

1 What Is Creative Agency and Why Does It Matter?

This section introduces our conception of *creative agency*, building on our and others' previous work on creative self-beliefs and our updated model of *Creative Behavior as Agentic Action* (CBAA). Our goal is to describe its role in understanding how individuals convert creative potential into meaningful action. We begin by examining the philosophical foundations of human agency before offering our definition of creative agency and exploring key components related to that definition.

How can we live in a predetermined universe yet still be able to make novel choices and bring about alternative possibilities? This question highlights a longstanding area of debate in philosophy, psychology, and the sciences. Several scholars have long dismissed human agency as a mental illusion, arguing that such beliefs belong to “folk psychology” and are incompatible with a deterministic universe (Churchland, 1981, 1986; Sapolsky, 2023). These arguments claim that human actions are governed by predetermined physical laws and properties of our brains.

In contrast, scholars like psychologist Albert Bandura (e.g., Bandura, 1986, 2001) argue that humans are active agents who exercise control over their behaviors. This agency allows them to uniquely shape their lives and the environment around them. More specifically, Bandura (2001) does not reject the influence of biology or the way phenomena operate in the physical world. He rejects the view that biology or physical structures predetermine behavior:

Human evolution provides bodily structures and biological potentialities, not behavioral dictates. Psychosocial influences operate through these biological resources to fashion adaptive forms of behavior (p. 20).

This perspective offers a more nuanced view that goes beyond simple *either/or* claims. For example, it challenges the idea that human behavior must be either entirely predetermined and aligned with scientific laws of the universe, or freely chosen and thereby making humans an anomalous and incompatible exception to those laws. Rather, Bandura's (2001) perspective is a *both/and* view. It recognizes both the possibility for the physical universe to operate under predetermined laws and for humans to still exercise some level of choice and control over their behaviors and actions in the world around them.

Philosopher Christian List provides a compelling argument in favor of this *both/and* perspective. More specifically, List (2023) asserts that accepting determinism at the physical level (i.e., “physical possibilities” governed by the laws of physics) does not require rejecting the idea that humans can exercise some level of choice and control over their actions and bring about new possibilities (i.e., “agentic

possibilities,” which have a degree of openness that we have some control over). According to List, physical possibilities and agential possibilities are compatible because they operate at different levels. An example might help clarify this compatible view.

Just as coding has a set of syntax rules that govern how the programming language operates (“physical possibilities”), human coders can exercise choice and creativity (“agential possibilities”) in how they work with that programming language to create a vast array of programs and applications. The programming rules constrain but do not predetermine the possibilities for how coders develop new computer applications. The same can be said for a vast array of human endeavors, for instance:

- In the arts, sculptors exercise their agency by making creative choices within the constraints of a specific medium (e.g., clay), and poets often work within a formal structure (e.g., haiku).
- In business, employees exercise agency in how they approach tasks and provide goods and services to customers while adhering to constraints such as company practices, government regulations, and brand guidelines.
- In education, teachers exercise agency by designing unique lessons and tailoring their teaching methods to student needs within the constraints of curricular standards and school policies.

Our goal here is not to go too far down a philosophical rabbit hole but to provide a backdrop for realizing that human agency is always constrained. Those constraints, however, do not preclude people from intentionally making choices about when and how they will act in certain situations. Moreover, those choices can lead to new and meaningful changes in their lives and the world around them.

What Is Creative Agency?

Scholars have conceptualized creative agency in various ways outside of psychology. Daniel X. Harris, director of the *Creative Agency Lab*, for instance, views creative agency from a socio-cultural perspective informed by posthumanist, new materialist, and affective theories (Harris, 2021), emphasizing an active, responsive, relational, and ethically engaged way of being in the world (Harris, 2023). Oliver Bown and Jon McCormack apply the concept to artificial life (i.e., non-human and computational systems), defining creative agency as “the degree to which [a system] is responsible for a creative output” (p. 255).

We define creative agency from the psychology of human creativity as:

The intentional and self-directed capacity to envision and enact new and meaningful actions within the existing constraints of a particular context which can bring about changes in our lives and the world around us.

This definition encompasses two key elements. First, the “creative” aspect addresses both novelty and meaningfulness, aligning with standard definitions of creativity (Plucker et al., 2004; Runco & Jaeger, 2012). Second, the “agentic” aspect emphasizes the intentionality of choices and the self-directed nature of actions, consistent with Bandura’s (2001) conception of agentic action.

We also recognize that agentic action occurs within physical, sociocultural, and psychological constraints of a given context (Bandura, 2001; List, 2023). The central issue is not whether people can exercise creative agency, but rather what factors facilitate or impede it. Indeed, just because people have the capacity to exercise creative agency does not mean that they will.

Exercising creative agency is resource-intensive. As Baumeister (2008) has argued, exercising intentional choice and control over thoughts and actions requires expending psychological resources. Indeed, there is evidence that making choices and exercising control over one’s thoughts and behaviors in one task *can* deplete performance on subsequent tasks (Baumeister et al., 1998; Muraven & Baumeister, 2000; Vohs et al., 2008). Although the assertion that exercising agency can deplete subsequent performance makes sense, recent work (Forestier et al., 2022; Hagger et al., 2016) has cautioned against describing this in simple or singular terms, such as “ego depletion.”

Rather, researchers recommend taking a more nuanced, multifaceted, and dynamic view. Forestier and colleagues (2022) have, for instance, recommended describing the costs of exercising agency as “self-control fatigue,” which can impair people’s capacity, resources, and willingness to exert effort. They define self-control fatigue as “a temporary impaired effortful self-control act caused by an initial effortful self-control act that aimed to resolve a motivational conflict and decreased self-control resources, willingness and/or capacity” (p. 25).

Indeed, there are various personal factors, social pressures, and restrictions that can impede creative agency (Brehm, 1966). Consequently, people will likely exercise creative agency only when they believe the benefits outweigh the potential physical, psychological, and social costs. Put simply, creative self-beliefs matter when it comes to exercising creative agency.

Creative Agency Beliefs

Understanding how people exercise creative agency requires examining the key decisions they encounter when considering creative action. In 2019, we introduced a model of CBAA (Karwowski & Beghetto, 2019). The CBAA model

presented an empirically testable set of assertions derived from our own earlier work (Beghetto, 2006; Beghetto & Karwowski, 2017; Karwowski, 2011) as well as the contributions of others (e.g., Bandura, 1997; Tierney, 1997; Tierney & Farmer, 2002) on creativity and self-beliefs.

As this research program evolved, we recognized the need to expand this model to offer a more holistic, unified, and empirically testable theoretical account of creative agency. In our expanded model, creative agency is conceptualized as a series of interrelated decisions informed by four core self-beliefs:

- ***Creative confidence***: Belief in one's ability to think and act creatively.
- ***Creative centrality***: Belief that creativity is a central aspect of one's identity and personal values.
- ***Creative risk-taking***: Belief that the benefits of engaging in creative actions outweigh potential costs or risks.
- ***Creative self-regulation***: One's ability to use strategies and skills necessary for engaging with ill-defined creative tasks and overcoming challenges encountered along the path to creative solutions.

We also identified the need for a refined model to address lingering conceptual and methodological issues that have led to inconsistent findings across studies on these self-beliefs (Beghetto & Karwowski, 2017, 2019). Updating our model thus provides an opportunity to clarify and better align these concepts with the design of future studies, enhancing the field's understanding of how creative agency beliefs facilitate the translation of creative potential into action.

Our updated model of CBAA (building on Karwowski & Beghetto, 2019; explored fully in Section 6) identifies *four critical decisions* that shape whether and how individuals convert creative potential into creative action (see Figure 1):

1. **Can I do this creatively?** (Creative Confidence) This first decision is informed by people's creative confidence beliefs (fully described in Section 2). Creative confidence encompasses whether people believe they can think and act creatively. This belief is comprised of two interrelated sub-beliefs:
 - A general, trait-like belief in one's creative ability;
 - A specific, state-like confidence when facing creative challenges.
2. **Should I do this creatively?** (Creative Centrality) This decision examines whether people value creativity and view it as central to their identity (detailed in Section 3), including:

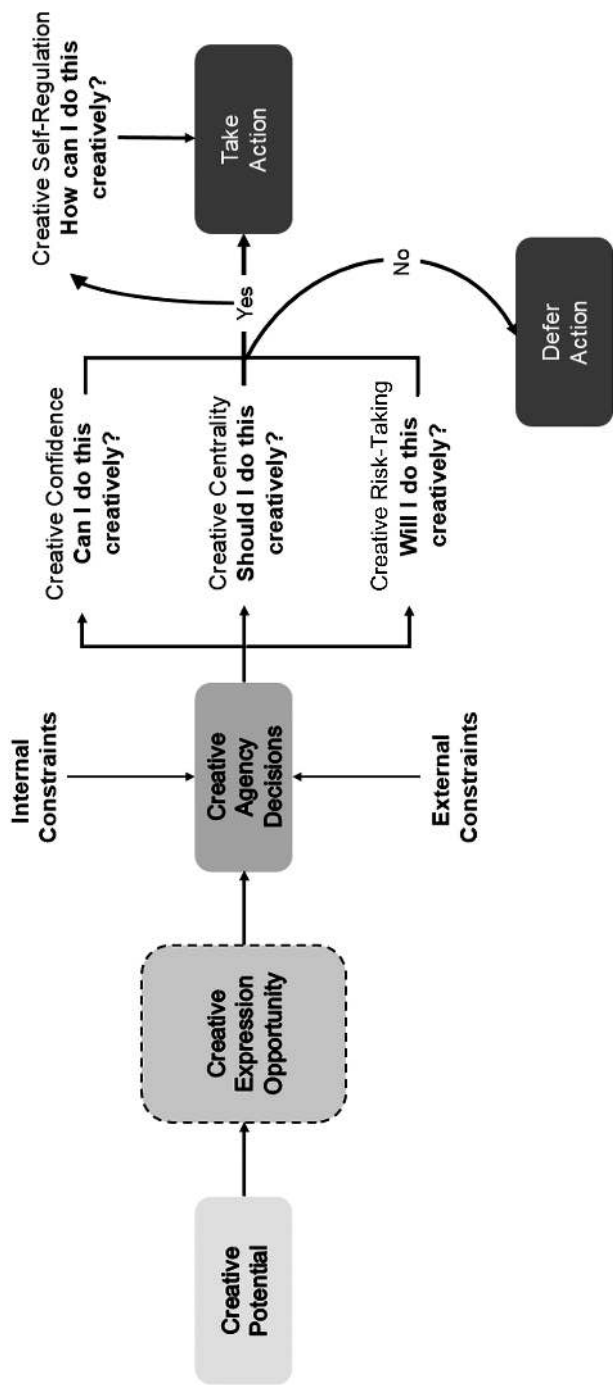


Figure 1 Creative agency decisions necessary for converting potential into action

- Whether people believe there is inherent value in being creative;
 - How people assess the personal meaning of creative action;
 - How these value judgments influence creative behavior;
 - The role of sociocultural factors in shaping creative centrality beliefs.
3. **Will I do this creatively?** (Creative Risk-taking) This decision focuses on risk assessment (discussed in Section 4), specifically:
- Weighing benefits against potential costs of creative action;
 - Willingness to embrace uncertainty;
 - Ability to face potential setbacks;
 - The role of prior experiences in risk-taking decisions;
 - The distinction between process-related and product-related risks;
 - The influence of contextual factors on risk assessment and decision-making.
4. **How will I do this creatively?** (Creative Self-regulation) This final decision involves implementation strategies (described in Section 5), including:
- Using cognitive and behavioral strategies;
 - Managing thoughts, emotions, and actions;
 - Operating across three phases:
 - Forethought (goal setting, strategy planning);
 - Performance (monitoring progress, adjusting strategies);
 - Self-reflection (evaluating outcomes, learning for future tasks).

These four components work together as an integrated system within the CBAA model. While each component can be examined independently (and are individually discussed in Sections 2–5), they function interdependently to influence how individuals assess and engage in creative action. Their combined influence determines whether and how creative potential is converted into meaningful creative behavior, as detailed in Section 6.

As illustrated in Figure 1, these decisions become activated when we encounter situations requiring new thought and action. This activation occurs in situations such as when our previous approaches no longer serve us effectively, when we identify opportunities to create something new, or when existing solutions prove insufficient.

These decisions are shaped by both internal factors (such as our agency beliefs) and external factors (such as social and environmental contexts). To illustrate how these four decision points and their associated beliefs operate in practice, we present two contrasting scenarios. These scenarios demonstrate how creative agency beliefs can either enable or constrain creative action in real-world settings.

Creative Agency Beliefs in Action: Two Scenarios

Scenario 1: Diminished Creative Agency Beliefs

Consider Chris, a recently promoted shift manager at a popular restaurant. Chris notices persistent inefficiencies in the staffing scheduling process and recognizes an opportunity to creatively address this problem by introducing a new artificial intelligence (AI) scheduling tool.

However, Chris quickly experiences self-doubt (*Creative Confidence*). Despite recognizing that the AI tool is innovative, Chris questions their ability to successfully present and implement the idea. Although Chris has been generally confident in previous roles, the specific challenge of advocating for a technological change causes state-like uncertainty about their ability to convince senior management.

Chris also struggles to evaluate whether pursuing this creative solution aligns with their values and identity (*Creative Centrality*). While Chris generally values efficiency and innovation, they currently do not view creativity or proposing new ideas as central aspects of their professional identity, particularly within their new role. Additionally, the organizational culture seems to prioritize stability and adherence to established practices, further diminishing Chris's perception of creativity as a central or valued aspect of their new shift-manager identity.

Facing uncertainty about senior management's reaction, Chris carefully weighs the benefits against the potential personal and professional costs (*Creative Risk-Taking*). The potential advantages of improved efficiency seem promising, but Chris perceives significant risks associated with stepping outside traditional expectations and challenging established processes. Concerned about rejection, loss of credibility, or negative career consequences, Chris concludes that the risks outweigh possible rewards, further discouraging creative action.

Finally, Chris lacks clear strategies for managing uncertainty, emotions, and potential setbacks in moving forward with this creative solution (*Creative Self-Regulation*). Without established approaches for handling potential criticism, adapting their proposal to senior management expectations, or persisting in the face of initial resistance, Chris feels ill-equipped to successfully navigate the uncertainties of implementing this solution.

Taken together, these diminished agency beliefs (i.e., low creative confidence, limited creative centrality, heightened risk perception, and insufficient self-regulatory strategies) constrain Chris's decision-making, leading them ultimately to abandon the idea. Rather than taking creative action, Chris decides to maintain the inefficient but familiar scheduling process.

Scenario 2: Robust Agency Beliefs

Now, let's imagine Dr. Jones, a college instructor teaching an introductory physics course designed for nonscience majors. Dr. Jones frequently hears students express frustration, complaining that the course content lacks relevance to their lives. Recognizing an opportunity for creative improvement, Dr. Jones develops a generative AI chatbot called *AppliedScience Bot* to help students explore practical connections between physics concepts and their everyday experiences.

Initially, Dr. Jones faces some internal doubts (*Creative Confidence*). While generally confident about their ability to introduce innovative teaching methods, recent faculty discussions about generative AI perpetuating scientific misconceptions cause some initial hesitation. However, Dr. Jones is confident that the *AppliedScience Bot* is different and believes it can help students see the relevance in what they are learning.

Dr. Jones also strongly believes that creativity and innovation in teaching are central to their professional identity (*Creative Centrality*). They view creative experimentation as a core value of effective instruction and perceive implementing *AppliedScience Bot* as aligned with their teaching philosophy and identity. This belief strengthens Dr. Jones's commitment to exploring new educational solutions despite the possibility of potential criticism.

In assessing risks, Dr. Jones acknowledges the concerns colleagues have raised about inaccuracies associated with generative AI but carefully weighs potential costs against the benefits of making physics more relevant to students (*Creative Risk-Taking*). Convinced that clearly communicating potential limitations to students can mitigate risks, Dr. Jones decides that the educational value of enhancing student engagement significantly outweighs potential drawbacks. Based on this assessment, Dr. Jones decides to embrace the uncertainty of implementing this instructional innovation.

Aware that resistance or criticism might arise, Dr. Jones proactively prepares strategies to manage potential obstacles (*Creative Self-Regulation*). When colleagues express skepticism midway through the semester, Dr. Jones is ready and provides a demonstration video illustrating *AppliedScience Bot's* effective use and positive student feedback describing how the chatbot increased engagement and relevance. Dr. Jones is able to effectively address colleagues' concerns and foster greater acceptance, prompting some colleagues to ask about adopting the chatbot in their courses.

Ultimately, Dr. Jones's robust agency beliefs (i.e., strong creative confidence, clear identification with creativity's central role in their teaching identity, willingness to embrace creative risks, and effective self-regulatory strategies)

resulted in a successful creative outcome. Reflecting on this experience, Dr. Jones decides to pursue the development of an additional chatbot to support further student engagement and learning.

Why Does Creative Agency Matter?

As we have discussed, when people exercise their creative agency, they can convert their creative potential into creative actions and achievements. Creative agency is, therefore, crucial at the individual and societal level. At the individual level, exercising creative agency can help us more productively navigate the uncertainties we face in everyday life. It can contribute to a sense of purpose, give our lives meaning, and promote well-being (Kaufman, 2023; Zelińska et al., 2023). It allows us to play a central role as the creative authors of our learning and lives – contributing to more positive and transformative futures for ourselves and others (Beghetto, 2023).

On a broader scale, exercising our agency plays a central role in the coevolution of individuals and cultures, simultaneously shaping our environment and influencing our development (Bandura, 2001). Exercising our creative agency can also contribute to societal progress and innovation. It helps in addressing complex societal issues and longstanding inequities, promoting economic growth, and bringing about positive social change (Sternberg & Karami, 2024).

In this way, developing healthy beliefs in our ability to exercise creative agency is not simply an additive luxury. Rather, it is necessary for healthy human flourishing and societal progress. Prior research on whether people believe they have choices and control over their own lives (Baumeister, 2008; Vohs & Schooler, 2008) suggests that people who lack such beliefs may exhibit decreased prosocial behavior and increased antisocial behavior, thereby hindering the motivation necessary for individual and societal progress.

Therefore, understanding creative agency and how it can be supported is a critically important goal for the social sciences, as agency plays a central role in individual and societal growth and survival. This issue takes on added importance in the age of GenAI, as such technological advancements present both positive possibilities for enhancing human agency (using GenAI to extend creative capabilities) and potential threats to people's willingness to exercise their agency (e.g., people deferring their creative thinking and actions to machines) (Faiella et al., 2025; Reich & Teeny, 2025).

Overview of the Remaining Sections of This Element

In the remainder of this volume, we take a much closer and more detailed look at the theory and research on the four creative agency beliefs: creative confidence,