

Stereotype Threat and Memorization (Summary)

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### Stereotype Threat and Memorization

Steele, Spencer, and Aronson investigated the phenomenon of *stereotype threat*, showing that “[d]epicting social groups as intellectually inferior can disrupt academic achievement.” This phenomenon occurs among groups that are at higher risk of academic underachievement: African Americans, Hispanics, members of low socio-economic groups, and female mathematics students. In studies, students’ performance on academic tasks decreased when the purpose of the task was evaluation of their intellect; performance was better when the task was not presented as such.

Dutrevis and Croizet investigated if stereotype threat occurred at a more basic level of academic achievement: memorization. Based on previous research, they hypothesized that, given a difficult task, people who were told they were inferior would have lower performance due to their fear of confirming the stereotype. For an easy task, however, the threat would increase their performance (Spencer, Steele, & Quinn, 1999).

The participants in Dutrevis and Croizet’s experiment were 62 females and 15 males, all psychology majors. In the school where the research was performed, psychology majors had a reputation for lower intellectual capability than medical school students. All the participants were told that they would be learning verbal material. Half the students were placed in the *diagnostic condition*, where the task was portrayed as a test of learning ability, designed to find out why psychology majors had a lower achievement level than medical students. The other students were placed in the *non-diagnostic condition*, where the task was portrayed as “fine-tuning” the software used in researching the psychology of memory. In this condition, the students were not being evaluated or compared to any other students.

In the first phase of the experiment, the participants were given 6 pairs of letter and two-

digit number combinations (like C 27 and N 52) to memorize. In the easy condition, participants had 20 seconds to memorize the pairs; in the difficult condition, they had only 10 seconds. In the second phase, they were presented with 162 pairs (like N 35) and asked to indicate if each pair was one of the pairs they had memorized. The participants' performance was calculated as the number of pairs they identified correctly.

After the memory test, participants took a questionnaire modeled after the one used by Steele and Aronson (1995). The questionnaire asked them how many hours of sleep they had, the amount of stress in recent days, amount of personal worries in their life, and their current physiological state. The experimenters asked these questions to detect differences in apprehension about performance. Participants were also asked if they were afraid of making mistakes or felt pressured to perform well. They expected more "self-handicapping" (excuses for poor performance) and a feeling of pressure among the participants in the diagnostic condition who had the difficult memorization task.

As expected, people in both conditions performed better in the easy task than in the difficult one. The results also supported Dutrevis and Croizet's hypothesis about performance. For the difficult task, students in the diagnostic condition performed worse than those in the non-diagnostic condition; for the easier task, they performed better. This supports previous research about stereotype threat; for difficult tasks such as those that a person might encounter in school, memory efficiency is impaired.

Contrary to the researchers' predictions, students performing the difficult task in the diagnostic condition did not self-handicap by claiming more excuses for their lower performance. Both groups reported being more worried and having a worse physiological states

in the difficult task. Also, contrary to prediction, there was no significantly greater concern over errors or pressure of being evaluated for the diagnostic group doing the difficult task.

By showing that stereotype threat can adversely affect a skill as basic as memorization, Dutrevis and Croizet's research "suggests that students' attention and immediate retention during a class can be impaired because of stereotype threat."

**References**

- Dutrevis, M. & Croizet, J. (2005, February 1). Reputation of intellectual inferiority undermines memory efficiency among college students, *Current Research in Social Psychology*, 10(8). Retrieved from <http://www.uiowa.edu/~grpproc/crisp/crisp.10.8.html>