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## Goal Orientations



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### Abstract

This entry discusses the interplay between motivational goal orientations, creativity, and the possible as a field of inquiry. Crucial theoretical categories of goal orientations: mastery-versus-performance and approach-versus-avoidance, as well as the integrated  $2 \times 2$  goal orientation model are discussed altogether with empirical results showing their links with creativity. Drawing on classic theories of achievement goals, this entry also discusses two widely studied constructs that are specifically relevant for goal orientations, creative mindsets, and creative confidence, all contextualized within the possible.

### Keywords

Mastery and performance goals · Approach and avoidance · Fixed and growth mindsets · Creative self-efficacy

Creativity is goal-directed activity. Although simple, this statement covers an essential characteristic of creative activity. Even if popular literature promotes many examples of famous creators who benefited from “aha moments” – sudden insights

(Insight) that seemed to come out of nothing – the idea that activity leading to creative accomplishment is unintentional is extremely unlikely. Quite the opposite is true. Creative activity requires a confluence of different characteristics and opportunities, including: cognitive (divergent thinking, intelligence), personality-related (openness, curiosity), motivational (creative self-efficacy, intrinsic motivation), environmental (supportive climate), time devoted to training, and, of course, luck. Creative activity most often begins with a goal, even if exploratory, and goals play a crucial role in motivation and self-regulation during creative activity. How individuals frame their goals plays an overarching role in shaping the possible for personal development and outcomes in one’s life and work. In this way, the clearest link between goal orientations and the possible exists at the level of exploring possible selves (Glăveanu 2018).

Importantly, being goal-directed does not mean that all creators always have a clear perspective of an end-product to be achieved. Goals might be operationalized in more general and less material terms than a published book, finished piece of art, or composed symphony. For instance, the development of competency and eventual mastery with a technique, material, or process will open different possibilities than goals of public recognition. This entry discusses how the conceptual framework of achievement goals, influential in motivational literature, can inform creativity research and, in turn, connect to the possible as a

field of inquiry. To this end, the history of achievement goals and the evolution of this construct is briefly discussed alongside the scarce empirical evidence that links achievement goals to creativity. Next, more distal components of achievement goals theories – creative mindsets and creative self-efficacy – are introduced. This entry closes by showing some promising research areas allowing for effective integration of goal orientation models with creativity and the possible.

The interests in achievement goals date back to the mid-1970s when two psychologists independently proposed the initial framework of analyzing and studying purposes that might motivate (or de-motivate) people during their activity. Carol Dweck (1975), continuing her work on learned helplessness, developed the mastery-versus-performance goals distinction. John Nicholls (1976), continuing his research on self-perception of abilities and competence, developed a theory of ego-versus-task involvement goals. Although coming from different theoretical traditions and varying in terms of specific propositions, these two models share crucial assumptions. Given that the mastery-approach perspective is more prevalent in the contemporary literature, this approach to achievement goal distinction is followed in this entry.

## Mastery and Performance Goals

In Dweck's works, mastery orientation was initially theorized as a characteristic of children who failed under challenging tasks and, yet, still displayed an adaptive pattern of attribution, making their failure productive. In this way, Dweck, and researchers that followed, found that people with mastery orientation attribute their struggles and failures to either insufficient effort (i.e., *I did not try sufficiently hard*) or ineffective strategies (i.e., *I dealt with this problem the wrong way*). Therefore, mastery orientation, sometimes called *learning goals*, posits the main reason for engaging in a particular activity is developing an individual's competence and mastering a task. When faced with a failure, people with a mastery orientation are able to persist and continue working on

a problem. Mastery orientations make failure an expected, productive struggle on the path toward achievement. In line with Heidegger's (1962) ideas about the possibility of becoming, the openness to unexpected setbacks in a mastery orientation fuels a latent potential for growth rather than a deficit orientation toward one's limits.

Performance orientation was theorized as the result of maladaptive patterns in the face of challenge and failure. People holding performance goals orientation explain their failures as a lack of sufficient ability to succeed in a task and often react with negative, self-defeating emotions. The purpose of performance goals can be twofold: (a) to *show off* and demonstrate competence in a particular task or (b) to *hide* and avoid showing incompetence when faced with a challenging problem. The performance goals orientation was theorized to affect individuals maladaptively by evoking misdirected attribution and negative emotions, leading to suboptimal effects on motivation and achievement. Narrowly focused performance-directed goals, essentially, close off individuals from different possible outcomes.

Although several theorists predict that mastery orientation will lead to positive effects while performance orientation is detrimental leading to adverse outcomes, for example, in school, the evidence for such claims is scarce. Several studies demonstrated that mastery orientation is indeed connected with positive emotional reactions and generalized positive affect, and performance orientation correlates with negative affective states and anxiety. What is far less clear, though, is the role of these orientations for different types of effective functioning under different circumstances – be it learning, problem-solving, or the “what-if” possibility thinking, key to creativity.

Gaps in the literature prompt the question – what is the role of goal orientation in the creative process toward the possible? Given that creativity is polymotivational, where conflicting motives can lead to creative activity (Anderson and Karwowski 2020), there are convincing reasons to argue that under certain circumstances, both mastery and performance orientations may be conducive. On the other hand, there is a classic theorizing and research tradition in creativity

literature that demonstrates the benefits of intrinsic motivation for creative thought and action (Amabile 1996). Mastery orientation is conceptually close to intrinsic motivation: both are driven by curiosity, personal value of a task, and need for cognition. Still, while intrinsic motivation denotes activity driven by its autotelic value, mastery orientation is, by definition, *telic* – goal-oriented to develop one’s skills and master a task. This reasoning would lead to a prediction that mastery orientation, thanks to its focus on development, improvement, and learning, will support creative thinking and activity and what they make possible for oneself and the world around them. Performance orientation, with its emphasis on competition, demonstrating one’s competence, and avoiding overly difficult situations that might demonstrate limitation, seems like an antithesis of creativity and the possible. But what is the empirical evidence for this prediction?

Integrating, the literature on the links between mastery-versus-performance goal orientation and creative potential and accomplishment is sparse. In a study of Chinese R&D employees (He et al. 2016), mastery orientation was found to be significantly and positively, yet, at the same time, weakly ( $r = 0.18$ ), related to creativity, while performance orientation was negatively linked to creativity. Apart from simple correlational evidence, empirical relationships were more complicated. Mastery orientation moderated the relationship between failure feedback and creativity in the work environment. The link between supervisors’ failure feedback and employees’ creativity was positive and significant among employees high in mastery goals, only. This moderation implies that goal orientations might not necessarily serve as direct predictors of creativity, rather goal orientations might be interdependent with other factors and, in a way, determine what a person makes possible from constructive feedback.

That logic is consistent with the results of an experimental study that explored the links between risk-taking and creativity and the potential moderating role of goal orientations (Simmons and Ren 2009). Results demonstrated that, not only were people more creative under a

risk-taking condition, but also when risk-taking was accompanied by a more adaptive mastery goal orientation. Taking risks can be seen as a disruptive necessity to new possible futures for oneself and the surrounding sociocultural environment. In educational settings, Beghetto (2006) has shown that mastery orientation significantly predicted students’ creative self-efficacy, but – contrary to what might have been expected – he also found positive links between performance goal orientation and creative self-efficacy. A recent longitudinal study (Jankowska and Karwowski 2019) focusing on the development of children’s creative thinking found that parents’ performance orientation was positively related to children’s initial level of creative ability but negatively predicted the developmental changes in their children’s creative abilities. In other words, although children whose parents held stronger performance goals started with higher creative abilities, their developmental trajectories not only were flatter but even tended to decline with time. Parental goal orientations can limit what is possible for their children (Lebuda et al. 2020). In contrast to the potential negative influence of parental performance goals orientation, parents’ mastery orientation was unrelated to changes in children’s creative thinking. A study on teachers (Hong et al. 2009) demonstrated strong positive links between their own mastery orientation and the creative skills used by their students. They found no relationship between teachers’ performance goals orientation and students’ creativity.

In sum, these results allow for a tentative conclusion that while mastery orientation, in an individual, their parent, or their teacher, may be conducive to creativity, the evidence regarding performance orientation is mixed. Importantly, the potential role of mastery orientations should not be overestimated, given the consistently weak observed effect size. There are studies demonstrating effects of performance goals on creativity as negative, null, or positive; as such, an unambiguous conclusion regarding its role is impossible, at this time. These ambiguities call for new studies on different samples with well-established measures and a more finely ground model of goal orientations relevant to creativity and the possible,

specifically. Such a model, extending the pure mastery versus performance dimension, has been proposed in the achievement goals literature by synthesizing it with a classic approach-versus-avoidance perspective.

## Approach and Avoidance Orientation

Early works on mastery and performance goals orientations ignored the possibility that these two goals may be approach- or avoidance-driven. This is surprising, as the distinction between approach and avoidance is classic in motivational literature (see discussion in Elliot 1999). While approach orientation denotes expecting the possibility of positive outcomes and striving for success, avoidance orientation is linked with failure expectations and, consequently, avoidance of potentially tricky tasks. The combination of mastery-performance goals with approach-avoidance goals was proposed by Elliot (1999), who demonstrated that a simultaneous analysis provides an additional input into motivational goals. Elliot suggested that performance goals are not always detrimental for adaptive functioning and achievement, and should be divided into approach versus avoidance orientations. Performance-approach goals hold a focus on the attainment of sense of competence, and performance-avoidance hold a focus on avoidance of sense of incompetence. In early conceptualization, mastery goals were theorized as approach goals only, with an emphasis on the development of competence and task mastery; yet, a  $2 \times 2$  achievement goals framework (Elliot 1999) delineated a mastery-avoidance category (e.g., avoiding self- or task-referential incompetence).

Though performance-avoidance goals may be detrimental, the central premise of the  $2 \times 2$  achievement goal model is that performance-approach goals, with a focus on normative competence, might be conducive to achievement as well. Thus, the introduction of the approach-avoidance continuum into research on achievement motivation has allowed for more nuanced interpretations of motivational goals' effects. But how does this distinction inform discussion about

creativity and the possible that it opens and expands for self and others?

A safe conclusion from two decades of studies is that creativity benefits from approach orientation and is suppressed by avoidance orientation. This seems commonsensical – feeling agentic to be creative requires activity that is often risky and unknown, so exploration typical for approach motivation is necessary for creativity. It is much harder to imagine or theorize how avoidance motivation could be useful for creativity. Empirical evidence confirms that approach motivation helps to solve insight problems and generating ideas (Friedman and Förster 2002), and approach-related emotions, both positive (e.g., feeling happy) and negative (e.g., feeling angry), are far more conducive to creativity than avoidance-related emotions (both positive, e.g., feeling calm and negative, e.g., feeling sad; Baas et al. 2008). However, as Roskes and her colleagues (Roskes et al. 2014) theorized, avoidance motivation may boost creativity under certain conditions, like the presence of constraints that channel cognitive resources. Providing an individual solving a problem with specific, procedural instructions illustrates how a channelling, yet constrained situation could help solve creative problems for people who are driven by avoidance motivation (see Roskes et al. 2014).

Considering the  $2 \times 2$  achievement goals model again, a natural prediction would be that mastery-approach goals and, to a lesser extent, performance-approach goals should be conducive to creativity, while the link between creativity and avoidance-related goals – both: mastery-avoidance and performance-avoidance is less clear. A study on Taiwanese junior high school students (Peng et al. 2013) partially confirms this prediction. While both approach goals (mastery and performance), as well as mastery-avoidance goals, indirectly boosted students' divergent thinking as a result of their autonomous motivation, performance-avoidance goals were unrelated to divergent thinking.

Although the  $2 \times 2$  achievement goals model forms a useful motivational framework for creativity literature, more research is needed to fully untangle the role of, and conditions for,

mastery-performance and approach-avoidance dimensions for creative thinking, activity, and achievement. Research suggests these goal orientations are not always contradictory in adolescence, but may actually coexist. As such, future studies may benefit from not only showing static correlational links between goal orientations and aspects of creativity but also by analyzing the interrelations and interactions of goal orientation to explain creative functioning. Additionally, future research should investigate the potentially varying role of goals for different phases of the creative process. Future studies might also benefit from including relevant antecedents and consequences of goal orientations into a testable theoretical model. Two existing constructs – creative mindsets and creative confidence – hold unique promise for such models. The remaining part of this entry will focus on the role of these factors in relation to goal orientations and the possible.

### **The Role of Creative Mindsets for Goal Orientations**

Creative mindsets refer to a specific part of implicit theories that people carry about creativity, specifically, the perceived roots of creative potential and perceived susceptibility for creative potential to change or remain stable. The idea of mindsets was introduced by Dweck (e.g., Dweck 1986), who proposed that people differ in their beliefs about the potential changeability of human characteristics and the sources for that change. So-called entity theorists (people holding a “fixed” mindset) believe that traits, such as intelligence, are inborn and impossible to change – clearly at odds with holding a philosophy of the possible for oneself and others. Incremental theorists (people holding “growth” mindset) perceive human characteristics and abilities as malleable with potential for change and development given sufficient effort, training, and use of effective strategies – an orientation toward the possible.

In creativity literature, there is a growing interest in creative mindsets as plausible regulatory mechanisms explaining the likelihood of engaging in creative activity (Karwowski 2014).

Interestingly, in the case of creativity, fixed and growth mindsets do not form the opposite ends of one continuum but often coexist (Karwowski et al. 2019b). Holding these seemingly contradictory beliefs simultaneously could relate to common societal narratives about an assumed destiny for creative genius, individual experience of success in one domain and not another, or other unexamined theories individuals carry. Indeed, especially among people who value creativity and have prior creative achievement, the paradoxical high-growth-high-fixed pattern is surprisingly often met.

Regarding creativity and the possible, it is important to ask why mindsets matter for goal orientations? In her early theory, Dweck proposed that mindsets are among the most critical factors that cause goal orientations – people who hold a fixed mindset do not believe in the possibility to change and improve and naturally adopt a performance goals orientation that. Consequently, those holding a fixed mindset engage in activity for the sake of confirming their self-perception. For instance, they may aim to demonstrate to others that they are able to solve a specific problem or that they are better than others in a particular task. At the same time, such people tend to avoid a difficult task that may form a threat for their self-perception in case they fail. Incremental theorists – people holding a growth mindset – are much more likely to adopt mastery goal orientation with a focus on improving in a task and developing their skills.

Although studies conducted in educational settings confirm Dweck’s propositions, the question about the links between creative mindsets and goal orientations in creativity is still to be explored and could support theorizing around motivation and orientations toward the possible. A tentative answer, consistent with hypotheses, was established by a study from Mexico (Puente-Díaz and Cavazos-Arroyo 2017), showing that, indeed, growth mindset positively predicted mastery orientation, while fixed mindset positively predicted performance-avoidance goals.

Given increasing interest in creative mindsets, it seems prudent to advise future researchers to

include goal orientations into their theoretical framework, research designs, and studies. One might consider performance goals as mediators in the relationship between mindsets and creative behavior. Studying mindsets alone may, in part, explain the underlying belief but it does not test important mechanisms that lead from a belief to creative action. Not only are motivational goals among highly plausible mechanisms but their inclusion may also (even if partially) explain inconsistent findings reported in the literature. Indeed, it happens that some observed links between mindsets and creative thinking or efficiency of problem-solving are weak or even null (e.g., Hass et al. 2019). It seems likely that these mixed findings would be more understandable if goal orientations are taken into account.

### The Role of Creative Confidence

Creative confidence is another key construct that should be emphasized when goal orientations are theorized in creativity research. Creative confidence may be operationalized as a more stable creative self-concept – “holistic cognitive and affective judgments of creative ability in and across particular domains” (Karwowski et al. 2019a, p. 399). Creative confidence also relates to more task- or situation-dependent creative self-efficacy, or the “perceived confidence to creatively perform a given task, in a specific context, at a particular level” (Karwowski et al. 2019a, p. 399). Both aspects of creative confidence – creative self-concept and creative self-efficacy – are among intensively studied constructs in creativity literature, precisely because of their motivational functions.

Why does creative confidence matter in relation to goal orientations? Early theorizing posited that, while mastery orientation is usually conducive to achievement, performance orientation is especially harmful when accompanied by low perceptions of self-competence (Dweck 1986). In other words, one could expect that the links between performance goals and creativity are negative only among people who do not believe that they can be creative. In contrast, when creative

confidence is high, it may buffer the negative effects of performance orientation. If followed consistently, this logic leads to a more complex model in which creative mindsets are antecedents of goal orientations with growth creative mindset building mastery orientation and fixed mindset translating into performance orientation. Those resulting goal orientations would strengthen or limit the chances for creative outcomes – mastery orientation would be expected to support creative thinking. However, the hypothesized negative role of performance orientation – specifically, performance-avoidance orientation – would be moderated by creative confidence. In that model, even if someone held a fixed creative mindset, believing in little potential for malleability of their creative skills and the skills of others, they would likely also hold a performance goal orientation and, yet, could still be expected to reach creative achievement if their creative confidence was high. In the context of the possible, creative outcomes that result from this mindset-to-mastery process can be considered the actualization of a possible self that also opens up new possibilities for others.

Although interesting, this hypothesized model awaits empirical examination. Previous studies focused on links between mindsets and confidence, showing that indeed people with a higher growth mindset tend to have higher creative confidence than those with a fixed mindset (Karwowski 2014). Other research treated creative confidence as a mediator between mindsets and creative problem-solving (Royston and Reiter-Palmon 2019). The potential moderating effects of confidence in the link between goal orientations and creativity is yet to be tested.

### Discussion

Goal orientations are essential for achievement motivation theorists and educational psychologists. Though often overlooked, their role for creative thought and action has implications for what is made possible for self and others. The overview presented in this entry emphasizes the potential fruitfulness of goal orientations as factors that

may enrich scholars' understanding of motivational factors conducive to creativity. Although the models discussed here were developed in different theoretical traditions and rarely directly referred to creativity, they allow for three testable predictions related to creativity with implications for the possible.

First, by its nature, creativity is much more approach- than avoidance-oriented. Although, under certain, very specific circumstances, avoidance motivation may be conducive to creativity, in general, creativity is exploratory, depends on an openness to different possibilities, and benefits from an approach motivation. The open question for future research is to what extent both mastery-approach and performance-approach orientations support creativity and what are the boundary conditions for such influence.

Second, while the available evidence suggests that mastery orientation is, generally, conducive to creativity, the role of performance orientation remains ambiguous. Though evidence would suggest performance-avoidance orientation should suppress creative thinking, it is unclear if the same will apply to performance-approach orientation. Similarly, factors that moderate the relationship between performance orientation and creativity should be considered in much more detail. For instance, is creative confidence moderating these links as hypothesized? Is performance orientation harmful to creativity only among those who do not believe in their creative capacities? These problems require much more systematic and rigorous tests in the future.

Third, and finally, the growing number of studies exploring creative mindsets should incorporate goal orientations into research designs. Based on theoretical premises, mindsets are among the most critical causes of specific goal orientations. Consequently, goal orientations may mediate the relationship between creative growth and fixed mindsets and creative activity. Given evidence for malleability of mindsets, this area of research may be primed for intervention designs that aim at improving individuals' goal orientations to creativity and their resulting potential for creative activity and achievement. And given how intertwined creative mindsets are to a personal

philosophy for growth and the possible in one's development, research on future interventions should include a focus on benefits in the realm of the possible for both the self and others (e.g., new career trajectories, growth in an artistic domain, enhanced interpersonal relationships, and professional work that benefits others).

To conclude, goal orientations hold the potential to enrich scholars' knowledge about self-regulation and motivational processes engaged in creative activities and processes, which underly the possible in the future for one's own life and in the life of others. Therefore, future studies in the possible and creativity should include measures of mastery and performance orientations and approach-avoidance orientation to understand better why and when people decide to engage in creative behavior and think about and live in the possible.

## Cross-References

- ▶ [Creative Development](#)
- ▶ [Creative Mindset](#)
- ▶ [Creative Self-Efficacy](#)
- ▶ [Creativity](#)
- ▶ [Curiosity](#)
- ▶ [Insight](#)

## References

- Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity*. Westview.
- Anderson, R. C., & Karwowski, M. (2020). Creativity and motivation. In M. Runco & S. Pritzker (Eds.), *Encyclopedia of creativity* (3rd ed., pp. 185–189). Elsevier.
- Baas, M., De Dreu, C. K., & Nijstad, B. A. (2008). A meta-analysis of 25 years of mood-creativity research: Hedonic tone, activation, or regulatory focus? *Psychological Bulletin*, *134*, 779–806.
- Beghetto, R. A. (2006). Creative self-efficacy: Correlates in middle and secondary students. *Creativity Research Journal*, *18*, 447–457.
- Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*, *31*, 674–685.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, *41*, 1040–1048.

- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist, 34*, 149–169.
- Friedman, R. S., & Förster, J. (2002). The influence of approach and avoidance motor actions on creative cognition. *Journal of Experimental Social Psychology, 38*, 41–55.
- Glăveanu, V. P. (2018). The possible as a field of inquiry. *Europe's Journal of Psychology, 14*(3), 519–530.
- Hass, R. W., Katz-Buonincontro, J., & Reiter-Palmon, R. (2019). The creative self and creative thinking: An exploration of predictive effects using Bayes factor analyses. *Psychology of Aesthetics, Creativity, and the Arts, 13*, 375–387.
- He, Y., Yao, X., Wang, S., & Caughron, J. (2016). Linking failure feedback to individual creativity: The moderation role of goal orientation. *Creativity Research Journal, 28*, 52–59.
- Heidegger, M. (1962). *Being and time*. Harper.
- Hong, E., Hartzell, S. A., & Greene, M. T. (2009). Fostering creativity in the classroom: Effects of teachers' epistemological beliefs, motivation, and goal orientation. *Journal of Creative Behavior, 43*, 192–208.
- Jankowska, D. M., & Karwowski, M. (2019). Family factors and development of creative thinking. *Personality and Individual Differences, 142*, 202–206.
- Karwowski, M. (2014). Creative mindsets: Measurement, correlates, consequences. *Psychology of Aesthetics, Creativity, and the Arts, 8*, 62–70.
- Karwowski, M., Lebuda, I., & Beghetto, R. A. (2019a). Creative self-beliefs. In J. C. Kaufman & R. J. Sternberg (Eds.), *Cambridge handbook of creativity* (pp. 396–417). Cambridge University Press.
- Karwowski, M., Royston, R. P., & Reiter-Palmon, R. (2019b). Exploring creative mindsets: Variable and person-centered approaches. *Psychology of Aesthetics, Creativity, and the Arts, 13*, 36–48.
- Lebuda, I., Jankowska, D. M., & Karwowski, M. (2020). Parents' creative self-concept and creative activity as predictors of family lifestyle. *International Journal of Environmental Research and Public Health, 17*(24), 9558.
- Nicholls, J. G. (1976). Effort is virtuous, but it's better to have ability: Evaluative responses to perceptions of effort and ability. *Journal of Personality and Social Psychology, 31*, 306–315.
- Peng, S. L., Cherng, B. L., Chen, H. C., & Lin, Y. Y. (2013). A model of contextual and personal motivations in creativity: How do the classroom goal structures influence creativity via self-determination motivations? *Thinking Skills and Creativity, 10*, 50–67.
- Puente-Díaz, R., & Cavazos-Arroyo, J. (2017). The influence of creative mindsets on achievement goals, enjoyment, creative self-efficacy and performance among business students. *Thinking Skills and Creativity, 24*, 1–11.
- Roskes, M., Elliot, A. J., & De Dreu, C. K. (2014). Why is avoidance motivation problematic, and what can be done about it? *Current Directions in Psychological Science, 23*, 133–138.
- Royston, R., & Reiter-Palmon, R. (2019). Creative self-efficacy as mediator between creative mindsets and creative problem-solving. *Journal of Creative Behavior, 53*, 472–481.
- Simmons, A. L., & Ren, R. (2009). The influence of goal orientation and risk on creativity. *Creativity Research Journal, 21*, 400–408.