

# Paying Tribute to Janet Taylor Spence

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Across her groundbreaking career, [Janet Taylor Spence](#), who died in March 2015 at the age of 91, was both an inspired researcher and an influential leader. Spence's many contributions to the field of psychological science were honored in a special symposium organized by APS Past President Kay Deaux and Lucia Albino Gilbert at the 2016 APS Annual Convention in Chicago. Three speakers highlighted the myriad achievements of APS's first elected president, including her pioneering work on anxiety and the multifaceted nature of gender identity, as well as her many accomplishments as an editor and science communicator.

"[APS](#) was only one of the organizations to which Janet contributed during her academic career, but I believe that it is the one that in the end was the most important to her, so it is fitting that we are honoring her at this convention," Deaux said.

[Colleagues Remember Janet Taylor Spence](#) | [Janet Taylor Spence Award for Transformative Early Career Contributions](#)

Spence's early work investigating the role of anxiety on performance produced one of the most influential — and still widely used — tools for assessing anxiety, the Taylor Manifest Anxiety Scale. At the core of Spence's theory of manifest anxiety is the idea that individual variations in anxiety relate to cognitive performance. University of Chicago psychology professor and APS Fellow Sian L. Beilock, a 2011 recipient of the Janet Taylor Spence Award for Transformative Early Career Contributions, discussed how her research on the psychological and neuronal processes that influence performance is indebted to Spence's early work on manifest anxiety.

"She really was one the first influences in my career as a psychologist, understanding that individual variation in anxiety can really have an impact on your ability to think and reason through a task," Beilock said.

In several recent studies, Beilock has built on Spence's anxiety research, extending it to one of the most common forms of educational anxiety: math anxiety. Spence's research suggests that the experience of anxiety itself actually deprives people of the cognitive resources they need to effectively reason through problems, a finding that Beilock and colleagues observed in math-anxious children.

Beilock and colleagues have found that the more anxiety children have about math, the worse their performance. But, as Beilock explained, children don't perform poorly simply because they are bad at math. Anxiety itself influences performance.

"When math-anxious children were faced with a difficult math problem, they would often guess at the answer rather than work through the problem. Our research suggests that math anxiety is essentially

robbing them of the working memory they need to think and work through difficult problems,” she said. “In our society, it’s very common and socially acceptable to say, ‘Oh, I’m not a math person,’ and it’s possible that this negativity about math contributes to some children’s anxiety about this subject.”

Beilock’s research shows that very young children absorb math anxiety from their parents and teachers. In a series of studies, she found that when parents who were nervous about math spent a lot of time helping their kids with homework, their involvement actually hurt children’s performance.

“It’s like it’s backfiring in some way,” Beilock explained. “That’s not great, because we want parents to be helpful in terms of their kids’ learning and performance.”

To support math-anxious parents, Beilock and colleagues collaborated on an interactive app to help parents and their kids learn about math in a positive setting. The researchers found that using the app even just once a week had a significant positive effect on math learning.

“Now, all of a sudden, the kids of higher math-anxious parents are learning closer to the level of kids with parents who are not math-anxious,” Beilock said.

## **‘A Giant of Gender Research’**

During the early 1970s, Spence turned her attention to gender when she and her University of Texas colleague, the late Robert Helmreich, began collaborating on an influential series of studies. Gilbert explained how Spence’s research into gender began with a challenge to the status quo in psychological research: The default in research at the time was to have all male subjects, scenarios, and perspectives. After reading a biased study about competence in men, Spence and Helmreich launched their research on gender with the question “Who likes competent women?” Their resulting research eventually led to the Attitudes Toward Women Scale and the Personal Attributes Questionnaire (PAQ). Both of these scales continue to be used in current research, and the PAQ is one of the most frequently used measures of gender identity today.

APS Fellow Alice H. Eagly of Northwestern University, herself a pioneering researcher on gender, described how Spence’s work introduced measures of gender identity and attitudes that represented gender in terms of individual differences rather than a male/female binary.

“Spence was a giant of gender research,” Eagly said. “I think she had a lot of ambition. She really wanted to understand the psychology of women and men and how it produces the phenomenon of gender.”

The PAQ measures the extent to which an individual views him- or herself as possessing stereotypical gender traits related to masculinity (defined by agentic behaviors) and femininity (defined by communal behaviors). Though the PAQ is now one of the most — if not the most — commonly used measures of gender (cited more than 1,000 times on Google Scholar), Spence early on had to fight to get her research on gender recognized within the broader scientific community.

“There were some voices in the field who were very explicit that this was ridiculous and trivial,” Spence recalled during an “Inside the Psychologist’s Studio” interview with Deaux recorded in 2010. “It was

not welcome in many quarters. But it was my view that one of my tasks was to have people take this seriously.” Spence bent over backward to ensure that this research was absolutely impeccable methodologically, publishing it in the top journals in the field.

Spence’s theories about gender anticipated at least one important future insight from social identity theory: that an existential sense of gender — the fundamental sense of oneself as male or female — is strongly connected with social identities that come from social groups, Eagly said.

## **Kindness With a Kick**

APS Fellow Donald J. Foss, of the University of Houston, was one of Spence’s colleagues in the psychology department at the University of Texas at Austin for many years. In addition to her prolific research, Spence also was recognized for her considerable accomplishments as a scientific editor and reviewer.

“In addition to contributing to the science, she also did award-winning editing and made major contributions to her institutions,” Foss said. “She was also a leader in numerous national agenda-setting activities. She was very kind to people, and she was also very tough-minded and direct.”

In 1974, Spence became the editor of the journal *Contemporary Psychology*, a job that packed a challenging workload, Foss said. The monthly journal published more than 1,000 pages of reviews on scholarly books every year. The staff received about one book per hour every working day, totaling around 2,000 each year. According to Foss, Spence never missed a single one of her 36 yearly deadlines.

“Every month Janet put the issue together, including the blueline editing [and] the page proofs, and she did 60 percent of the editing, always — almost — with good cheer and complete dedication, because this was the realm of ideas in psychology writ large,” Foss said.

Across the course of her career, Spence served on the editorial boards of an extremely impressive set of journals. She eventually became the editor of one of the most important outlets in the discipline, the *Annual Review of Psychology*. In 1993, she won the National Academy of Sciences Award for Scientific Reviewing, which recognizes “authors whose reviews have synthesized extensive and difficult material, rendering a significant service to science and influencing the course of scientific thought.” Spence is one of only five psychological scientists to have won this award. Along with her many professional distinctions, she remains the only person to have served as president of both APS and the American Psychological Association.

The final words of the evening came from Spence herself, via another clip from her “Inside the Psychologist’s Studio” interview.

“I can’t think of anything more I would rather have done,” she says. “It was fun, and I wish everybody the same kind of joy that I had. Enjoy yourself — what you do is important — and please have fun.”