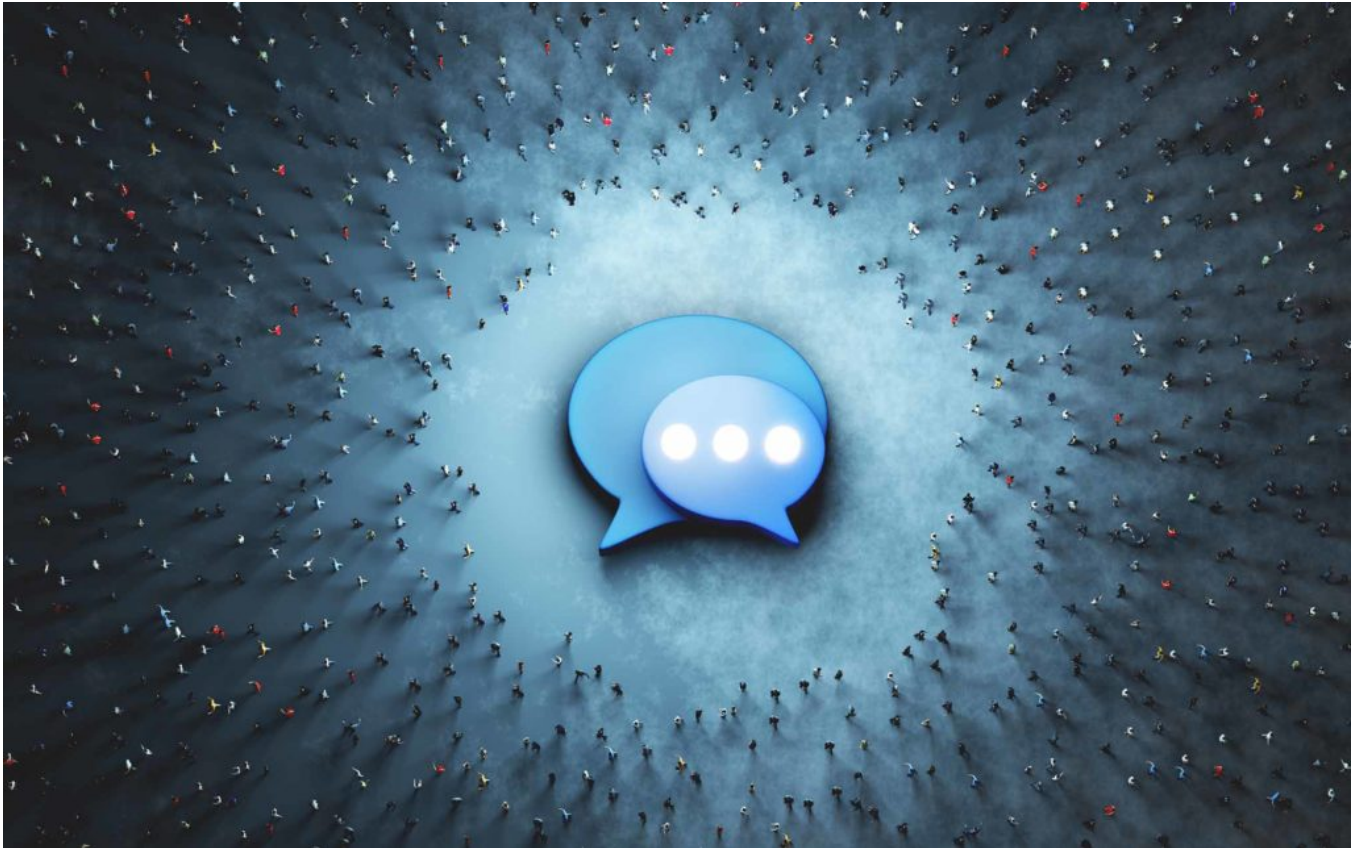


Deconstructing Entrepreneurial Discovery

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What is the right way to conceive a scientist’s work? Are scientists merely innovative minds who turn their ideas into creative tangible concepts? Or do they have additional tools in their skill set as inventors or entrepreneurs? One person who tackled this question is Joseph A. Schumpeter who in the early 1910s argued that economic growth depends, in part, on the “innovator-entrepreneur” willingness to do what mere economists, capitalists, and even inventors cannot—that is, unleash “the drive and the will to found a private kingdom” to essentially destroy old economic structures and create new ones.



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The Austrian-born economist, who later emigrated to the United States to become a professor at Harvard University, lived in a time of great invention—the oil, steel, textile, railroad, and food production industries, to name a few, were booming. But he had no way of foreseeing the subsequent waves of entrepreneurship that produced the postwar housing boom of the 1950s, the dot-com explosion of the late 1990s, or such tech-driven industry “disruptors” as Airbnb and Uber in the late aughts.

And he certainly couldn’t have imagined Twitter. Since launching in 2006, the social media site has attracted hundreds of millions of users around the world, many of them business startups that use it to track and, ideally, to influence the real-time sentiments of potential investors, customers, and more. As a tool for scanning and listening, Twitter can reward entrepreneurs by alerting them to emerging business needs and opportunities. As a tool for expression, Twitter also can serve as a mirror for the emotional states of its users.

Prior research (Baron, 2007; Cardon et al., 2013) highlighted the role of emotions in the heart of entrepreneurial action because they enable entrepreneurs to foster and tap into creativity and lead to exploration and exploitation of business opportunities. On the basis of the theory that emotions stimulate and shape entrepreneurial alertness, we set out to ask two essential questions. First, how might alertness be related to entrepreneurial discovery? Secondly, which affect might be more associated with alertness: positivity or negativity?

To find our answers, we conducted two complementary studies that, together, constitute the first major effort to address antecedents to alertness and subsequent discovery.

The first study analyzed the self-reports of almost 100 successful professionals (37 entrepreneurs, 54

non-entrepreneurs) by measuring their emotional valence using the frequently applied Positive and Negative Affect Schedule (PANAS) scale for trait affectivity. Participants rated how much they felt emotions like “enthusiastic” or “jittery” on a five-point scale—“very slightly or not at all” (1) to “extremely” (5). In addition, two additional scales were used to measure entrepreneurial alertness and entrepreneurial discovery. For this, participants rated utterances like “I am an avid information seeker,” and “I am engaged in a deliberate, systematic search for new business ideas” on a scale from (1) strongly disagree to (7) strongly agree. We found that although entrepreneurs and non-entrepreneurs do not differ in their expression of negative and positive emotional traits, they do differ in entrepreneurial alertness, with entrepreneurs showing significantly higher levels than non-entrepreneurs. We also found support for the theory that entrepreneurs and non-entrepreneurs discover entrepreneurial opportunities differently.

In a second study, we explored 28,478 tweets posted by 459 entrepreneurs and non-entrepreneurs who were chosen using *Forbes*’s Next 1000 list and 30 Under 30 Directory. After categorizing tweeted words between 2009 to 2021 as positive or negative using the criteria of the Harvard IV-4 dictionary, we noticed significant differences between the two groups. Specifically, entrepreneurs used 2.35% positive and 0.63% negative words in their tweets, and non-entrepreneurs used 2.08% positive words and 0.83% negative words in theirs. Thus, we first explored the nature of relationships via a survey, and then tested the underlying assumption about positive and negative traits expressed over a long period of time through publicly available statements.

Overall, in two studies, we were able to highlight major differences between entrepreneurs and non-entrepreneurs. Study 1 indicated that words related to positiveness, such as “interested,” “excited,” “enthusiastic,” and “inspired,” are associated with entrepreneurial alertness, which in turn might accelerate entrepreneurial discovery. Study 2 highlighted significant differences in the words tweeted by entrepreneurs and non-entrepreneurs—specifically, successful entrepreneurs tend to use more positive words.

Collectively, our research suggests that a higher positive trait affectivity is associated with entrepreneurship. Thus, we might infer that nascent entrepreneurs could be trained to favor and cultivate positive emotions to increase both their alertness and their chances of accurately sensing entrepreneurial opportunities.

Because entrepreneurship is essential for generating job-rich, inclusive economic growth, we believe that knowing how new entrepreneurial opportunities are discovered is useful for both scholarly and practical purposes. Moreover, understanding which emotions facilitate entrepreneurial alertness—and in particular encourage nascent entrepreneurs to start ventures, attract sources of finance, and pursue entrepreneurial careers—could advance research by encouraging scientists to develop, test, and implement tools that could help train potential entrepreneurs to be more alert to business opportunities.

We hope that this project will not only inform (entrepreneurial) individuals who wish to improve their entrepreneurial discovery abilities but also help entrepreneurship educators and policymakers design instruments and services to enhance initiatives among nascent entrepreneurs.

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