

The SAGE Encyclopedia of Lifespan Human Development

Intuition

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Intuitions are a heterogeneous class of mental entities that have one feature in common: They are easily generated or accessed, as well as manipulated, during cognitive activity. Intuitions can be beliefs, judgments, decisions, explanations, inferences, goals, or associations—any of these various mental entities qualify as intuitions as long as they are activated and used with little effort. (Many of these entities have nonintuitive counterparts as well; e.g., a judgment derived via effortful deliberation is not an intuition.) Intuitions are the currency of everyday cognitive activity—people routinely rely on content that is quick to access and easy to process, even in circumstances in which use of such content leads to errors. Intuitions also drive our behavior throughout the life span by shaping which goals we adopt and how we pursue those goals. This entry systematizes the vast research on intuitions by describing four major sources of human intuitions. Cataloging the origins of our intuitions also provides opportunities to discuss their developmental trajectory and to highlight their centrality to human thinking and behavior.

Domain-Specific Core Knowledge

Some of our most basic interactions with the world are guided by intuitions. For example, we intuitively understand that objects that are occluded from view do not simply cease to exist, that solid objects cannot pass through one another, and that unsupported objects will fall. These intuitive ways of understanding the world are likely part of the *core knowledge* shaped by our species' evolutionary history. Consistent with this idea, these intuitions are present early in infancy and persist throughout life, although they are, of course, enriched and refined via experience. Intuitions about other aspects of experience may stem from core knowledge as well. For instance, the ability to orient ourselves and navigate through space is likewise rooted in primitive, evolutionarily ancient intuitions, as is our reasoning about numbers and quantities: Even newborns can detect the abstract numerical equivalence between a set of objects and a set of sounds.

As argued famously by Noam Chomsky, language acquisition may also be guided by certain skeletal intuitions about how words can and cannot be combined. These intuitions may be part of the reason why children learn language as quickly as they do, especially when considering the syntactic complexity of human languages and the fact that the linguistic input children receive is far from complete. However, the content of these linguistic intuitions and the extent to which they are needed to explain language acquisition are still vigorously debated.

Finally, core knowledge intuitions may be at the foundation of human sociality. From the first few months of life, infants understand—arguably at an intuitive level—that other people's behaviors are due to unobservable mental states (e.g., goals, perceptions, beliefs). Infants also seem to have a rudimentary sense of good and bad. For example, they prefer social agents who help (rather than harm) others, and they expect resources to be distributed fairly even when their own interests are not at stake. These core sociomoral intuitions are continuous across development but are also overlaid with culture-specific principles, giving rise to the variety of moral belief systems observed across the globe.

Needs and Motives

Human behavior is driven by goals. Although we sometimes select goals via careful deliberation, many goals emerge seemingly spontaneously, guided by underlying needs and

motives (e.g., physiological needs such as hunger or thirst, social needs such as intimacy or power). Needs make it intuitive to select goals that fulfill them. They do this both by making salient the need-relevant stimuli in our environments and by facilitating the processing of information about these stimuli. As a result, selecting need-related goals is often cognitively easy. For example, when people feel hungry, information pertaining to food becomes particularly salient and easy to process, which makes the selection of the relevant goal (i.e., obtaining food) feel seamless. In fact, this process may be so seamless as to not even register consciously. Need-fulfilling goals are often activated and guide our behavior outside of awareness. Thus, needs and motives are a key source of the intuitive, often automatic, goals that underlie everyday behavior through the life span.

Learning

Humans are equipped with powerful cognitive mechanisms that allow them to learn about the world either directly (by observing and exploring their environments) or indirectly (by attending to social others). These two types of learning are available as early as infancy and are a key source of intuitions. Of the many beliefs we acquire via learning, those that are also routinely reinforced by our experiences with the world (e.g., that the sky is blue) or by our culture (e.g., that saying *thank you* is polite) will be easy to access and use during reasoning—that is, they will act as intuitions.

The intuitions acquired through learning are a major influence on our behavior. These intuitions dovetail with our needs to supply much of the cognitive content that goes into selecting goals: They shape both the perceived value of possible outcomes (e.g., which jobs we intuitively perceive to be desirable) and the expected probability of these outcomes (e.g., whether we intuitively believe we can attain those jobs); values and expectancies are major determinants of goal selection. Intuitions can also influence whether we accomplish our chosen goals. For example, learned intuitive associations between certain cues in the environment (e.g., being home) and certain behaviors (e.g., watching TV) can operate outside of awareness to undermine the pursuit of chosen goals (e.g., getting good grades). However, intuitions can also be harnessed to benefit goal pursuit: Strategically forming and rehearsing an association between a cue (e.g., being home) and a goal-directed behavior (e.g., studying) can make that association accessible enough that it is able to guide behavior in response to the relevant cue without any deliberation. Thus, by shaping goal selection and pursuit, intuitions exert a pervasive influence on human behavior.

Variability in the Inherent Complexity of Mental Content

Mental content varies in its inherent cognitive complexity. By virtue of their structure, some ideas are easy to grasp and manipulate mentally; others, however, require perceptible effort. The mental content that is cognitively simple is also a major source of intuitions—and, as a result, disproportionately influential in our thinking.

Two important classes of mental representations that differ in cognitive complexity, and thus in the extent to which they are featured in our intuitions, are representations of features and of relations. Both children and adults find it cognitively simpler to reason about the features of an object (e.g., the apple is red and juicy) than about relations involving that object (e.g., the apple is to the left of the cup). This difference has wide-ranging implications for people's ability to generate explanations, draw analogies, and perform comparisons—as well as for many other tasks that require relational reasoning but on which people often default to the

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more intuitive, feature-based mode of reasoning. Reliance on feature-based intuitive judgments is particularly pronounced in early childhood and wanes somewhat as working memory capacity increases with development.

Another noteworthy contrast in cognitive complexity, and thus in prevalence among intuitions. is that between generic beliefs and statistical beliefs about categories (e.g., dogs, men). A generic belief about a category attributes a property to the category as an indivisible whole (e.g., dogs bark). In contrast, a statistical belief encodes the frequency of a property among the members of the category (e.g., some/most/all dogs bark). Generic beliefs are cognitively simpler, and as a result, people use them more often than statistical beliefs when reasoning about categories and groups—even in cases where reasoning more precisely with statistical beliefs would be desirable (e.g., stereotypes).

Intuitions drive everyday thinking and behavior. Although their influence is most keenly felt early in life, intuitions remain a central part of our lives throughout the life span. Thinking and acting based on intuitions is in many ways adaptive, enabling us to navigate situations where deliberation would simply not be feasible. However, reliance on intuitions has clear disadvantages as well, from biases in reasoning to failures to accomplish important goals.

See alsoAction; Beliefs; Categorization; Cognition; Core Knowledge; Culture; Executive Functioning; Goals; Habit; Infancy; Learning; Morality; Problem-Solving; Reasoning; Self-Efficacy; Social Categorization; Stereotype; Theory of Mind

- intuition
- deliberation
- infancy
- cues
- dogs
- motives
- complexity

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Further Readings

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