

Developing Self-Awareness: Learning Processes for Self- and Interpersonal Growth

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Keywords

self-awareness, self-insight, mindfulness, reflection, rumination, feedback

Abstract

Self-awareness—how we see ourselves and the effects we have on our environment—influences our behavior and the type of person we want to become. This article examines recent research and areas of practice that address the meaning of self-awareness and how it develops over time. We build on extant comprehensive reviews of the literature to define self-awareness and its accuracy, measurement, and effects, including the dark side of being overly introspective. We offer a framework to integrate theory-based processes. We present the results of a literature search of educational interventions aimed at increasing mindfulness through reflection, feedback, and coaching. We conclude with calls for research and implications for practice in areas of measurement, tracking changes, interventions, and self in relation to others in areas of societal impact, self-presentation on digital media, and promoting self-awareness in relation to organization and team membership.

INTRODUCTION

We cannot change what we are not aware of, and once we are aware, we cannot help but change.

—Sheryl Sandberg (2013, p. 151)

Self-awareness development is a hot topic in contemporary culture around the world and across many disciplines. We found studies for our review from China, Qatar, South Africa, Spain, Turkey, the United Kingdom, and the United States, among others, that examined employee self-awareness. In addition, self-awareness development is included in educational programs in such areas as health care (physician, nurse, and pharmacist training), business (master of business administration, public administration, entrepreneurship, and corporate leadership programs), undergraduate student development, teacher training, clinical and counseling psychology, and social work. The goal of this article is to articulate how self-awareness and, more specifically, the development of self-awareness have been conceptualized and applied in organizational psychology. Drawing on and integrating key concepts from recent comprehensive literature reviews on self-awareness (Carden et al. 2022, Chon & Sitkin 2021, Eurich 2017, Rasheed et al. 2019), as well as recent research in self-awareness development, we define self-awareness, consider how it is measured, and examine individual and situational antecedents and consequences of changes in self-awareness to understand how it is affected by, and affects, interpersonal relationships, work behaviors, and outcomes throughout a person's career. We acknowledge that self-awareness development has a potential dark side—being too introspective at the expense of recognizing external pressures, demands, and expectations. Given the breadth of concepts and relationships identified in our review, we synthesize the literature in an integrative model of affective, cognitive, and motivational processes facilitated by situational support to develop resilience, self-insight, and self-identity. We review interventions aimed at increasing self-awareness and positive outcomes. The integrative model and review of interventions lead to our call for future research and practice on self-awareness development.

Defining Self-Awareness

At its heart, self-awareness is the ability to see ourselves clearly (Eurich 2017), that is, to become the object of our own attention. Recent reviews (Carden et al. 2022, Chon & Sitkin 2021, Eurich 2017, Rasheed et al. 2019) agree that the definition of self-awareness across the literature has been conceptualized in several ways. **Table 1** describes the content and process of self-awareness. The content of self-awareness has internal and external components. Internal self-awareness includes our affect, beliefs, cognitions, interests, goals, personality, values, and meaningful life patterns. External self-awareness includes our perceptions of our physical appearance and our behavior. External self-awareness also includes a social aspect of self-awareness, specifically, our self-evaluations in relation to what others tell us (feedback), our perceptions of how people relate to us and the effects our behavior has on others, and the extent to which we act in ways that are sensitive to others. Internal and external components of self-awareness are evident in concepts that have slight distinctions but may be used as synonymous with self-awareness: self-insight and self-knowledge (what we know about ourselves and our environments) and self-image and self-identity (how we see ourselves and how we think others see us in our various roles) (see **Table 1** for definitions).

The process of self-awareness includes thinking about ourselves such that we become aware of our characteristics, sustain this awareness, and use it as we behave and interact with others. Thought processes include introspection, self-examination, and self-absorption (Carden et al. 2022, Chon & Sitkin 2021). Authors have referred to these processes as reflection, rumination, metacognition, and mindfulness. Reflective self-awareness is continuous attention to the self, with

Table 1 Definitions of self-awareness and related concepts

Self-awareness content	
Internal self-awareness	How people perceive themselves—their own values, interests, and goals—and their impact on others (Eurich 2017, 2018) Internal mental states, in particular, feelings/emotions and cognitions/thoughts (Carden et al. 2022) When attention is directed inward, the object of his own consciousness (Chon & Sitkin 2021, Duval & Wicklund 1972) Awareness of one's attitudes, beliefs, emotions, and motives; recalling past internal states and thinking about who we will be in the future (Wilson 2009); accuracy of one's internal states (Klimoski & Hu 2021)
External self-awareness	Thoughts about how others perceive us (Eurich 2017, 2018) “Process of becoming aware of one's physical and physiological traits, emotional states and feelings, and meaningful life patterns, actions, beliefs and preconceived ideas” Rasheed et al. (2019, p. 765) “The similarity or difference in the way a person sees himself or herself, compared to how they are perceived by others” (Murphy et al. 2008, p. 258)
Internal and external integration	“A range of components, which can be developed through focus, evaluation and feedback, and provides an individual with an awareness of their internal state. . . that drives their behaviors. . . and an awareness of how this impacts and influences others” (Carden et al. 2022, p. 164) The ability to see ourselves clearly—to understand who we are, how others see us, and how we fit into the world around us (Eurich 2017, 2018)
Self-insight	The strengths and weaknesses we see in ourselves and our perception of resources, opportunities, potential rewards, and barriers (London 1983, 1995)
Self-image	The network of psychological dimensions that encompass how we view ourselves and our roles; dimensions include self-efficacy, self-esteem, self-liking, self-confidence, internal control, and openness to learning (Tafarodi & Swann 2001)
Self-identity	Closely related to self-image, self-identity includes the idiosyncratic attributes that one sees in oneself and the roles one has and wants to achieve (London 1983, Maurer & London 2018, Swann 1987)
Self-awareness processes	
Reflective self-awareness	Continuous attention to the self, with a focus on conscious, reflective, and balanced learning motivated by curiosity in the self (Itzchakov et al. 2018, Sutton 2016, Trapnell & Campbell 1999)
Ruminative self-awareness	Attention to self that is motivated by perceived potential or current threat, loss, or injustice (Itzchakov et al. 2018, Trapnell & Campbell 1999)
Metacognition	Knowledge of one's own thought processes and awareness of one's abilities (Jia et al. 2019, Zimmerman & Schunk 2001)
Mindfulness	“Receptive attention to and awareness of present moment events and experiences” (Brown et al. 2007, p. 212); trait mindfulness—the propensity to be aware of present moment experiences (Hülshleger et al. 2021, Leyland et al. 2019)

a focus on conscious and balanced learning motivated by curiosity or interest in the self—what we are and what we have the potential to become (Itzchakov et al. 2018, Sutton 2016, Trapnell & Campbell 1999). Ruminative self-awareness is attention to self that is motivated by perceived threat, loss, or injustice (Itzchakov et al. 2018, Trapnell & Campbell 1999). The tendency to reflect about ourselves; ruminate about our weaknesses; and generally be mindful of our capabilities, needs, interests, and desires can be a disposition—an individual difference such that some people are internally driven or have developed the ability or habit to engage in processes that sustain and increase their self-awareness (Sutton 2016). Metacognition is knowledge of one's own thought processes and abilities (Jia et al. 2019). Mindfulness is awareness of experiences at the

present moment (Brown et al. 2007). **Table 1** presents examples of how content and processes of self-awareness have been conceptualized in the literature.

Self-Awareness Accuracy

We are poor judges of our own capabilities, with an average correlation of 0.29 between self-evaluations and objective assessments (Dierdorff & Rubin 2015). This has been explained by the difference between one's implicit and explicit self-view. One's implicit self-view is that portion of one's self-concept that is embedded in one's unconscious. One's explicit self-view is that portion of one's self-concept of which one is conscious. The difference between the two may cause over- or underestimation of one's abilities (Alicke et al. 2020). Measures of accuracy may be derived from how self-perceptions differ from test scores, behavioral assessments, and observations from others (e.g., supervisors and peers) or from behavioral assessments (e.g., evaluations from assessment centers; Collins & Hartog 2021). Over- or underestimating one's abilities can lead to negative outcomes or to missing positive outcomes. Either could lead to low emotional well-being (e.g., depression or feelings of being ridiculed from failure or self-blame for what could have been if our fear of failure had not prevented us from trying; Wilson 2009). As such, self-knowledge is likely to affect motivation and style of behavior. For instance, new leaders' behaviors are reinforced by feedback and outcomes, which in turn generate dominant styles of leadership based on situational conditions (London & Sherman 2021). Individuals give up or integrate past identities to form a new identity as a leader and the type of leader they are or are becoming. This self-identity affects their future motivation to lead and leadership style (Maurer & London 2018) (see the sidebar titled *Spirals of Leader Self-Identity*).

Measures of Self-Awareness

Self-awareness measures are often self-reports. Some measures focus on the process of self-awareness—how people describe gaining self-awareness through reflection and seeking and discussing performance feedback. These can determine an individual's readiness to engage in interventions that encourage self-reflection and mindfulness. For instance, a general self-awareness scale asks respondents to rate how well their personal experience shapes their goals and whether they know how their personality influences the way they behave (Lu & Wan 2018). Another measure, the Self-Reflection and Insight Scale (Grant et al. 2002), asks respondents for ratings on 20 items about their tendency to reflect on the self and the extent to which they believe they have insight into their own behavior. Trapnell & Campbell's (1999) Reflection Rumination Questionnaire is similar.

Other measures focus on the content of self-awareness. These can be useful for predicting whether people are likely to seek or accept tasks that they can perform well and whether they

SPIRALS OF LEADER SELF-IDENTITY

Day et al. (2009) distinguished between positive and negative spirals of leader self-identity. Positive spirals occur as favorable events and outcomes unfold. For instance, team members in initially leaderless groups come to see themselves as team leaders when they realize that fellow members are following their suggestions and guidance (Jiang et al. 2021). As leaders stretch their capabilities, generate positive outcomes, and see themselves as role models for others, and give less importance to their old roles and relationships, they increase their identity as leaders (Kragt & Day 2020, Maurer & London 2018). However, negative spirals can occur when leadership actions and decisions do not produce positive outcomes.

recognize what they need to learn to improve their performance. The Mindful Attention Awareness Scale (Brown & Ryan 2003) measures trait self-awareness on 15 items using 6-point scales. Sutton (2016) compared these measures to a measure called the Self-Awareness Outcomes Questionnaire, which contains 38 items measured on 5-point scales. The analysis yielded four factors: reflective self-development (e.g., “I have insight into myself”), acceptance (e.g., “I am realistic about myself”), proactiveness at work (e.g., “I see my work life as something I have power to affect”), and emotional costs (e.g., “I feel vulnerable”). Other means of evaluating self-awareness ask participants to keep observational journals or collect trained observers’ opinions of assessee’s self-objectivity—the accuracy of their self-perceived characteristics—during interviews, assessment centers (cf. Thornton 1992), and feedback coaching sessions and compare self-ratings to others’ judgments about their performance (Atkins & Wood 2002).

Effects of Self-Awareness

Self-awareness is important to our behavior, satisfaction, and performance (Carden et al. 2022). It contributes to better decision making and team performance (Dierdorff & Rubin 2015), increased leadership success (Showry & Manasa 2014), and more opportunities for career advancement (Axelrod 2012). Self-awareness brings many psychological benefits, including increased self-regulation, more attention to others’ needs (pro-sociality), and less stress and anxiety (Donald et al. 2019, Hali et al. 2021, Hülshager et al. 2021, Rasheed et al. 2019). Self-awareness affects behaviors and outcomes through internal states (e.g., self-confidence, self-identity) and accuracy of how we believe others view us and how we perceive others. Individuals who are low in self-awareness are likely to exhibit self-protection mechanisms such as denial, withdrawal, self-aggrandizement, and fear of failure (Wohlers & London 1989). As people become more self-aware, they become more resilient and better at adaptive performance—the ability to analyze uncertain, stressful situations; identify possible solutions; improvise; and maintain composure (Park & Park 2019). Preparing for difficult situations, for instance, emergency response training, increases individuals’ feelings of self-efficacy and readiness to adapt when the need arises (Chen et al. 2005, Kraiger et al. 1993). Leaders who are higher in self-awareness generally have higher levels of performance (Cashman 2014). Leaders who are more self-aware are better able to incorporate others’ assessments about them into the way they see themselves, and as a result, they are better able to adjust their behavior and improve their performance (Murphy et al. 2008). Personal self-awareness is an attribute of authentic leadership. It is reflected in the way authentic leaders think about their values, identity, emotions, goals, knowledge, and capabilities (Chen et al. 2005, Steffens et al. 2021). Steffens et al. (2021) distinguished between personal and collective self-awareness (how leaders are perceived to have a deep understanding of the teams or organizations they lead).

The dark side of self-awareness. Processes that contribute to self-awareness can have dysfunctional consequences. Just because you are aware of something about yourself does not mean you can benefit from that awareness. White-knuckle alcoholics know they are alcoholics but do not take positive actions to address their issues. Instead, they try to use their mind and willpower to fix it. Self-awareness can lead to excessive self-inspection, making it difficult to function or perform (Ariel et al. 2018). Self-serving biases (Duval & Silvia 2002) and self-deception (Showry & Manasa 2014) cause us to invent answers that are not necessarily true. Indeed, people need to learn to manage discrepancies between self and feedback from others, particularly when the feedback is unfavorable and unexpected (Whetten & Cameron 2016). Feedback about one’s behavior that is inconsistent with one’s self-view can be disconcerting and lead to withdrawal, denial, depression, or other such negative feelings that hamper our ability to function (Kluger & DeNisi 1996, London 2015).

The ways others act toward us, especially when we speak about ourselves, can increase rumination and foster a dark side of self-awareness. As people are speaking, they tend to become more self-aware when they believe they are being heard. They become more self-reflective when they feel they are being listened to. That is, when a listener focuses on the speaker's message, the speaker's cognitive and emotional frame of reference increases (Kluger & Itzchakov 2022). Listeners who convey a judgmental attitude show little understanding. They may inaccurately paraphrase what they think the speaker meant, ask irrelevant and closed-ended questions, or exhibit nonverbal behaviors that signal disinterest and inattention. This tends to increase the speaker's anxiety and decrease the speaker's psychological safety, although this effect may be lower for people who are less interpersonally sensitive (Itzchakov et al. 2018, Kluger & Itzchakov 2022). Alternatively, listeners can act in ways that make us feel we are being understood and psychologically safe to express our thoughts and engage in introspection.

Another dark side of self-awareness can emerge from being too self-centered and introspective. Chon & Sitkin (2021) outlined characteristics associated with effects of high levels of self-awareness, such as aggression, narcissism, emotional regulation, humility, and perspective taking. A balanced approach to self-awareness recognizes the dark side of self-awareness, including anxiety and depression, that may stem from awareness of one's own flaws and emotional insensitivity from self-centered thinking and habituated self-reflection (Chon & Sitkin 2021, Walsh & Arnold 2020). Individuals who tend to be self-centered, particularly if they are more egocentric and narcissistic, are not likely to care about how others see them (Clawson 2010). This can result in blind spots, shortcomings, derailments, and failures. Dysfunctional self-awareness can occur when individuals misread how others see them, avoid or ignore information about themselves, maintain a self-perception that does not relate to their behavior or how others see them, act defensively in response to unfavorable feedback, and/or routinely blame others for negative outcomes and attribute any positive outcomes to themselves. Feedback aimed at helping individuals control their implicit biases by making them aware of their biases may have the opposite effect by stimulating feelings of threat and invoking self-protective defense mechanisms (see the sidebar titled *Implicit Bias*). Interventions that decrease their feelings of self-blame and offer behaviors to increase perceived control over biases can motivate people to recognize their biases and commit to overcome them (Vitriol & Moskowitz 2021).

Summary

Self-awareness includes both content and process. The content of self-awareness is an awareness of our internal states, our external appearance and behavior, and our social interactions and environments. Over- or underestimating our abilities as compared to objective data on how others see us can have dysfunctional outcomes in establishing goals and recognizing our true level of performance. The process of self-awareness includes engaging in activities in which we turn attention to ourselves. Generally, self-awareness has positive effects on our health and well-being, although there is a potential dark side to being too introspective or too ruminative to the exclusion of

IMPLICIT BIAS

Alerting people to the unintentional effects of their behavior toward others can foster their self-knowledge and change how they act. If we understand implicit bias, we can guard against such biases in the future (Onyeador et al. 2021). Training can help individuals recognize their implicit bias and develop more accurate frames of reference against which they evaluate others and their own behavior (Uggerslev & Sulsky 2008, Wilson 2009).

accurately understanding the effects we have on the world around us. Self-awareness about negative qualities (e.g., one's biases) can be threatening, causing us to seek ways to reduce feelings of blame and increase control.

THEORY-BASED STRATEGIES FOR SELF-AWARENESS DEVELOPMENT

In their review, Rasheed et al. (2019) suggested three general types of strategies for developing self-awareness: (a) theory-based strategies that use various frameworks for developing and improving self-awareness; (b) educational and teaching interventions, which we identified from a search of the literature on self-awareness development; and (c) personal interventions—those that people initiate on their own. Here we consider theory-based strategies for self-awareness development.

Self-awareness is not “one truth” (Eurich 2018) but is rather a balance of processes and content of how we perceive ourselves in different roles and situations over time. Although many people believe they are self-aware, that they are able to see themselves clearly, some research suggests that only 10% to 15% of people are self-aware (see Eurich 2017). Self-awareness development as a lifelong process is the deliberate inception, and then broadening and deepening, of both the content of self-awareness and the processes or activities used in our pursuit of self-awareness. Over a lifetime, people learn about what self-awareness is and the importance of it. They learn about self-awareness processes and then to engage in them, become better at them, and use them in a more complex and deep manner. They learn more about themselves and how their internal and external self-awareness are interconnected. Theories of self in adult development, learning, and motivation are useful for understanding self-awareness development. We consider each below.

Key Adult Development Theories

There is no shortage of theories of adult self-development. We list and briefly describe several in **Table 2**. These processes unfold over time. Adult constructive development theories such as those proposed by Kegan (1994) and Laske (1999) argue that self-awareness evolves and develops over a lifetime from simpler to more complex. According to Kegan (1994), humans are engaged over their lifetimes in a continuous process of meaning making. Kegan theorizes that this process leads individuals from being completely embedded in their own subjectivity to potentially being able to take themselves as objects. Depending on where adults are in this journey, this meaning-making governs their relationship to themselves, their roles, work, and their world in general. Thus, the self is continuously evolving (Laske 1999).

Experiential learning theory. Kolb & Fry's (1975) experiential learning model highlights the value of taking time for self-reflection to realize what we know and do not know about ourselves and how we relate to other people. Cycles of learning occur as one engages in reflection, drawing inferences about desired behavior change, experimenting with new behaviors, taking action to change behavior on the job, engaging in further reflection about the action and its outcomes, and continuing and deepening in a spiral of learning cycles (Passarelli & Kolb 2021). Adaptive performance models hold that we learn by handling uncertain situations. This helps us recognize our skills and abilities and the degree to which we meet task requirements. This increases our sense of self-efficacy, which in turn helps us collaborate with team members, set goals, and monitor progress (Chen et al. 2005, Kraiger et al. 1993). Generally, developing greater and more valid self-knowledge helps people improve their interpersonal relationships, which in turn contributes to better job performance (Klimoski & Hu 2021).

Table 2 Theoretical drivers of self-awareness processes

Self-assessment	People want and seek accurate information about themselves (Sedikides 1993).
Self-monitoring	People follow and evaluate themselves in relation to a standard that they perceive (Silvia & Duval 2001).
Self-regulation	People control their behavior in relation to perceived standards of favorable behavior and are motivated to meet these standards (Baumeister 1998).
Self-enhancement	People seek information that maintains their positive view of themselves (Alicke & Sedikides 2009, Swann et al. 1987).
Social identity	We see ourselves differently in different situations and groups (Tajfel & Turner 1986).
Self-categorization	Through the process of self-categorization into different group members, individuals come to see characteristics of the group in themselves (Turner & Reynolds 2010).
Intentional change	People may have different selves that are relevant to them in different contexts, and in any given situation, particularly a new situation; they consider which self applies and what skills and competencies are needed (Taylor 2006).
Social cognition	One's self-efficacy enables people to control their own thoughts, feelings, and behaviors and control their personal, cultural, and social goals and achievements (Bandura 1986).
Self-determination	Intrinsic motivation is connected to mindfulness; through mindfulness, "people's motives become more informed by their intrinsic interests, abiding values, and deep priorities" (Ryan et al. 2021, p. 301); benefits include well-being and pro-sociality (Ryan & Deci 2017).
Intentional change	People discover their real selves through reflection, learning, practice, and experimentation as they develop trusting relationships (Boyatzis 2006, Taylor 2006).
Implicit personality	An individual holds beliefs about the malleability of personal attributes, such as ability and personality, that influence behavior (Dweck 1999).

Motivation theories. Self-awareness fits within a nomological network of concepts and theoretical models of relationships associated with motivation. Early social psychological theory and research suggest that becoming self-aware initiates the development of a standard or a mental representation of a "correct person" (Duval & Wicklund 1972), "ideal self" (Boyatzis 2006), or future possible self (Markus & Nurius 1986). Discrepancies between the self and the standard motivate individuals to close the gap. They could do this by attributing the gap to themselves and actively changing and developing to be more congruent with their standard, or they could change the standard. A third option is that people could avoid self-focusing stimuli and circumstances (Silvia & Duval 2001, p. 231). Thus, the content of our self-awareness helps us perceive what we can or want to accomplish. This acts as a motivational spark to close the gap. Intentional change theory (Boyatzis 2006) argues that individuals pick how they want to change and that changing in desired ways takes intentional effort.

Career motivation theory links one's sense of resilience, self-awareness, and self-identity (London 1983). Self-awareness is a motivational spark. When we have insight into our abilities, interests, and goals and about our environment (others' expectations of us and opportunities), we perceive what we can accomplish. Our self-identity is the direction for our motivational energy, that is, what we want to achieve (say, a position of leadership). Resilience is the set of characteristics (e.g., self-esteem, self-efficacy, and internal control) that give us confidence to persist, especially in the face of barriers. Thus, developing self-awareness content leads to stronger self-identity.

An integrative framework of self-awareness development. In adulthood, self-awareness content develops as we become aware of our internal states and capabilities. People develop self-awareness content as they increase their understanding of how they compare to their perception of societal or organizational standards, others' expectations, and their own goals and values. Self-awareness processes, such as mindfulness, contribute to a clearer focus of our internal states, biases, and external stimuli. Given the disparate content and processes of self-awareness, we

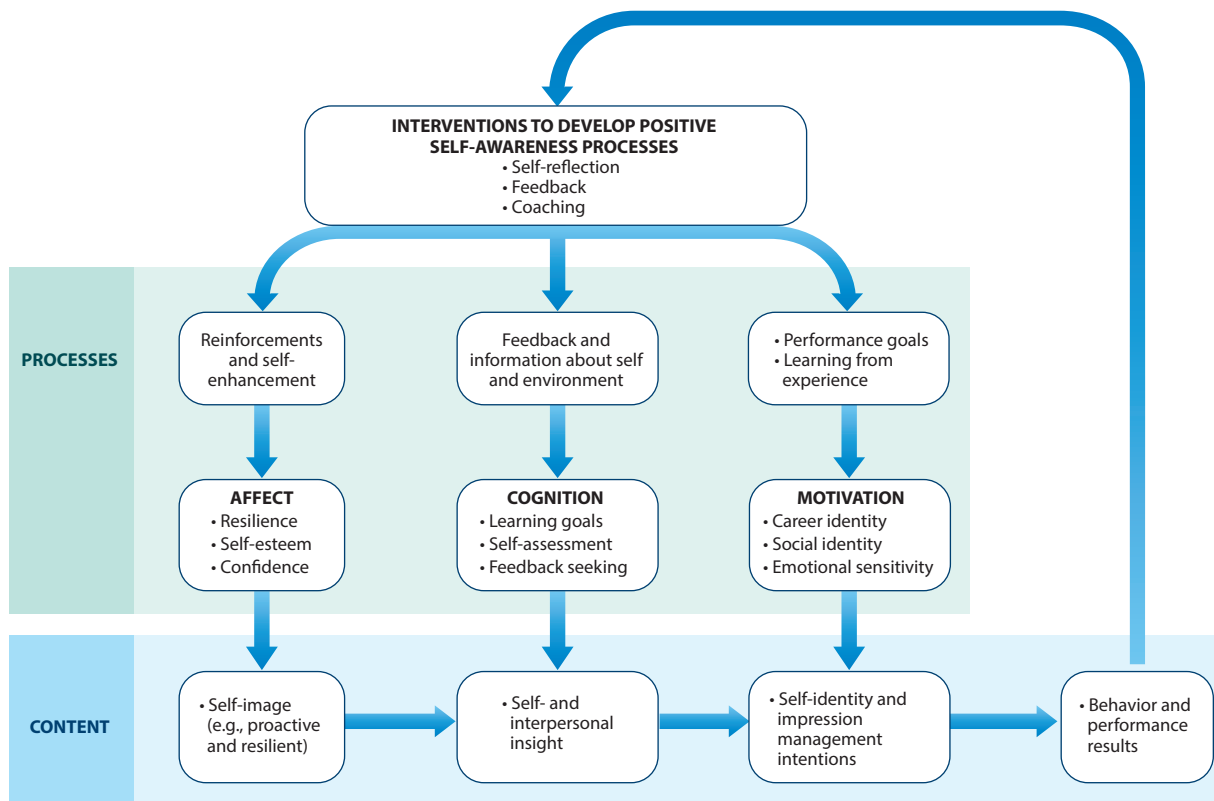


Figure 1

An integrative model of positive and continuous self-awareness development through self-reflection, feedback, and coaching.

offer a framework that integrates components of self-awareness; how self-awareness develops over time; and how self-awareness affects, and is affected by, dispositional characteristics and situational conditions across a person's career and in different organizational contexts. We draw on Chon & Sitkin's (2021) distinctions between content and processes of self-awareness and between affective, cognitive, and motivational constructs associated with internal and external self-awareness. There is also a social component to external self-awareness, how we see ourselves interacting with others, and social self-awareness. **Figure 1** summarizes these key self-awareness development processes for how self-awareness changes (strengthens, diminishes, and changes in content) over time. The model includes antecedents of self-awareness and how self-awareness shapes our behavior. Our actions lead to learning and outcomes that reinforce our resilience—our ability to be proactive, persist, and overcome barriers toward goal accomplishment. This is a foundation for developing self- and interpersonal insight. This is knowledge about ourselves and others—the spark that motivates us to formulate goals and actions that shape our self-identity and the type of person we want to become.

The processes in the model encompass situational events (e.g., supervisor relationships) and employees' feelings, thoughts, and motivation. This incorporates resilience, insight, and identity underlying career motivation. Reinforcements (e.g., praise) strengthen employees' self-esteem and confidence, over time increasing their resilience in the face of challenges and increasing their tendency to be proactive in seeking feedback and opportunities for development. As such, resilience

is the foundation for greater self-insight and understanding of others. Insight about capabilities and opportunities contributes to self-identity.

Overall, as ongoing, dynamic processes, the integrative model proposes seeing oneself as resilient, being insightful about oneself and others, and having a clear self-identity. This influences performance-related behaviors, which in turn continue to support self-focused affect, cognition, and motivation. These processes are not always a virtuous cycle. Lack of reinforcement, feedback, and learning experiences can weaken resilience, insight, and identity and result in inaccurate self-views and dysfunctional behaviors and attitudes. Examples would be misreading others' cues or experiencing disappointment when goals are not met or positive results do not materialize. This is in line with Kluger & DeNisi's (1996) finding that feedback can be dysfunctional if it threatens one's self-image.

Our integrative model highlights how people garner information about themselves and their environments, particularly how they perceive others and how others perceive and react to them. Self-reflection must be accompanied by thinking about the world outside ourselves. Being too self-centered, perhaps from dwelling on negative outcomes, can result in misreading job requirements, others' expectations, and our capabilities, causing us to misjudge our performance and miss opportunities. Receiving information about ourselves (e.g., tests of our capabilities), if we pay attention to it and process it mindfully, stimulates self-awareness and builds self-knowledge, forming self and interpersonal insight. This is the spark that suggests to us what we can accomplish in our lives and careers and the type of person we want to become (the behaviors we want to exhibit and the impressions of ourselves that we want to create and reinforce in others). Our social identity and emotional sensitivity contribute to how we see ourselves in different roles within and outside the organization. Our self-image, especially possessing characteristics that make us proactive and resilient, often develops early in life but likely changes as we learn from our successes and failures. This occurs throughout our careers and lives. Role and life changes may result in merging new identities with the old or changing or reshaping our identity.

Motivation to learn and support for self-awareness development. Table 3 suggests how different combinations of motivation to learn more about oneself and support for self-awareness development produce different results over time. People who are motivated to learn about themselves and receive support, for instance, in the form of constructive feedback and coaching given in a way that promotes psychological safety, are likely to grow in self- and interpersonal awareness. After a positive experience in self-learning, they are likely to continue to seek this information,

Table 3 Self-awareness development

Support for self-awareness	Motivation to learn more about oneself	
	High	Low
High	Growth <ul style="list-style-type: none"> ■ Growth of self- and interpersonal awareness ■ Benefits from reinforcement of ability ■ Proactive—seeks input and takes initiative for continuous improvement and pro-sociality 	Stagnation <ul style="list-style-type: none"> ■ Generally oblivious to self and others unless made aware ■ Self-awareness and empathy are fleeting without ongoing support ■ Possible unwanted potential actions (ego-driven achievement motivation and externally controlled motivations)
Low	Self-focus <ul style="list-style-type: none"> ■ Increasingly self-centered ■ Focus on self-enhancement ■ Narcissistic 	Decline <ul style="list-style-type: none"> ■ Low self-image; low empathy for others ■ May expect, and even seek, unfavorable feedback to verify negative self-image

take the initiative for their own continuous improvement, and provide similar support for others' self-development. However, too much self-reflection at the exclusion of openness to environmental conditions is likely to produce self-centered behavior. Without the support of feedback and coaching, highly introspective individuals are likely to ignore others' needs and focus on their own aggrandizement. In the extreme, this becomes narcissistic. People who spend little time on self-reflection may stagnate, maintaining a level of self-knowledge that no longer fits how others see them and how they perform. Their self-awareness and empathy for others may be fleeting. However, they may be jogged into recognizing how they affect others and can address others' needs when information in the environment becomes salient. This may happen when there is a crisis that cannot be ignored or there are vocal complaints by significant others (subordinates, one's supervisor) about one's behaviors or decisions. Yet another possibility is when individuals spend little time understanding themselves and are in an environment that is unsupportive and possibly debilitating, for instance, when being harassed or bullied. This can create a situation in which one seeks feedback that verifies their low self-image.

These are dynamic processes that emerge over time. The results can be changed in positive directions by interventions that promote constructive combinations of mindfulness and support. This can occur through self-development as individuals take charge of their own self- and interpersonal growth, including seeking information and advice that help them understand themselves and the conditions (others' needs and capabilities and organizational expectations, goals, and challenges). Their organizations, through supervisor attention, coaching, and training, can foster positive growth. However, organizational conditions can also hamper this growth or cause decline. Individuals who are not open to self-awareness, perhaps because they have not had positive experiences that reinforced openness to learning in the past (e.g., a highly critical supervisor, toxic organizational culture, lack of developmental opportunities) may face continued self-deprecation and low empathy for others. Organizational environments that do not foster self- and interpersonal awareness are likely to create a stale climate marked by maintaining the status quo and missing the benefits of individuals who are enthusiastic about what they can accomplish with others.

EDUCATIONAL INTERVENTIONS

Most of the research on self-awareness development during the last five years has been based on educational interventions and personal practices. We conducted literature searches using the terms "self-awareness" plus "develop," "learn," "change," and "improve" in the titles of articles in APA Psychological Abstracts, APA PsychInfo, EBSCO Host, and ProQuest from 2016 to 2021, limiting the searches to research studies that measured self-awareness and changes in self-awareness of college students and working adults. This resulted in a total of 42 articles. These are summarized in **Supplemental Table 1** and accompanying supplemental references. **Supplemental Table 1** includes the citation, the research design (e.g., pre- and post-test, post-test), the sample size, how self-awareness was conceptualized and measured, the findings, and our comments about the research.

Our literature review covered just the last five years to determine the level of current focus of research on self-awareness. We found that the latest research has concentrated on educational interventions. The results showed a wide range of interventions to increase self-awareness content and processes, including reflective practices, mindfulness interventions, coaching, leadership development programs, experiential learning, and feedback interventions. However, this research was limited in several ways. Most of the research was qualitative and based on an analysis of a small number of participant responses to post-intervention surveys and interviews, although some

Supplemental Material >

MAINTAINING GAINS FROM SELF-AWARENESS TRAINING

A few articles in our review noted that the interventions take time and are resource intensive for facilitators and participants, limiting their use. Others noted that the interventions provide safe holding spaces for the development of self-awareness that are not available outside the programs (Svalgaard 2018). As a result, although self-awareness process interventions might lead to increased self-awareness processes or content, participants may have trouble maintaining continued change and development once away from the training program (Svalgaard 2018).

conducted pre-post designs or some sort of multiple waves. Mostly, methods for assessing self-awareness development focused on self-reports during or soon after the intervention. Much of the research focused on developing general self-awareness, internal self-awareness, and mindfulness; very little focused on external self-awareness. There was little attention to understanding or measuring the processes underlying the interventions or their long-term value. Also, there was little attention to underlying theories of adult development or motivation to guide these interventions and practices. In addition, there was an absence of longitudinal research to determine whether individuals continue to develop their self-awareness after the intervention, let alone throughout their careers. Nevertheless, to understand self-awareness development, it is necessary to explore the theory-driven processes that underlie self-awareness development and whether interventions can transfer to work settings (see the sidebar titled Maintaining Gains From Self-Awareness Training).

Most of the published research focused on interventions in educational contexts. Often, a process of self-awareness was introduced either in a stand-alone intervention or as part of a larger intervention. Content of self-awareness was then assessed. In **Supplemental Table 1**, we separate articles for the following categories of self-awareness development: (a) reflective practices; (b) mindfulness interventions; (c) coaching interventions, including both preparing coaches and the impact of coaching; (d) leadership programs; (e) experiential learning programs; (f) art-based programs; (g) feedback interventions; and (h) self-assessment via instruments. The most prevalent were mindfulness interventions, feedback, and coaching.

Mindfulness interventions. Reviewing the application of mindfulness to organizational psychology, Hyland et al. (2015) highlighted three elements that are central to defining mindfulness: (a) a focus on the here and now (present-focused consciousness); (b) recognition of both internal states (thoughts, feelings, bodily sensations) and external stimuli (sights, sounds, smells, events); and (c) an open and accepting attitude, paying attention without judgment, memory, or bias. Mindfulness interventions often include various forms of meditation, such as breathing exercises. Mindfulness training increases one's ability to modulate one's behavior, that is, to be self-regulated (Hülshager et al. 2021).

Mindfulness has been found to (a) reduce employee stress and burnout and help employees cope with change and increase engagement and job satisfaction (Andrews et al. 2014, Hülshager et al. 2013, Reb et al. 2013, Sutton et al. 2015); (b) generate higher levels of emotional intelligence, which includes self-awareness, self-management, social awareness, and relationship management (Hyland et al. 2015, Salovey & Mayer 1990); and (c) make executives more cognizant of their abilities, less inclined to be overly confident, and more open to others' feedback. This is consistent with the importance of self- and interpersonal awareness to executive success (Hogan et al. 2011). Trait mindfulness (nonjudgmental present-moment attention and awareness) increases employees' ability to stay on course and sustain effort in pursuit of goals during a work week, which in turn increases performance (Dust et al. 2022). State mindfulness interventions (e.g., listening to a short audio recording that induces a mindful state of present-moment awareness) increase feelings

of focus and induce a positive attitude and perspective taking, shifting focus away from the self toward others, leading to gratitude and prosocial behavior (Sawyer et al. 2022).

Feedback interventions. Feedback is central to how people learn to see themselves and others. Generally, the goal of feedback is to reduce blind spots and broaden individuals' awareness of their behavior in relation to others' expectations and observations by becoming aware of how others see them (Pienaar & Nel 2017). Feedback can come directly from a supervisor or other coworkers or by participating in, and receiving the results from, various assessment methods, such as multi-rater (360°) feedback surveys, personality inventories, or assessment centers (Collins & Hartog 2021). People can become observers of their own behavior, recognizing what they are doing and the effect they have on others.

Seeing oneself through others' eyes takes openness to feedback and practice. In terms of openness, people consciously or unconsciously block uncomfortable feelings, motives, and judgments and forget negative experiences. Some people may have an inflated view of themselves (overraters). Others' views may disconfirm the impressions we have of ourselves. An individual's openness to feedback influences the extent to which the individual integrates, assimilates, and acts on the feedback (Pienaar & Nel 2017). Having feedback from multiple sources that provide data on the agreement among raters can improve feedback accuracy and help individuals reflect on the meaning of the feedback, including what may account for others' differing views (Smither et al. 2005). Feedback of results from personality inventories, such as the Myers-Briggs Type Indicator, aims to help people identify tendencies and areas for improvement and motivate behavioral change. However, there is limited evidence that such feedback alone improves performance unless further support is available, such as coaching (Jelley 2021).

Coaching. Coaching from a supervisor or a professional executive coach can increase self-efficacy, motivation to learn, positive goal orientation, trust, interpersonal attraction, and desire for more feedback and coaching (Bozer & Jones 2018, Carden et al. 2021, Hullinger et al. 2019). As a means of increasing self-awareness, coaching discussions should be specific, with impressions from different sources about what went well and what can be improved. This can be accompanied by discussions about goals for development (Drawbaugh et al. 2021, Levy et al. 2017, London & Smither 2002).

SELF-INITIATED, PERSONAL INTERVENTIONS

Mindfulness practices are often part of personal self-development, that is, practices that people initiate on their own. Rasheed et al. (2019) categorized stimuli for self-development: (a) making a deliberate choice to engage in self-awareness; (b) thinking (personal reflection, introspection, and feedback), which is the impetus for engaging in self-awareness development; (c) acknowledging personal values; (d) recognizing one's historical, cultural, and social understandings of self and family values; and (e) identifying meaningful life patterns. Owning self-development means taking initiative to be more self-aware and using feedback to improve one's performance (Willink & Babin 2015). For instance, physicians who are most receptive to data-driven feedback about patient progress and outcomes are those who have a growth mindset and are motivated to use their own data (Kamhawry et al. 2021). As another example, people who successfully transition from team member or subject matter expert to leader (e.g., are promoted to their first leadership role) recognize the expectations of the organization and their ability to be a leader (based on ongoing feedback and mentorship) and take the initiative to lead in ways they believe will fit the challenges of the position (London & Sherman 2021). Ultimately, self-awareness development is an individual iterative learning process, sometimes proceeding rapidly, possibly brought on by sudden role

Erratum >

transitions, unexpected challenges, or traumatic events or more slowly over time as one gains more experience, receives feedback, observes role models, and is coached.

However, consistent with the dark side of self-awareness mentioned above, mindfulness can make an individual too introspective to the extent of ignoring or paying little attention to the world around them. As a result, they may be “harmed, cheated, disappointed, and/or disaffected” (Van Dam et al. 2018, pp. 37–38). They may search for new positions, give up vying for advancement, or become lax, exerting less effort to help coworkers or even meet organizational goals (Hülshager 2015). Choi et al. (2022) suggested that a balanced approach is needed to understand the effects of mindfulness on individuals and the organization and determine the individual and situational boundary conditions that have positive or negative effects.

Summary

Self-awareness development is multifaceted, with a range of theoretical foundations and methods for education and training as well as self-development throughout one’s career and life. Adult development, experiential learning, and motivation theories provide directions for self-monitoring, experimentation, and learning. However, our literature review revealed that many interventions recommended for professional growth have less of a theoretical foundation than they do assumptions and guidelines for practice. The most prevalent are mindfulness training, feedback, and coaching. Individuals often take it upon themselves to develop personal strategies for self-awareness development.

DIRECTIONS FOR RESEARCH AND IMPLICATIONS FOR PRACTICE

Development of self-awareness is at the heart of personal and professional growth. Here we consider a range of ideas for research and practice. We focus on designing valid measures of self-awareness to track how people change and grow over time and discuss the use of more sophisticated designs and measures to develop specific elements of self-awareness process and content and ways to measure change. We also consider designing targeted interventions to affect key developmental processes, and how people develop a sense of self in relation to others. We summarize our recommendations for research and practice in **Table 4** and in more detail in **Supplemental Table 2**.

Designing Valid Measures of Self-Awareness

Research can address whether people accurately perceive their skills and abilities and how they are perceived by others, as well as their tendency to self-reflect and seek and process feedback about themselves. However, asking employees for self-ratings of self-awareness and related measures is insufficient because individuals are not necessarily self-reflective and may have an inaccurate view of themselves, over- or underestimating their capabilities and performance. Also, relying on agreement between multiple raters as an indication of self-objectivity or the agreement between self- and others’ ratings may be insufficient indicators of self-awareness. People behave differently in relation to different individuals. The extent of agreement in ratings on various behavioral and performance dimensions may not be an accurate reflection of the performance, and employees may have different views of themselves than others in different roles (Herbst & Conradie 2011, London & Smither 2002). Herbst & Conradie (2011) pointed to the need for valid measures of self-awareness that are independent of multi-rater assessment instruments, even though multi-rater assessment results are valuable to stimulate thought and discussion with one’s supervisor and/or coach and reflection about self-awareness. Self-ratings can be compared to objective

Table 4 Directions for research and implications for practice

Focus	Directions for research	Implications for practice
Designing valid measures of self-awareness		
Develop valid measures of self-awareness	Measure internal and external self-awareness Assess agreement between self and others' ratings and objective indicators of behavior	Use multiple indicators of self-awareness measured over time Discuss disagreement in ratings Train assessors on standardized, realistic tests (web-based assessment centers)
Using measures to track changes in self-awareness over time		
Integrate self-awareness processes and content	Assess situational and internal affective, cognitive, and motivational processes of self-awareness development (Figure 1) Examine motivation, support, and trajectory of self-awareness change over time with input from multiple sources (Table 3)	Ensure psychologically safe and constructive reinforcement, feedback, and goal setting
Designing targeted interventions		
Focus on biases in over- and underratings	Examine effects of over- and underrating on career progress Compare managers who applied for a promotion they did not get with those who were promoted after the same length of time Interview executives about changes in their self-awareness	Recognize employees' aversion to risk, self-sabotaging, and tendency to set unrealistically high goals
Examine the impact of self-awareness on goal setting during role transitions	Study self-awareness at the time of a major role transition and later	Coach individuals during major role transitions
Develop profiles of individuals' self-perceptions	Identify characteristics and changes in the profile over time	Help individuals assess their profile of characteristics over time; online technologies may be useful, including simulations
Determine when people are more open to learning	Examine openness to self-awareness development during transitions	Provide assessment, feedback, and support for goal setting during role transitions
Examine reactions to feedback	Study reactions to ways supervisors present unfavorable feedback Study individuals who react in constructive ways to disappointments and career barriers	Design self-management and coaching to help individuals deal with, rather than avoid or deny, unfavorable feedback
Identify methods that focus on future self-image	Design action research to compare methods for self-awareness development	Track effects of methods to support employees' self-awareness development Train and expect supervisors to reinforce employees' self-awareness development Develop an organizational culture of self-awareness development
Identify ways people present themselves to others on social media	Correlate data from social media self-presentations with other indicators of self-assessment Study how others' reactions to their social media posts influence individuals' changes in their self-awareness	Design media and training to help individuals conceptualize their self-identity and present information about themselves clearly and professionally

(Continued)

Table 4 (Continued)

Focus	Directions for research	Implications for practice
Self in relation to others		
Develop situational sensitivity methods	Determine whether people who misjudge their own capabilities also misjudge situational conditions	Provide information about situational conditions that impose barriers and facilitate goal accomplishment
Examine how society impacts self-awareness development	Study societal and organizational factors that influence self-awareness development	Identify the norms in the organization for participating in self-awareness development Assure equal availability of support for self-awareness development opportunities
Assess the extent to which people acquire team identity	Identify the development of characteristics of collectives	Develop interventions that identify team-level characteristics; simultaneously publicly reward individual distinctive accomplishments
Recognize how team members affect each others' self-awareness	Study how team membership affects self-perceptions Study how competitive relationships undermine or support self-confidence and identity	Train team members to engage in feedback discussions that are mutually supportive and constructive or destructive

indicators of behavior and performance when they are available, for instance, for sales positions, units sold in comparison with goals, and the performance of others in similar territories who face similar advantages and barriers. Physical and cognitive abilities can be measured objectively and compared to individuals' self-perceptions (e.g., how they think they performed on a test compared to others). Organizations may use assessment centers to evaluate managers' potential for advancement and as a basis for feedback, using trained assessors and objective tests to evaluate individuals in different standardized, realistic exercises (Thornton 1992). This suggests that there is no one indicator of self-awareness and that multiple measures are needed for research and practice. Further, these multiple indicators of self-awareness should be measured over time in relation to feedback, learning, behavior change, and change in performance outcomes.

Using Measures to Track Changes in Self-Awareness over Time

Measuring self-awareness over time can track increases in the complexity of the content and process of self-awareness as the individual grows and develops. We may see changes to responses to such survey items as "I realize that I have multiple identities in relation to the different people with whom I live and work" and "I see how I change my behavior in different situations." Evidence of self-awareness development may derive from people's reports of what they do to deepen their self-awareness, for instance, their responses to questions such as "I take time out to think about my behavior and why others react to me the way they do" and "I am not comfortable when people give me advice." Assessments of self-awareness development require longitudinal designs to determine changes over time, ideally throughout adulthood.

Research is needed on the conditions that determine the impact of self-awareness and that make self-awareness more or less important to behavior—for instance, when individuals have choices that make a difference to affect their own and others' performance and their career opportunities. Further, given the potential value of developing and sustaining accurate self-awareness and the possible risks of too much attention to self-reflection, research on self-awareness development should examine the effects of developing self-awareness on career progress and personal growth, as well as the combined and cumulative effects of interventions to increase individuals'

self-awareness. These can be addressed by testing and considering ways to apply possible trajectories of self-awareness development (Table 3) as individuals are increasingly motivated to learn about themselves (Figure 1). Measuring the components of the process and content of self-awareness will demonstrate how situational conditions and interventions influence the affective, cognitive, and behavioral components of self-awareness through self-identity emergence and change. Constructive feedback—i.e., feedback given in a positive, confidence-reinforcing tone, with coaching on directions for behavior change—should develop the recipient's self-insight, encourage feedback seeking, and lead to higher levels of interpersonal sensitivity and prosocial behavior. Multiple sources of input are important, recognizing that self-perceptions may not be accurate or may become stale and outdated, especially for individuals who are not introspective or lack support for self-awareness development.

Supervisors can learn how these different processes affect components of self-awareness over time. In particular, supervisors can learn how employees process information about themselves and how they influence employees' affect, cognition, and motivation by creating a psychologically safe environment in which employees feel free to talk about their weaknesses without consequences. The reinforcements employees receive for what they do well build their self-confidence and openness to learning. Supervisors can assess subordinates' tendency to be self-reflective and how organizational support improves employees' self-awareness and thereby fosters their openness to learning and continuous improvement. However, this may not occur for all individuals. Some employees may be more dependent on support, whereas others may be more self-motivated.

Designing Targeted Interventions

Intervention practice and evaluation research can target specific self-awareness processes and content. Consider the following: biases in self-perception, goal setting at times of transition, profiles of self-perceptions, characteristics associated with openness to learning, factors related to reacting positively to feedback, and a desired future self-image.

Biases in self-perceptions. Recognizing that people are generally not good judges of their own performance, several questions arise: What self-perception biases derail goal setting and career advancement? Overrating can lead to setting unrealistically high goals. Underrating can lead to not striving to maximize one's potential (the imposter syndrome; cf. Langford & Clance 1993). When do risk aversion, self-sabotaging, and planned failure, or the converse, optimism and overconfidence (e.g., a bias for fast action without fact finding), become fatal flaws affecting future behavior? Supervisors can learn to recognize these biases and coach employees toward more accurate awareness of their abilities and potential.

Goal setting during transitions. During role transitions, resilient feedback seekers may relish information that is difficult to hear but useful for making realistic self-assessments, revising goals, and changing behavior. But not everyone is so resilient. Since role transitions are times for evaluating future potential and setting goals, do self-centered individuals develop unrealistic expectations about their future? Do low self-image individuals underestimate their potential? Are self-centered or low-self-image individuals likely to seek ways to support their success? Answering such questions will help employees interpret feedback mindfully during the transition process.

Profiles of self-perceptions. Here we wonder what characteristics define individuals' self-image, that is, aspects of ability, personality, thought, and emotion that are central to different aspects of their life. Researchers and practitioners can construct profiles of primary, secondary, and tertiary characteristics that may vary by individual and context (e.g., work and nonwork) and change over time. Such profiles can help practitioners understand and possibly predict employee

behavior in specific contexts under specific conditions. Perhaps a hierarchy of dominant and secondary characteristics is common among individuals in particular roles and from particular educational, socioeconomic, and cultural backgrounds. If so, development interventions can help people recognize and deploy these characteristics to best advantage for themselves and the organization.

Openness to learning. What are the best times during a person's career and life for assessment and reflection? Is it during transitions when a person acquires new roles; when there are frame-breaking innovations in one's discipline; or when disruptive events affect their employment, such as reorganizations? People may be more open to learning about themselves during early-, middle-, and late-career transitions with the attendant differences in goals, responsibilities (e.g., due to promotion, job change, a shift in family situation), and events that provoke reactions (e.g., being passed over for a promotion or a choice assignment, achieving an important accomplishment, working on a significant assignment, reporting to a new manager, or managing a difficult employee). Also, people may learn about themselves at different rates when their circumstances change (Day et al. 2021, Kragt & Day 2020). This notion of how environmental and developmental changes affect openness to learning is consistent with research on career-stage transitions as inspiration for learning (Levinson 1986). An example is how individuals deconstruct and reconstruct their self-identity when they transition from team member to leader (London & Sherman 2021, Maurer & London 2018). Transitions are times when people are likely to be open to learning but also are vulnerable to unfavorable information or disappointment. As such, organizational interventions should recognize the sensitivity of individuals' self-image during these times. Research can explore how the ways organizations and supervisors handle major changes affect the extent to which employees integrate their commitment to the organization in their self-identity, and how this in turn influences their loyalty, performance, and turnover intentions.

Positive reactions to difficult-to-hear feedback. When do individuals have positive, self-affirming responses to disappointments and reinvent themselves, as opposed to dysfunctional, self-confirming responses that diminish their self-worth? Difficult work experiences, such as harassment, disappointment, or envy, and transitions to uncertain, complex environments can decrease employees' self-worth and threaten their self-identity (Matheson et al. 2015). However, employees can engage in self-management strategies that create and reinforce their self-concept, thereby protecting their self-identity, or restructure their identity in new directions if pressures on the old self-identity are too great (e.g., as a result of job loss) (Petriglieri & Petriglieri 2020). Individuals can compensate for upsetting or unfavorable events by engaging in activities that affirm their self-worth. Coaches and training can help them learn these responses instead of having the emotions associated with the event spill over into other aspects of work and life (Staines 1980). Employees may compensate for loss in one area of life by engaging in actions for which they have control and that can produce a feeling of self-worth (Cohen & Sherman 2014, Steele 1988). For instance, a manager who does not receive a coveted promotion may devote efforts to other pursuits, such as advancement in a professional association or charitable organization, or engage in efforts that yield self-fulfillment, such as music, cooking, or other pursuits they can explore to see if they have a continued interest and talent. Even if these efforts are not recognized and reinforced by others, intrinsic satisfaction may be self-reinforcing, helping them to maintain, strengthen, or even revise their self-concept (Caza et al. 2018). Essentially, they can test the feasibility of different self-identities—for instance, whether they could be a good artist or chef rather than corporate manager (Dutton et al. 2010, Ibarra & Petriglieri 2010). This may be especially true for individuals who are self-driven (Shin & Grant 2021) and have a promotion regulatory focus—who aim for and see the possibilities in achievement rather than avoid failure (Brockner & Higgins 2001). These individuals are likely to be open to exploring possibilities and challenging themselves to see

what they can accomplish and become. Coaching, whether from professional executive coaches, one's supervisor or mentor, or family and friends, can reinforce compensatory behavior and exploration of different identities. This is especially important during the early career stage, when individuals are still seeking a career and life path. Exploring possibilities and even procrastinating with distractions may be an incubation period for creativity for people who have the opportunity and intrinsic motivation to explore (Shin & Grant 2021). Compensatory responses to unexpected difficult situations can be valuable later in life, for instance, as a response to forced early retirement, to discover positive channels for accomplishment, increased self-awareness, and a renewed self-identity. Research and practice interventions such as coaching can address how individuals can turn lemons into lemonade.

Future self-image. Methods for developing self-awareness begin by measuring individuals' current state of self-awareness. Instead of encouraging individuals to identify current self-knowledge, an alternative would be to begin by focusing on a goal, for instance, the type of leader they want to become—the self-image they want to have, say, in five years or when they retire—and then encourage them to plan what they need to do to get there. This would unearth gaps in abilities and behavioral tendencies that they need to address, including feelings about themselves that may be holding them back.

Research and practice on developmental interventions can incorporate the relationship between self-awareness and risk. In particular, methods aimed at developing self-awareness can address individual characteristics, such as risk-taking tendency (Rolison 2019), that may affect individuals' ability to make constructive decisions about themselves. On the one hand, too much self-reflection can be detrimental. This is especially likely when one is highly self-absorbed and anxious about risks to the extent of not being able to function. On the other hand, people who are low in self-awareness may be more likely to put themselves in jeopardy, taking or avoiding risks (Belmi & Pfeffer 2016).

Self in Relation to Others

Consider the various factors that influence how we see and portray ourselves in relation to others, in particular, sensitivity to situational conditions, societal impacts, use of digital media, and portraying ourselves to others in the organizations including members of the teams of which we are a part.

Situational sensitivity. Accurate self-awareness should affect our ability to predict our performance in given situations. If we lack an accurate perception of a situation, we are likely to under- or overpredict our ability to do well in that context (cf. Braddy et al. 2020). Yang et al. (2021) positioned this prediction bias as a general tendency toward situation insensitivity. In particular, we are likely to be insensitive to variations in situational conditions that underlie our performance. We may have a sense of the average situation and our ability in relation to this condition, due to past experience and feedback, but may not accurately understand current conditions. If the situation is less difficult than our view of the average situation, we will likely underpredict how well we will do. If the situation is actually more difficult than our view of the average situation, we will likely overpredict how well we will do. This may explain the self-enhancement bias that self-ratings are generally higher than ratings of others about us (Alicke & Sedikides 2009). In rating our own performance, we may be evaluating ourselves today and our potential for the future and lack a clear assessment of situational variability. Future research and practice can explore the extent to which feedback provides information about current and likely future situational conditions and the recipient's performance and ability relative to the situation.

Societal impacts. Research can explore the effects of societal culture on self-awareness and, in particular, the relation between self-awareness and social well-being and self-satisfaction. What people look for and evaluate in themselves may be culturally based. For instance, gender inequality may be more important in liberal societies than in conservative societies. In the latter, inequality is more highly related to subjective well-being than in conservative societies (Chen et al. 2021). By extension, self-awareness in relation to situational conditions may be more cogent for women in liberal societies in which people are more sensitive to inequality, unfairness, and instability of treatment than in conservative (collectivistic, high power distance; Hofstede 1980) societies.

Self-presentation on digital media. Self-awareness may be evident from how people present themselves on social media. Social media are vehicles for personal image branding. Social media allow people to portray their self-image and reinforce their personal and professional identities. But this is not without risking pushback from others, negative feedback that is hard to ignore even if all it takes is deleting “like” buttons. Social media provide a ready wealth of information about opportunities, positive and negative role models, and self–other comparisons. Research can explore the extent to which people are attuned to this information. Do they screen selectively, or do they explore and process a wide range of possibly divergent information about themselves and opportunities that may be open to them? Do they select accurate (verifiable) information, or are they unduly influenced by what some others say and do? Are they fed increasing artificial intelligence–driven environmental and career-related information about what they want to hear because of what they clicked in the past and receive information that is tailored to their interests, or do they explore many different sources? This may influence who they identify with and the extent to which they ignore other potentially pertinent information about themselves, others, career prospects, and changes in their discipline.

Consistency to organization members. Self-awareness extends to awareness of self in relation to collectives of which an individual is a member. The collective may be a team, organization, or any grouping within one’s employer, profession, family, or other realm of life. It may also be the culture in which the individual lives or was raised. These relationships frame large and small portions of an individual’s self-identity, in part by influencing how other members of the collective relate to the individual (Butler et al. 2014). This includes the accuracy of the individual’s understanding of the collective and the members’ perception of the individual (Steffens et al. 2021).

Cultural self-awareness is the extent to which one is influenced by one’s culture (Lu & Wan 2018). Culture is especially dominant in collectivistic cultures (Fei 2015, Hofstede 1980). An area for investigation is the extent to which individuals are aware of how culture influences them. A measure of cultural self-awareness may ask individuals for ratings regarding their beliefs about how culture affects what they value and whether they realize how culture affects how they behave (Lu & Wan 2018). For an indication of whether individuals’ self-awareness is accurate, the cultural behaviors people see in themselves can be compared to observer judgments of the extent to which their behavior reflects their culture. Supervisors can benefit from an understanding of how individuals’ self-views are influenced by their culture and whether people recognize this in themselves.

Team identity and member interactions. Team members may affect each other’s self-knowledge. For instance, supervisors or coworkers may be naysayers who rarely support a team member’s new ideas or reinforce the team member’s contributions. They may readily deliver unfavorable feedback and rarely offer praise. Perhaps because they are dominant or competitive, they may use feedback and their knowledge of information about challenges and opportunities to retain their own power. This may be one reason why women are not rewarded or encouraged for potentially constructive yet gender-counter-normative actions and decisions (Bear et al. 2017). Such

individuals may wittingly or unwittingly decrease an individual's self-confidence and diminish the individual's self-image.

Continuing a focus on self-awareness and teams, research on the intersection of individual self-awareness and team development is needed to understand context effects of team members' self-awareness and team-level performance. As individuals develop a sense of belonging to a team (self-categorization), the team develops interpersonal processes for operating. This occurs through transactional communication patterns (Kozlowski & Bell 2013). Teammates inform each other about processes as they plan, implement, and later evaluate performance (Cannon-Bowers et al. 1993). In the process, they develop shared mental models of how work can and should be coordinated and goals achieved. They discuss techniques and engage in recursive communications (reflexive feedback) as they plan and when the action is occurring. Later, they engage in informal feedback as they comment on goal accomplishment and build up each other's confidence and sense of collective efficacy (Potosky et al. 2021). Team members develop skills, a sense of self-efficacy, and role knowledge that enable them to adapt their behavior to fit task demands. Similarly, collective action promotes team and multi-team system learning. The members' collective efficacy helps the team adapt to changing conditions (Chen et al. 2005, London & Sessa 2007, Sessa et al. 2019). Team-level research can examine team members' self-awareness in relation to the team and the concept of collective awareness (see the sidebar titled Directions for Self-Awareness Research).

DIRECTIONS FOR SELF-AWARENESS RESEARCH

Drawing on their synthesis of the self-awareness literature, Chon & Sitkin (2021) made the following suggestions for research:

- Explore how self-awareness, particularly awareness of one's values, actions, and others' perspectives, affects the exercise of power, status, and leadership.
- Examine the role of demographic diversity in self-awareness (e.g., effects of gender, with men overestimating their strengths and women underestimating their strengths). Study how awareness of one's own stereotypes and biases can thwart unintentional biases, prejudice, and discrimination in making judgments and decision about others, for instance, in hiring and promotion processes.
- In negotiations, consider how the leverage one has over others may be grounded in one's own self-awareness and judgments about others' self-awareness.
- Study how feedback received, feedback seeking, and perspective taking affect differences in self-awareness over time.

Other topics for team-level self-awareness research include

- Self- and team image consistency
- Self-image and role expectations of self and others
- Effects of direct and indirect feedback from team members
- How member biases affect their self-perceptions and how their treatment of each other affects each member's self-awareness in and outside the context of the team
- Measurement of team-level self-awareness and content and how it is expressed and affects how the team operates
- Relation between team members' reactions to feedback and individual members' self-awareness
- Assessment of development of team-level self-awareness over time and how it changes during transitions (e.g., as members come and go)
- Identification of factors that affect the team's openness to learning from within and from feedback from outside the team

CONCLUSION

Self-awareness affects how we feel about ourselves. It generates attributes such as self-efficacy and self-confidence that mediate between self-awareness, feedback seeking (for confirmation and affirmation), interpersonal sensitivity and relationship development, goal setting, effort, and performance. These outcomes, in turn, are related to strengthening or changing self-awareness. Theory-based research and empirically driven practice can inform self-awareness development and be a foundation for employees' learning and growth throughout their careers.

SUMMARY POINTS

1. The content of self-awareness is both internal (the characteristics we ascribe to ourselves) and external (how we believe others see and react to us).
2. Self-awareness has positive effects on our health and well-being, although there is a potential dark side of too much introspection.
3. Positive self-awareness development occurs through affective, cognitive, and behavioral dimensions as people gain confidence, insight about themselves and others, and self-identity.
4. The process of developing accurate and deeper self-awareness occurs through experiential learning and self-reflection drawing on feedback and coaching.
5. The literature is replete with educational interventions to increase self-awareness but little research on the short- and long-term effects of these interventions.
6. Research is needed on constructing valid measures of self-awareness and tracking changes in self-awareness over time.
7. Interventions can help individuals recognize their biases, use feedback to set goals during transitions, and identify components of self-awareness that are important to their self-image.
8. Developmental methods can increase individuals' openness to learning about themselves, particularly learning from unfavorable feedback, and developing characteristics in line with the type of person they want to become.
9. Research and practice can help people develop situational and cultural sensitivity, recognize how they present themselves in digital media, and be aware of how their self-image is tied to their membership in organizations and teams.

FUTURE ISSUES

1. Valid measures of self-awareness should be designed.
2. Measures should be used to track changes in self-awareness over time.
3. Targeted interventions that influence content of self-awareness and the processes of self-awareness development should be designed to
 - a. help individuals recognize their biases.
 - b. examine the effects of self-awareness of goal setting during transitions.

- c. identify profiles of self-perceptions to understand the components of an individual's sense of self.
 - d. demonstrate the importance of openness to learning to self-awareness development.
 - e. study language and actions of feedback providers that generate recipients' positive reactions to difficult-to-hear feedback.
 - f. help people develop their self-awareness and establish the identity they want to achieve (e.g., the type of leader they want to become).
4. Explore self in relation to others to
- a. show the importance of self-awareness development to situational sensitivity.
 - b. study societal and organizational factors that influence self-awareness development.
 - c. examine how self-awareness influences how people present themselves on digital media.
 - d. explore the extent to which individuals' self-conceptions come to match that of organizational members.
 - e. examine the interplay between self-awareness of team members and their sense of team identity and its effects on member interactions.

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Self-awareness can be viewed as a path to self-knowledge and understanding one's true self.

Erratum >

Reviews clarity and dimensions of self-awareness that support personal development.

Review of internal and external self-awareness literature to acknowledge the evidence-based standards for proper understanding.

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Reviews self-awareness as a developable skill. “Insight” leads to understanding and observing the truth.

Reviews internal and external self-awareness; feedback allows for progressive self-journey.

Culture has influence
on cultural and personal
self-awareness and
perspectives.

Theory-based review
focusing on nurses'
self-awareness
development.

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Self-awareness is connected to well-being, but it also has benefits within the workplace.

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Errata

An online log of corrections to *Annual Review of Organizational Psychology and Organizational Behavior* articles may be found at <http://www.annualreviews.org/errata/orgpsych>