# Self-Knowledge

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# Definition

Self-knowledge refers to the collection of representations *believed* to truly and accurately depict the Self. Like classic knowledge, Self-knowledge is acquired, stored, retrieved, and organized, and it conveys meaning and guidance on how to interact with the environment, in particular with other social beings. Unlike classic knowledge, Self-knowledge is not learnt from any textbooks or media but essentially from introspection and interactions. Importantly, Self-knowledge exists in many forms, such as knowledge of our past, our personality, or our life goals, and its accuracy is often difficult if not impossible to evaluate objectively.

# Introduction

The scattered current state of the study of Self-knowledge can be attributed to the fact that various domains of psychology have focussed on specific aspects of Self-knowledge, such as its domains of knowledge, the processes contributing to or influencing Self-knowledge (e.g., selfawareness), and the qualities of Self-knowledge (e.g., accuracy and structure). Self-knowledge can be about any aspect of the Self; this explains why no consensus has as yet been reached about the organization of these aspects into domains and their terminology. Neisser (1988), for instance, conceives of five kinds of Self-knowledge, pertaining to the ecological, interpersonal, extended, private, and conceptual selves. In practice, however, research on Self-knowledge seems organized according to the following main domains: episodic and sematic autobiographical memories, personality traits, attitudes, social identity, emotions, physical attributes, reputational attributes (e.g., public image, likeability), partner or relationship knowledge, goals and motives, physical and mental health, preferences and values, metacognitive knowledge, and future actions and performance. An emerging pattern across these domains is the separation Self-knowledge, of controlled, explicit, conscious, goal-driven processing of self-relevant information from automatic, implicit, unconscious processes influencing the processing of Self-knowledge. Unconscious processes typically bias the access to and formation of Self-knowledge, they are generally referred to as the **blind spots**. Accuracy is therefore a central measure in Self-knowledge despite the lack of a perfect criterion to ascertain the accuracy of Self-knowledge. A common criterion is self-other overlap, which is the extent to which other people's impressions match selfviews. These impressions can be provided by a single person but are generally constructed from the average of several people; it is known as the social consensus criterion. These people can be strangers (giving their first impressions), acquaintances, or judges (experts trained to judge

particular attributes of a person). Other criteria are the **pragmatic criterion**, which assesses the extent to which self-views predict future actual behaviour, and the **objective criterion**, which is provided by existing standardized measures, such as academic performance and IQ, and experience-sampling devices. Finally, more domain-specific criteria could be the statistical plausibility of a self-view (e.g., better than average) or the consistency with previously reported self-views (Schriber & Robins, 2012).

The present review synthesizes Self-knowledge research into sections addressing how Self-knowledge develops and is stored, organized, examined, influenced, and socialized.

#### The developing Self

To build up Self-knowledge, one needs a minimal form of **self-recognition** capacities to recognize and dissociate self- from non-self-information. Infant behaviours indicate they represent their own body as distinct from other entities, over which they can exert control and thus experience a **sense of body ownership**, a **sense of agency**, and more generally, a **subjective self** (Gergely, 2002). By year 2 they explicitly recognize their body and their face as their own. By year 3, they can tell whether an object was remembered in a self-referent context or not and they show a mnemonic advantage for material referring to self, which is commonly referred to as the **self-reference effect**. From that point, the Self as agent and experiencer becomes implicitly and explicitly encoded as such and explicit memory of the Self develops (Hart & Matsuba, 2012; Ross, Anderson, Campbell, & Collins, 2011).

#### Storing and organizing the Self

The central storing unit of the Self is autobiographical memory, which is an explicit memory system allowing to access episodic Self-knowledge by recollecting episodes of our life and the semantic Self-knowledge by retrieving facts about ourselves that have been abstracted or inferred from commonalities across episodes (D'Argembeau, 2015). Autobiographical memory also indexes self-views resulting from future thinking, which refers to imagining oneself in the future, either as a first-person experienced episode, commonly referred to as episodic future thinking, or as an abstract thinking about future personal goals and self-schemas (D'Argembeau, 2015). In addition to accessing already acquired Self-knowledge, autobiographical memory allows to form new Self-knowledge by recollecting our past experiences and inferring what they say about us. Autobiographical memory also provides a sense of continuity of the Self over time and ensures the maintenance of a coherent Self identity, including established social connections. Critically, memory recollection is often a re-construction exercise that is easily biased by the selective retrieval of features that are, for instance, most accessible to mind (accessibility bias) and most congruent with current mood (mood congruency bias), by filling in the voids (especially when recollection is based on semantic memories), or by appropriating non-lived memories as our own (due to failed source monitoring). These biased and false memories are eventually stored as if they were authentic memories (Kelley & Jacoby, 2012).

Aggregations of episodic and semantic Self-knowledge form distinct **Self-schema**, which are sets of representations thematically organized around key features of our life (e.g., my lifegoal to win an athletic competition, my insomnia, or my high-school years). Different organizations of the Self-schema have been proposed. Cognitive neuroscience distinguishes between the **conceptual Self** containing most abstract representations such as life goals and Self identities, the general knowledge containing generic information about the Self and the past, and the episodic memory system containing the detailed memories as they were lived (Conway, Justice, &

D'Argembeau, 2019). Another approach, known as **Self-structure** research, is to consider that the Self can be multiple, since we have different identities or roles in different contexts (e.g., as a mother versus as a police agent). Two main measures of the multiplicity of the Self are termed **Self-complexity** or **Self-Concept differentiation**. Self-complexity highlights the richness of the Self and its adaptive functions (e.g., adapt to different contexts) whereas Self-Concept differentiation or **compartmentalization** of the Self and its maladaptive outcomes (e.g., fragile and incoherent identity). Relatedly, **Self-concept clarity** (or Self-clarity) inspects the extent to which our Self identity is clearly and confidently defined, coherent, and stable (Pilarska & Sucha, 2015; Showers, Ditzfeld, & Zeigler-Hill, 2015).

# **Examining the Self**

The most important activity by which we reach Self-knowledge is Introspection, which refers to the action of examining our inner world (e.g., feelings, goals, memories) in contrast to the external world. Introspection is often further characterized by the following key concepts: Selffocus refers to the mental activity of focussing attention on the Self. Self-awareness refers either to the capacity for introspection or the state of awareness of one's own thoughts (Silvia & Gendolla, 2001). Self-insight is generally considered as a synonym to Self-knowledge but its more technical definition is an extended state of awareness which requires awareness of the (i) content of the experienced mental state (or its association with an object, such as "being mad at my neighbour"), (ii) the cause that triggered the mental state, and (iii) the past or future consequences of the mental state on behaviour (Gawronski & Bodenhausen, 2012). Metacognition refers to the capacity to think about one's own thoughts (as self-awareness) but is often assimilated to the formation of and access to knowledge about one's skills and to the real-time monitoring of performance and learning. These cognitive processes or states may be considered as prerequisites to access and form Self-knowledge via introspection but they don't necessarily lead to accurate Self-knowledge, which actually depends on the type of introspection/self-awareness achieved (Hixon & Swann, 1993). The main distinctions are (i) private/public self-awareness, whether the self-information is private (e.g., my secret motives) or public (e.g., how others see me), (ii) ruminative/reflective self-awareness, whether the motives are negative feelings or an intellectual curiosity for the self, and (iii) whether the introspection aims to address why one experiences a specific mental state versus what the mental state is; ruminative and why-driven introspection are less likely to result in accurate Self-knowledge (Hixon & Swann, 1993; Morin, 2011).

A characteristic feature and function of introspective reasoning and autobiographical memory re-construction is the **narrative Self**. Narrative psychology distinguishes between two modes of thinking, the **paradigmatic mode**, which uses logical explanations to build a rational account of reality, and the **narrative mode**, which uses subjectively meaningful interpretations to build a coherent account of our identity. Critically, the narratives serve to bind the past, present and future episodic events of our lives into a coherent temporal sequence. These narratives are also marked by **causal coherence**, the narratives contain explanations to link different sets of actions, **thematic coherence**, the characteristic features of the identity (e.g., personality trait, life goal) are recurring themes of the narratives, and **cultural coherence**, the narratives tend to espouse cultural templates of how lives unfold. The narrative mode forms Self-knowledge that is accurate only to the extent that the story is believable by an external audience while the paradigmatic mode forms accurate Self-knowledge to the extent that the explanation is verifiable despite the fact that these explanations may challenge the coherence of the identity (Adler, 2012). Individuals may shift from one mode to another, depending on their motives.

#### **Influencing the Self**

Our construction of Self-knowledge is guided by four main **motives**. The **Self-enhancement** motive (or **positivity striving**) refers to striving to put the Self in a positive light and away from threats. The **Self-assessment** motive refers to the need to achieve accurate Self-knowledge in order to reduce uncertainty about the Self. The **Self-verification** (or **self-coherence**) motive refers to striving for maintaining self-perceptions coherent with the established Self-identity or self-views held by important others. The **Self-improvement** (or **self-expansion**) motive refers to striving to develop new facets of the Self (Strube, 2012). The preponderance of one motive over others varies across contexts (see below) but also depending on individuals' self-esteem, clarity of the self, or personality types (Schriber & Robins, 2012).

These motives can lead to various forms of bias and illusion in our Self-knowledge. Fuelled by the Self-enhancement motive, the most pervasive bias is the tendency to hold or produce positively-biased self-views; which goes along with a series of related illusions. The 'better-thanaverage' illusion consists in believing that we are better than the average other on many aspects despite statistical unlikelihood. The unrealistic optimism illusion translates into expecting unrealistically positive outcomes, especially if they result from our actions. The **illusion of control** consists in over-confidence that an expected outcome is dependent on our own actions. Relatedly, magical thinking translates into thinking we are the cause of an outcome when there is no scientific account of this causation. The prediction illusion consists in being over-confident in accurately predicting our future behaviours or mental states. The illusion of objectivity (or naïve realism) consists in erroneously believing that our decisions and perceptions are objective and thus devoid of biases. The self-serving attributional bias refers to the tendency to consider oneself to be the cause of positive outcomes and external and/or uncontrollable factors to be the cause of negative outcomes. The Self-verification motive, on the other hand, is fuelled by the confirmation bias, which translates into selecting information that confirms our beliefs, including beliefs about our Self-identity. In contrast to Self-enhancement, Self-depreciation (or selfdiminishing) consists in producing negatively-biased self-views, including seeing oneself as lower than average or expecting pessimistic future outcomes; self-depreciation characterizes psychological disorders such as depression and anxiety. An underlying illusion partly explaining these biases and illusions is the introspection illusion, which refers to over-weighting selfinformation originating from introspection (in opposition to external sources) when forming Selfknowledge. Additional biases in Self-knowledge may also originate from other known unconscious tendencies or attitudes, such as social conformity, prejudices, and egocentrism (Hansen & Pronin, 2012; Leary & Toner, 2012; Schultheiss & Strasser, 2012). Finally, the most drastic case of inaccuracy in Self-knowledge is self-deception, which refers to inaccurate beliefs that are so deeply motivated that they resist awareness of contradictory evidence (Paulhus & Buckels, 2012).

Generally speaking, the probability for Self-knowledge to be biased depends on which motive best fits the context and the verifiability of Self-knowledge. The benefits of expressing positively-biased Self-knowledge, for instance, such as building a positive public self-image, often outweighs the associated risks, such as social rejection (but the risk for overestimation of social status increases). At the same time, contexts in which accuracy is valued and external standards are available will prompt Self-assessment. Verifiability depends on whether the content of Self-knowledge has low **observability** (or external visibility) or no clear standards (e.g., being creative); cases of low verifiability tend to bias Self-knowledge (Strube, 2012). Congruently, self-observation of behaviour is consistently found to be less biased than other ways to form Self-knowledge. However, uncertainty (or **mutability**) about a trait (e.g., generous) has been shown to

foster associated behaviours (e.g., give to a charity) that signals to the Self a positive self-view about this trait; a phenomenon known as **self-signalling** (Bodner & Prelec, 2003). Finally, ignorance and misinformation are obvious contributors to inaccurate Self-knowledge.

# The socializing Self

The second main source of information to form Self-knowledge is other people, by comparing to them, by reflecting on the impressions of us they express, or by inferring their impressions of us. Social comparison is a pervasive mental activity leading to Self-knowledge through either assimilation ("I am like my best friend") or contrast ("I am smarter than my neighbour"). Accuracy can be compromised by self-enhancement motives as we tend to intentionally perform assimilative comparisons against similar people and contrastive upward or downward comparisons with superior or inferior others, respectively (Suls, Martin, & Wheeler, 2002). **Reflected appraisals** are the appraisals of the Self expressed by others, which have been converted into self-appraisal to form Self-knowledge. Before being converted into Selfknowledge, the appraisals that others have of us are also referred to as metaperceptions, and accuracy about how accurately we guess how people in general or a specific person sees us is termed generalized or dyadic (or differential) meta-accuracy, respectively. Although highly correlated with Self-knowledge, metaperceptions are not believed to be true depictions of the Self but simply external subjective views of the Self; knowledge of this distinction is called metainsight. Metaperceptions, however, have their own biases such as the tendency to assume that other people see us as we see them, known as **assumed reciprocity**, and that they share our mental attributes (e.g., personality traits), known as assumed similarity. The knowledge typically inferred in these social contexts pertains to the social (or interpersonal) Self, which namely includes knowledge of our social identities (e.g., group membership), family ties, social skills, and particularly reputational attributes (likeability, attractiveness, social status) (Srivastava, 2012). Other people's perceptions are generally more accurate than individuals' perceptions of themselves for attributes with a high motivational relevance because motives are likely to bias selfperceptions. Other people are however less accurate for low observability attribute (Vazire, 2010).

Reliance on other people as a source of Self-knowledge varies across individuals and contexts. For instance, younger people are more likely to assimilate others' inputs than adults because their self-concept is not yet well-established. Self-enhancement and self-verification motives might lead individuals to disregard, respectively, negative appraisals from others (via self-serving attribution bias) and appraisals conflicting established self-views (via the objectivity illusion). In addition, individuals are more likely to weight the opinions of people they wish to affiliate with, according to the **social tuning hypothesis** (Srivastava, 2012).

#### Conclusion

Self-knowledge covers any type of information relevant to the Self, from knowledge of physical appearances to knowledge of the limited Self-knowledge we possess. We all seek Self-knowledge, not necessarily for its accuracy but also for giving a meaningful narrative to our past, present and future actions, a sense of continuity over time, a sense of being both unique and similar to others, a sense of being tied to other people, and a sense of having one coherent and stable identity. Is accuracy necessary to well-being? The answer is a matter of debate. Overestimating your capabilities leads to systematic failures, frustrations, and risky choices but it also prompts confidence and motivation. Self-enhancing illusions seem helpful to cope with stressful, challenging and traumatic events but not to bond lasting relationships. Maladjustment and

psychopathology are associated with inaccurate Self-knowledge but one can ponder whether mental health is simply a prerequisite to accept accurate self-views. Most importantly, believing to be more intelligent, important, and rightful than others is the starting point, not for compromise, but for acts of violence such as World Wars, genocides, and terrorism (Leary & Toner, 2012). Unfortunately, on the path to accurate Self-knowledge we all walk blind to the very illusions that bias our knowledge of ourselves.

**Cross-references:** Self-Enhancement Bias, Self-Complexity, Self-Concept, Self-Concept Clarity, Self-concept structure, Self-Schema, Self-Appraisals, Self-Awareness, Self-Enhancement Motives, Self-Reflection, Metacognition, Agency.

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