

Boxed in, set free: Curvilinear effects of constraint on creativity

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Dissertation Abstract

Constraint has long been considered the enemy of creativity and the ally of effective decision-making. Historically, creativity researchers have found that too much constraint on freedom may decrease the intrinsic motivation to create (e.g., Amabile, 1983; Amabile & Gitomer, 1984; Greenberg, 1992; Zhou, 1999). In seeming opposition to these findings, recent decision-making research has revealed a “Paradox of Choice” (Schwartz, 2004); too much choice can be paralyzing, undermining good judgment (Iyengar & Lepper, 2000) and originality (Chua & Iyengar, 2007). It appears that there are limitations on the benefits of freedom – *constraint may in fact be essential to creativity*. This is good news given the ubiquity of constraint, especially in market-driven organizations.

My dissertation is about how constraint – restrictions imposed on freedom such as rules, boundaries, and scarcity – influences the creative process. Given that judgment and choice are important but often-overlooked aspects of creativity, my theory proposes a curvilinear effect of constraint, such that a moderate level of constraint is optimal.

Four studies (three lab experiments with individuals and one multi-method field study of 62 new product development teams) examine the effects of constraint on individual and team creativity. I also test the effects of three moderators (expertise, power, and group conflict), and three mediators (perceived risk associated with originality, need for cognitive closure, and team value convergence). Because the effects of choice are thought to be non-monotonic (e.g., Chua & Iyengar, 2007; Schwartz, 2004; Kahneman & Tversky, 1984), constraint is operationalized at many levels, going beyond the choice/no-choice dichotomy of earlier research (e.g., Amabile & Gitomer, 1984).

Consistent with the proposed theory, the data reveal that constraint has a curvilinear (inverted U-shaped) effect on creativity and originality. The effects of constraint on intrinsic motivation are negative and linear, with the largest decrease in intrinsic motivation occurring lower on the constraint scale than the decrease in creativity (probably explaining why earlier dichotomous studies (e.g., Amabile & Gitomer, 1984) did not identify these effects). Furthermore, expertise moderated the effect of constraint. As one would expect (Martinsen, 1993; Amabile, 1983), expertise was associated with better performance overall. Interestingly however, those with the most expertise produced ideas less creative than their peers when assigned to the most constrained condition.

These findings provide encouragement to organizations that are institutionally embedded, resource-scarce, or otherwise restricted. Creativity is resilient, and in fact performs best when given some challenge to overcome. From a managerial perspective, these findings suggest that while some amount of choice is important for encouraging creativity, it is important for creators to have some boundaries to limit the endless options available to them. As employees gain expertise, they should be given less and less constraint.

This dissertation bridges the gap between the creativity and decision-making literatures, and sheds light on the adaptive and strategic nature of everyday creativity in the social environment.