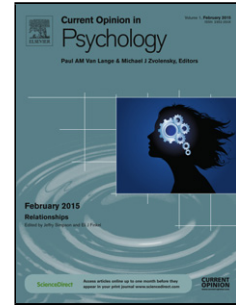


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## Wisdom is a social-ecological rather than person-centric phenomenon

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### Highlights

- Practical wisdom concerns superior deliberation about acting in complex situations
- Most previous, person-centric methods to study wisdom are faulty and misguided
- Wisdom varies across environments, incl. social class and self-centrality of situation
- Social-ecological framework needed to understand practical wisdom's social function

### Abstract

Typical approaches to study practical wisdom are person-centric, use flawed methods, and produce insights of little relevance to the construct's definition. We propose that understanding the processes underlying practical wisdom requires a social-ecological framework, supported by emerging empirical insights. Wise reasoning (i.e., intellectual humility, open-mindedness, recognition of broader perspectives and possible changes, integration of diverse viewpoints) varies dramatically across cultures, regions, economic strata, and situational contexts. By adopting a social-ecological perspective, psychologists can address some paradoxes about wisdom, including biases and errors in decontextualized versus context-variable assessments and a greater propensity for wise reasoning about social versus personal challenges, despite greater knowledge about personal issues. Moreover, an ecological perspective suggests the propensity for wisdom in the population can also shape its ecology and surroundings. This new approach to wisdom is enriching our understanding and exploration of practical wisdom as a mental process and an ecological asset for societies at large.

Keywords: wise reasoning, perspective-taking, intellectual humility, social class, ecology

## Wisdom is a social-ecological rather than person-centric phenomenon

Despite being praised by philosophers for societal and individual relevance, wisdom has for decades escaped the limelight of psychological inquiry. Wisdom-interested scientists have been drawn to person-centric characteristics making up the construct. Here, we argue that such person-centric approach has missed some of the defining features of wisdom, contributing to conceptual and methodological confusion. We present an alternative approach, characterizing wisdom from a social-ecological perspective. In our review of the empirical evidence, we focus on contextual roles of culture, region, economics, and situation in commonly agreed-upon features of practical

wisdom. Based on these insights, we highlight new questions inspired by the social-ecological perspective on wisdom.

### **Defining wisdom**

Wisdom can be defined in multiple ways [1]. Here, we adopt the notion of practical wisdom (cf. *phronesis*; Aristotle) [2]—a form of excellence in ethical and practical deliberation about the best course of action in a complex social situation [3]. Recently, behavioral and cognitive scientists have started converging on the idea that central to such deliberation are certain features of epistemic and social cognition that enable the successful navigation of social life’s challenges [4–6]: (a) appreciation of diverse viewpoints, (b) sensitivity to possible changes in perspectives, (c) intellectual humility or recognition of limits of knowledge, and (d) compromise or integration of different opinions. These features tap into the core functions Aristotle proposed for practical wisdom; namely, better perception of the specific situation and balance of different, sometimes conflicting, interests and values [3,7]. Notably, these features of cognition tend to converge on a latent factor that is distinct from general cognitive abilities and Big Five personality and uniquely predicts cooperation, interpersonal harmony, and subjective well-being [8].

### **Challenges of theoretical and methodological individualism**

Numerous social scientists have studied wisdom as a person-centric essence or immutable trait, embodied by only a handful of remarkable individuals [9]. To study wisdom, they focus on individual exemplars of wisdom (i.e., individuals nominated by their peers), examining these exemplars’ reflections on autobiographic experiences [10–12]. Even in research not explicitly ascribing to such a hyper-personal focus on wisdom, much of it attempts to understand the psychological processes of wisdom by focusing only on the individual, treating contextual factors as “noise” or measurement error. Additionally, scholars often administer single-shot, decontextualized scales [13–15] to measure wisdom-related characteristics, thereby implying wisdom can be reduced to people’s self-reports and assessment contexts dismissed. In short, the methodological approaches to studying wisdom have chiefly concerned the unique features of a person [9].

The person-centric approach to wisdom has provided some insights suggesting a relationship between personality and cognitive abilities and wisdom-related characteristics [16]. However, it has also contributed to a proliferation of global self-report measures of “wisdom” that are subject to social desirability biases [7] and inhibit scholars from developing a deeper understanding of the *processes* underlying wisdom in daily life. Moreover, the person-centric approach misrepresents the construct of *practical* wisdom, which originally was inherently context-sensitive [3]. Additionally, numerous wisdom exemplars are known for lapses in their wise judgment across different contexts [17], suggesting wisdom is not immutable and researchers should situate people’s thoughts and actions in a broader context. Finally, as reviewed below, emerging evidence suggests that social-ecological contexts fundamentally shape the development of and propensity for wise reasoning.

### **Towards a social-ecological approach to wisdom**

We propose to situate empirical insights about wisdom within a broader ecological systems framework [18,19]. In Figure 1 we point out the role of macro-level (e.g., cultural and regional affordances), socialization-related (e.g., social experiences and resources available to a person across their lifespan), and situational factors (e.g., situational contingencies) for wisdom’s development and expression [6,20]. This perspective is consistent with several earlier theoretical propositions that emphasized the role of ecological factors for wisdom [21,22]. Staudinger and

colleagues [21,23] proposed that wisdom-related characteristics are inherently social with respect to their sources, development, and expression. In particular, these scholars postulated that ecologically-grounded interpersonal challenges and uncertainties represent the major source of wisdom and that social context is necessary for successful development and expression of wisdom-related characteristics. Similarly, Sternberg's balance theory of wisdom [22] highlighted the integration of social-ecological factors such as interpersonal and extra-personal (i.e., group-level) interests as necessary for a holistic wisdom construct. Until recently, these claims were mostly theoretical. The emerging evidence reviewed below has started to fill this empirical gap.

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### **Macro factors: Cultural and regional differences**

On a macro-level, group differences in cultural practices and economic structure can fundamentally shape practical wisdom. Cultures differ in dominant themes in education. For instance, elementary school textbook analyses reveal that U.S. American culture promotes a view of the person as unique and independent from the social context, whereas Japanese culture promotes views of the person as embedded in a social context, guiding students toward greater perspective-taking and consideration of social context [24]. Initial evidence suggests cultural differences in education have consequences for wisdom, with greater reports of wise reasoning about societal and interpersonal dilemmas among random samples of Japanese (as compared to U.S. American) young adults [25].

Wise reasoning also varies across regions within the same country. Research from our lab compared wise reasoning in recent interpersonal conflicts among people from different U.S. states that differed in employment rates and median income. We found that at the state-level, affluence was inversely related to the propensity for wise reasoning [26], see Figure 2. At first glance, this finding may appear surprising; greater availability of resources is typically associated with superior performance on standard intelligence tests [27]. However, this pattern makes sense when considering prior literature on the role of ecology for human behavior [28]. When faced with resource scarcity, people may shift their focus to close relationships and in-group cooperation [29–32]—ecological adaptations that secure survival in resource-poor environments. It is, therefore, possible that wise reasoning about interpersonal affairs would be more prevalent in less (versus more) affluent environments, because it enables navigation and management of uncertainties within such environments [3,6].

### **Socialization-related factors**

Social experiences and personal resources across the lifespan can also produce wisdom-related differences. Thomas and Kunzmann [33] compared younger and older Germans on scenarios that were age-neutral or particularly relevant to younger adults' experiences. They observed higher wisdom scores among younger (vs. older) adults for these latter scenarios (e.g., marital conflicts) while there were no wisdom-related age differences for age-neutral scenarios (e.g., a friend's suicide attempt). Beyond the fit of people's social experiences to the issue at hand, wise reasoning also depends on resource-related adaptations. Brienza and Grossmann [26] found *individual-level* resources related to people's education and income—typical markers of class-specific socialization experience [34]—were inversely related to wise reasoning propensity. Consistent with the ecological adaptation explanation, these relationships did not generalize

beyond the interpersonal domain. Together, these observations suggest experiential contexts are essential for wise reasoning.

### **Situational-factors**

Ecological factors in a given situation impact wise reasoning as well. Wise reasoning is more pronounced when challenging situations involve a person higher in status than oneself [26]. Emerging evidence also indicates that people's wise reasoning about their daily challenges varies substantially and systematically as a function of the social-ecological factors they encounter in their lives [35,36]. In particular, people report more wise reasoning in the presence of close others or co-workers as compared to when they are alone [35]. This observation dovetails with an earlier experimental study [21] that suggested wise reasoning increased when preceded by a dialogue with a close other versus reflecting on the situation by oneself<sup>1</sup>. Thus, situations making up one's daily social ecology can have a substantial impact for one's propensity to show practical wisdom.

### **Paradoxical insights and novel questions**

A social-ecological lens on practical wisdom also allows for more in-depth insights about seemingly paradoxical findings. The first of these concerns the ability of context-sensitive measures of wisdom-related characteristics to minimize biased reporting and nonsense responses. As discussed earlier, decontextualized person-centric measures of "wisdom" are susceptible to strong social desirability bias. Moreover, questions of *general* wisdom-related tendencies may bring people's most salient—i.e., often least typical—memories to mind, providing potentially inaccurate measurements of *general* tendencies. By shifting people's focus from global, decontextualized self-reports to episode-specific, context-sensitive reports, researchers have shown that participants were less likely to present themselves in socially desirable ways [37] and suffer memory-related biases [37]. Brienza and colleagues [7] applied this method to their studies of wise reasoning and similarly found it attenuated bias in their samples.

Another paradoxical finding is people's greater propensity for wise reasoning when reflecting on others' dilemmas than their own [17,38], despite generally being more knowledgeable about the latter. Initial person-centered explanations for this finding suggested personal (vs. others') challenges are more emotionally intense, thereby inhibiting wise reasoning [39,40]. Recent work suggests, however, that heightened emotional intensity does not necessarily inhibit one's ability to reason wisely [41]. In contrast, an ecological explanation of this paradox would begin by highlighting that human evolutionary survival depended on successful mastery of social-coordination challenges in small groups [42]. This insight suggests that the main features of practical wisdom (e.g., open-mindedness, perspective-taking) evolved to solve social (e.g., involving other people) rather than personal challenges. If so, practical wisdom should naturally be more pronounced in social vs. personal contexts, suggesting that people may be able to enhance wise reasoning in personal contexts by adopting the mindset sensitive to social contexts (i.e., considering the bigger picture involving others). Prior research supports this suggestion: Instructions to take a self-distanced mindset promoted wiser reasoning in personal contexts [41,43,44] and reduced the wise reasoning asymmetry between social and personal contexts [17].

From an ecological perspective, one can further posit that humans' evolutionary survival also depended on the accuracy of knowledge and prediction [45]. This insight raises a new question: Did knowledge-related and social cognitive features of wisdom co-evolve? Empirical evidence so far suggests this may be the case, with ecological contexts facilitating social cognitive

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<sup>1</sup> As indicated elsewhere [6], evidence from this experiment by Staudinger and Baltes [21] was inconclusive due to confounds of conditions and time spent on the task.

processes such as perspective-taking or integration of diverse viewpoints also promoting knowledge-related features of practical wisdom concerning the recognition of one's limited knowledge or forecasting different ways a situation may unfold [17,41,43]. In a similar vein, knowledge-related features of practical wisdom are more likely to be activated when one is emotionally more attuned to the social environment [41].

Further experimental and computer simulation studies are necessary to bolster a view of practical wisdom as an evolutionarily prepared, yet ecologically malleable construct. It is not yet clear *whether* and *how* knowledge-related and social cognitive processes underlying practical wisdom evolved, or whether they reflect culture-specific forms of 21<sup>st</sup>-century meaning-making. Finally, given the mutual constitution of ecology and the mind [18], viewing wisdom as a social-ecological (rather than person-centric) concept implies that the prevalence (or absence) of wisdom-related characteristics in a population can also shape that population's social ecology. As seen around the world, social challenges abound [46,47] (e.g., rising individualism [32,48], loneliness, political polarization, social inequality, focusing on the short-term financial gain over long-term environmental sustainability). Applying the insight of mutual constitution to the notion of wisdom as an ecological phenomenon suggests practical wisdom has the potential to promote a less-polarized/more open-minded society by better balancing self-protective and cooperative goals [49], and by bridging short- and long-term concerns [46]. Promoting practical wisdom at the societal level is an important priority to help societies address increasingly common challenges such as climate change, poverty, and political engagement that require wise reasoning and integration of competing interests and concerns.

**Conflict of interest statement**

The authors have no conflict of interest to declare.

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\* of special interest

\*\* of outstanding interest

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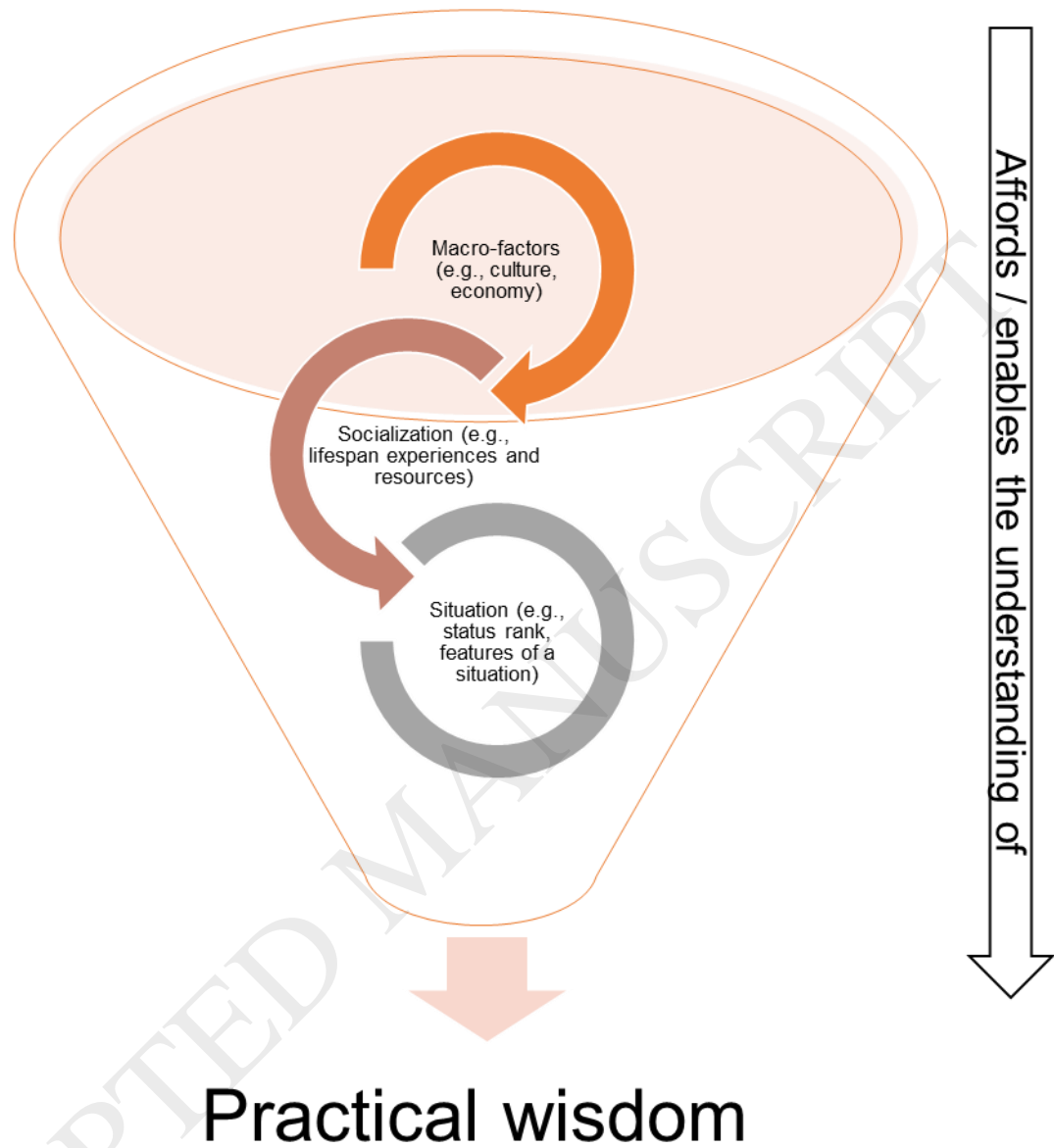
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*Figure 1.* An ecological framework of macro-level, socialization, and situational factors affording practical wisdom.

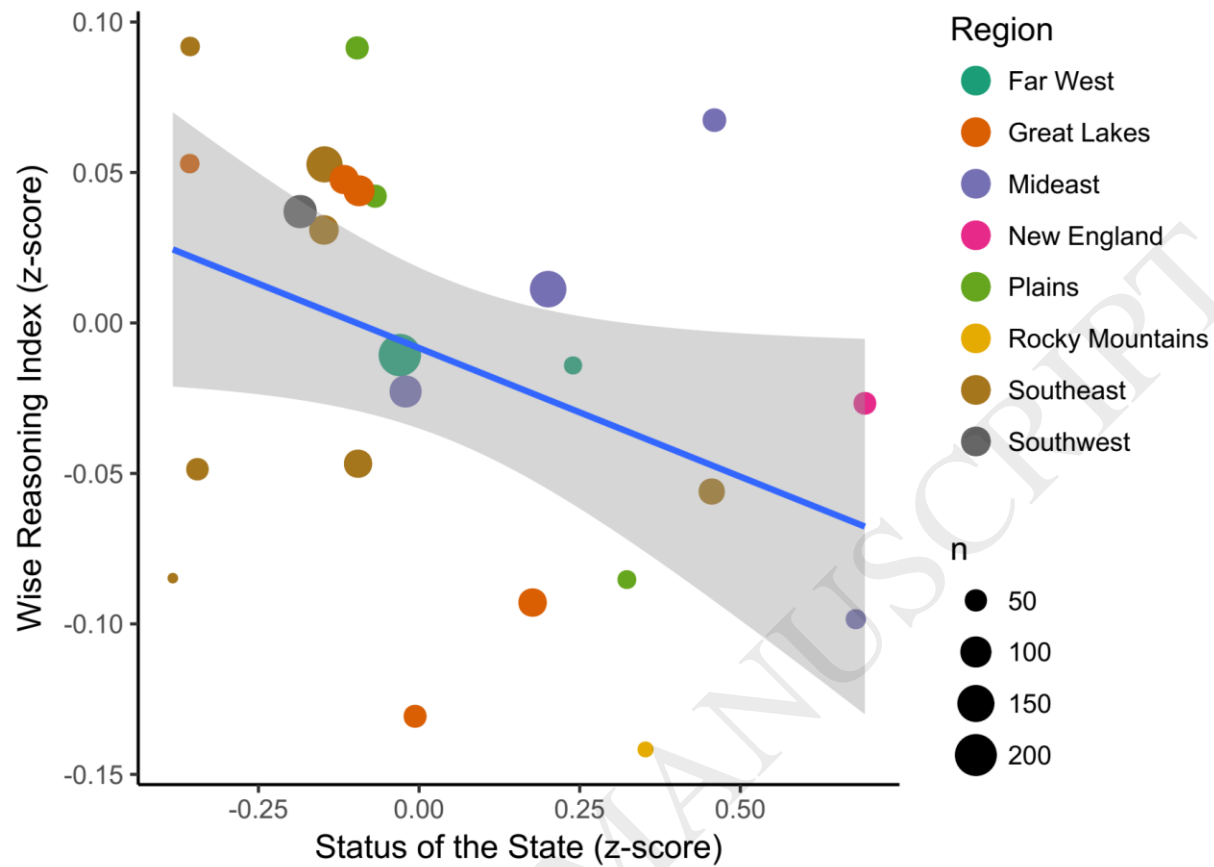


Figure 2. Relationship between resource-affluence of a U.S. state (composite of unemployment rates and median income of the region) and wise reasoning. Adopted from [26].