validity of the most recent version, including identification of possible subscales, is analyzed in Koller, Levenson, & Glück (2017)

Brief Wisdom Screening Scale (BWSS)

- Authors: Judith Glück and colleagues, University of Klagenfurt, Austria
- Empirically derived 21-item scale: first, factor analyzed the 3D-WS, SAWS, and ASTI scores and extracted a general wisdom score; then selected those 21 items that had the highest correlations with the general wisdom score
- Psychometric properties (Glück et al., 2013): Cronbach’s alpha for the total scale is .87; zero correlation with age; positive correlations with openness, emotion regulation, self-efficacy; low positive correlation with crystallized intelligence; zero correlation with fluid intelligence
- We recommend using this scale when researchers have very limited time resources and/or when wisdom is not a central variable in the study—otherwise, a theory-derived measure is preferable!
Other Self-Report Measures

<table>
<thead>
<tr>
<th>Name of Scale</th>
<th>Relevant Publication(s)</th>
<th>Items</th>
<th>Facets</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego Wisdom Scale</td>
<td>Thomas, Bangen, Palmer, Martin, Avanzino, Depp, Glorioso, Daly, &amp; Jeste (2017)</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>Wise Thinking and Acting Questionnaire</td>
<td>Moraitou &amp; Efklides (2012)</td>
<td>13</td>
<td>3</td>
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<tr>
<td>Foundational Values Scale</td>
<td>Jason, Reichler, King, Madsen, Camacho, &amp; Marchese (2001)</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Wisdom Development Scale</td>
<td>Brown &amp; Greene (2006); Greene &amp; Brown (2009)</td>
<td>79</td>
<td>8</td>
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Benefits and Limitations of Self-Report Measures

**Benefits**

- Economical in terms of the time/effort required for completing/scoring
- Some aspects of wisdom are internal processes that are best accessed through self-report

**Limitations**

- Underreporting wisdom: If humility is part of wisdom, wise people are likely to understate their actual wisdom when rating scale items
- Overreporting wisdom: Response biases related to self-enhancement (deceiving others) and self-illusion (deceiving oneself)
- Wisdom manifests itself in specific difficult situations, whereas self-report scales assess people’s beliefs about themselves in general
Performance Measures

Participants respond to open-ended problems that are assumed to tap into the competencies and ways of thinking that wisdom entails. Responses are transcribed and rated with respect to wisdom criteria.

- Berlin Wisdom Paradigm (e.g., Baltes & Staudinger, 2000)
- Bremen Wisdom Paradigm (Mickler & Staudinger, 2008)
- Wise Reasoning Paradigm (e.g., Grossmann et al., 2010)

Berlin Wisdom Paradigm (BWP): Definition

Paul B. Baltes and colleagues (Baltes & Staudinger, 2000) defined wisdom as expert knowledge about the fundamental pragmatics of human life, which manifests in five criteria:

**Basic criteria**
- Factual knowledge
- Procedural knowledge

**Meta-criteria**
- Lifespan contextualism
- Value relativism
- Recognition/management of uncertainty
BWP: Procedure

After some introductory exercises, participants are asked to think aloud about brief descriptions of difficult life problems, such as:

- A 15-year-old girl wants to get married right away.
- Someone gets a telephone call from a good friend who says he can’t go on, that he wants to commit suicide.
- In thinking over their lives, people sometimes realize that they have not achieved all that they once imagined.

What could a person consider and do in such a situation?

Response transcripts are scored by two raters for each of the five criteria (i.e., 10 independent raters) on 7-point scales relative to an ideal response. The wisdom score is the average across the ratings.

BWP: Example Responses

| Low Wisdom | A 15-year-old girl wants to get married? No, no way, marrying at age 15 would be utterly wrong. One has to tell the girl that marriage is not possible. (After further probing.) It would be irresponsible to support such an idea. No, this is just a crazy idea. |
| High Wisdom | Well, on the surface, this seems like an easy problem. On average, marriage for 15-year-old girls is not a good thing. But there are situations where the average case does not fit. Perhaps in this instance, special life circumstances are involved, such that the girl has a terminal illness. Or the girl has just lost her parents. And also, this girl may live in another culture or historical period. Perhaps she was raised with a value system different from ours. In any case, it is important to think about adequate ways of talking with the girl and to consider her emotional state. |
BWP: Measure Information

- Authors: Paul Baltes and colleagues (Jacqui Smith, Ursula Staudinger, Ute Kunzmann) at the Max Planck Institute for Human Development, Berlin, Germany
- Studies typically use 3-6 different life problems
- Inter-rater reliabilities for the criteria from .50 to .90; for the total score around .90; zero correlation with age (except for an increase between age 15 and 20); highest positive correlations with openness to experience, creativity, fluid and crystallized intelligence, judicial thinking style, emotion regulation (e.g., Kunzmann & Baltes, 2003; Pasupathi, Staudinger, & Baltes, 2001; Staudinger & Baltes, 1996; Staudinger, Lopez, & Baltes, 1997)

Bremen Wisdom Paradigm (BrWP)

- Authors: Ursula M. Staudinger, Charlotte Mickler, and Jessica Dörner
- Proposed a distinction between general (other-related) and personal (self-related) wisdom
- Personal wisdom is defined as “sound judgment and deep insight with regard to difficult and uncertain matters of one’s own life” (Staudinger, in press)
- Paralleling the BWP, personal wisdom-related knowledge manifests in five criteria:
  - Basic criteria: Self-knowledge, heuristics for growth and self-regulation
  - Meta-criteria: Interrelating the self, self-relativism, tolerance of ambiguity
- BrWP follows the same think-aloud and rating procedure as the BWP, only within an autobiographical (not hypothetical) context
Wise Reasoning Paradigm (WRP): Definition

- Wise reasoning
  - Considering multiple perspectives
  - Searching for compromise and seeing the importance of conflict resolution
  - Recognizing the limits of one’s own knowledge and acknowledging uncertainty
  - Recognizing the likelihood of change
  - Recognizing the multiple possibilities for how an event may unfold

Igor Grossmann (e.g., Grossmann et al., 2010) assesses wise reasoning in the ways that people go about thinking through social conflicts.

WRP: Example Vignettes

**Intergroup Conflict**

- “Because of the economic growth of Tajikistan, many people from Kyrgyzstan immigrate to the country. Whereas Kyrgyz people try to preserve their customs, Tajiks want Kyrgyz people to assimilate fully and abandon their customs.”

**Interpersonal Conflict**

- “Dear Abby: My husband, Ralph, has one sister, Dawn, and one brother, Curt. Their parents died six years ago, within months of each other. Ever since, Dawn has once a year mentioned buying a headstone for their parents…”

“What do you think will happen after that?" “Why do you think it will happen this way?”

Responses are scored on 0-3 or 1-3 scales for each facet. The wise-reasoning score is the average across the ratings.
WRP: Measure Information

- Authors: Igor Grossmann and colleagues, University of Waterloo, Canada
- Many variations across studies (different stimuli including self-related problems; oral responses, written responses, online formats; different numbers of facets)
- Cohen’s kappas for the facets between 0.61 and 0.75; Cronbach’s alphas for the total score > .80; positive correlation with age; positive correlation with crystallized intelligence, negative correlation with fluid intelligence; positive correlation with well-being, agreeableness (Grossmann et al., 2013)

Benefits and Limitations of Performance Measures

**Benefits**
- Not distorted by self-perception biases
- If you consider wisdom as a competence or ability, this is probably the most appropriate measurement approach

**Limitations**
- Cost- and effort-intensive
- Some facets of wisdom are hard to observe from the outside
- Some researchers have argued that theoretical problems of fictitious persons do not tap personal/emotional facets of wisdom (e.g., Ardelt, 2004)
A “Hybrid” Measure: The Situated Wise Reasoning Scale (SWIS)

- Based on Grossmann’s wise-reasoning facets and findings suggesting that wisdom varies by situational context at least as much as by person (Grossmann, 2017; Grossmann et al., 2016)
- Participants are guided through a structured recall of an autobiographical conflict; then, they fill out a self-report scale assessing to what extent they used wise reasoning during that conflict
- Cronbach’s alphas for facets > .80; total wise-reasoning score >.90; U-shaped relationship with age (lowest point around age 45); highest positive correlations with perspective-taking, mindfulness, extraversion; lower (mostly zero) correlations with social desirability and self-deception than other self-report measures (Brienza et al., 2017)
- For an overall (non-situation-specific) assessment of wisdom, several (possibly up to five) different autobiographical memories would need to be recalled (Brienza et al., 2017)

Recommendations for Selecting a Wisdom Measure

- Effort/resources are an important factor
- Consider how your research question relates to the conceptual backgrounds of the different approaches
- But also look at overlap between measures – it might be good to use one conceptually close and one conceptually distant measure.
- If wisdom is a central variable in a study: consider aspects of method variance – we prefer to use both self-report and performance measures to see whether results generalize across measures.
- Try out candidate measures yourself!
New Developments and Future Directions

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<tr>
<th>PROMISING DEVELOPMENTS</th>
<th>POTENTIAL DIRECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Video-based stimuli that are personally immersive (Thomas &amp; Kunzmann, 2014)</td>
<td>1. Use of virtual-reality possibilities for immersing participants in wisdom-requiring situations (avatars)…?</td>
</tr>
<tr>
<td>2. Autobiographical narratives as indicators of reflective capacities (Glück et al., submitted)</td>
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<td>3. Informant reports: wisdom as viewed by others (Redzanowski &amp; Glück, 2013)</td>
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<tr>
<td>4. Automated coding of facial expressions during wisdom-related performance (Hu et al., 2017)</td>
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Open Access Reading


Coming Soon

- Psychological Science Special issue in The Journals of Gerontology Series B: Psychological Sciences and Social Sciences on “New Developments in Psychological Wisdom Research” (Edited by Judith Glück)
  - Chapter by Ute Kunzmannon on performance measures
  - Chapter by Jeffrey Dean Webster on self-report questionnaires

Supplemental Materials

- A supplemental package will be sent to audience members via email following the webinar, including:
  - Complete webinar reference list
  - List of recommended readings (including some scholarly exchanges)
  - Copies of scales and weblink to a PDF of the Berlin Wisdom Paradigm manual
  - Archived recording of webinar on GSA’s YouTube channel
Thank You

- Thank you for joining us today! 😊

- Please contact us with any questions:
  - judith.glueck@aau.at
  - nicholas.weststrate@aau.at

Clarifying Questions?

- We will not be using the “raise hand” feature today
- Please use the “questions” feature accessible on the right side of your screen
- If we do not get to all of the questions today, we will email responses after the webinar
Webinar Evaluation

In an effort for continual improvement, we would like to hear your thoughts. Please provide feedback by clicking the survey link at the end of the webinar.

Thank you again and we hope you enjoyed the program!

Thank You

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