Anyone who has ever participated in a group brainstorming session knows the ground rules: Focus on quantity, not quality. Be open to far-fetched, outlandish ideas. And above all, don’t criticize.

Those principles were conceived in the late 1940s by Alex Osborn, a partner at the esteemed New York City advertising agency BBDO and the unofficial godfather of brainstorming. Osborn believed — and numerous studies back him up — that to maximize creativity, brainstorming should be freewheeling and nonjudgmental. “Creativity,” he said, “is so delicate a flower that praise tends to make it bloom, while discouragement often nips it in the bud.”

Recent research, however, has cast doubt on Osborn’s “no criticism” rule. A growing number of studies show that criticism might actually heighten creativity and imagination. Forcing participants to suspend judgment about the quality of ideas during brainstorming could in fact stifle free thinking and expression.

So does criticism help or hinder creativity in brainstorming? My colleagues Tatiana Labuzova, Aditi Mehta, and I set out to resolve this long-standing debate. Our latest research suggests that the answer depends on the brainstorming context — either cooperative or competitive.

The Effect of Criticism on Brainstorming

First, we conducted a field experiment in which we evaluated 100 group brainstorming sessions with stakeholders in a controversial urban redevelopment project near Boston. For half of the sessions, facilitators discouraged criticism, and for the other half, facilitators encouraged participants to critique ideas as they were being generated. We found that the effects of each approach varied greatly depending on context.

Criticism can increase creativity in a cooperative context. In our experiment, half of the brainstorming groups were told that all ideas — regardless of feasibility or merit — would be presented to the planning committee. Those instructions cultivated a cooperative atmosphere, and we found that instructions encouraging criticism within these cooperative groups yielded not just more ideas, but more creative ideas. When the group members’ goals are aligned, criticism is likely to stimulate creativity.

In a competitive context, criticism can decrease creativity. The other half of the brainstorming groups in our study were told to select their group’s best idea to be prioritized above all the others, thus creating a competitive environment. We found that encouraging criticism in these groups yielded fewer ideas and less-creative ideas as evaluated by judges. This suggests that criticism can indeed have a negative effect on creativity if the nature of the group or its task is competitive, mainly because the criticism may be construed as destructive and can trigger intragroup conflict.

Even holding constant the wording of the criticism, context matters. While much attention has been given to the phrasing of criticism and negative feedback, in another study we conducted, we found that the context, whether cooperative or competitive, is actually highly impactful. In this experiment, we used a labor negotiation scenario. Participants were always in the role of the union member negotiating with management, and the criticism they received was always the same: “That idea doesn’t make any sense.” We chose that statement precisely because of its ambiguity. It could come across as constructive, as in, “Please elaborate.” Or it could sound hurtful, as in, “That’s a stupid idea.”

We found that the setting affected how participants perceived the identically phrased criticism. When the criticism came from a fellow “union member” — a cooperative context — the criticism was construed constructively and led to greater creativity. Conversely, when the criticism came from “management” — a
competitive context — that same criticism was construed as destructive and resulted in less creativity.

**Set the Context for Creativity**

Leaders need to fully understand their team’s dynamics and adapt brainstorming instructions accordingly to benefit most from the group’s setting and context. For example, if team members are generally collaborative and supportive of one another, then encouraging a bit of criticism and debate could help spark new ideas. But if team members tend to be competitive with one another, then encouraging criticism and debate could backfire. Team members may edit themselves to avoid being criticized by their colleagues — which undermines the group’s creative process.

To be sure, there is no one-size-fits-all, best way to brainstorm. Much depends on the organizational context and the nature of the brainstorming task. In some scenarios, it might be best for managers to assign one team to come up with ideas freely (with criticism encouraged) and another team to review those ideas and select the best ones. Yet, taken together, our findings suggest that the optimal context for creativity in brainstorming is a cooperative one in which criticism occurs but is interpreted constructively by parties who understand that they are working toward the same goal.

Managers should keep in mind that Osborn was only half right about the effect of criticism on brainstorming. In certain contexts, criticism can wilt the “delicate flower” that is creativity. But in others, it can help plant the seeds of new ideas.

*Jared R. Curhan* is the Gordon Kaufman Professor and an associate professor of work and organization studies at the MIT Sloan School of Management.