Gender Bias Associated with Faculty and Administrative Titles

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Abstract

The decreasing representation of women at increasing levels of rank in academia is well documented; women are particularly underrepresented in the STEM disciplines at all ranks. Implicit associations, unconscious associations that occur automatically and quickly due to internalized stereotypes, may help explain women's underrepresentation in certain disciplines and in administration. The purpose of this study was to examine faculty participants' associations of gender with faculty versus administrative titles in academia using implicit and explicit association paradigms. 132 faculty at a public doctoral/research university completed implicit and explicit association tests. Women in non-STEM disciplines implicitly associated women with faculty positions more than men whereas other faculty (women in STEM and all men) associated women with administrative positions more than faculty positions. Overt and subtle biases may limit women's advancement in academia.

Study Purpose & Issues Addressed:

Women are underrepresented in the STEM disciplines and in administrative positions in academia.

Are implicit and explicit gender biases associated with women having faculty positions (especially among STEM faculty) or administrative positions in the academy?

Study purpose: The evaluation of explicit and implicit associations of men and women with faculty versus administrator titles.

Sample and Methods:

Study Design: Gender (2) x discipline of faculty participant (2: STEM versus non-STEM)

Dependent Variables:

- Directly queried explicit associations of gender with faculty and with administrative positions.
- Implicit Association Test (IAT: see http://implicit.harvard.edu) in which reaction times are assumed to reflect the internalized strength of associations. Average latencies and the summary parameter D (Greenwald et al., 2003), an effect size-like measure of association preference based on reaction times, were extracted for analysis.

IAT Test Stimuli Examples:

- Male and female stimuli: common first names by gender
- Faculty stimuli: Assistant Professor, Associate Professor
- Administrator stimuli: Chair, Provost, Chancellor

Procedure:

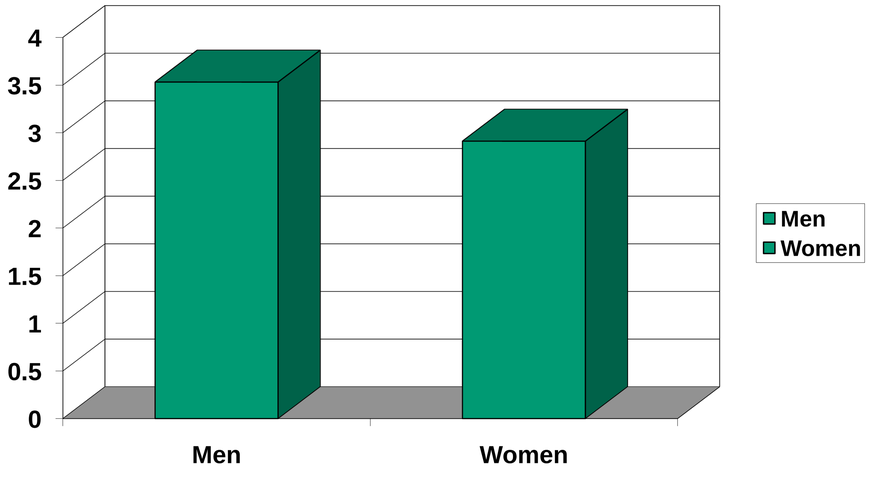
Web-based study: website was activated and a recruitment email sent to all full-time faculty in mid-semester, a second invitation was sent 2 weeks later, and the study closed after 3 weeks.

Participants and Data Reduction:

Of the 527 full-time faculty invited to participate, 136 (26%) responded. IAT data were cleaned per the procedure of Greenwald et al., 2003. N=132 (130 with D).

Explicit Association Results:

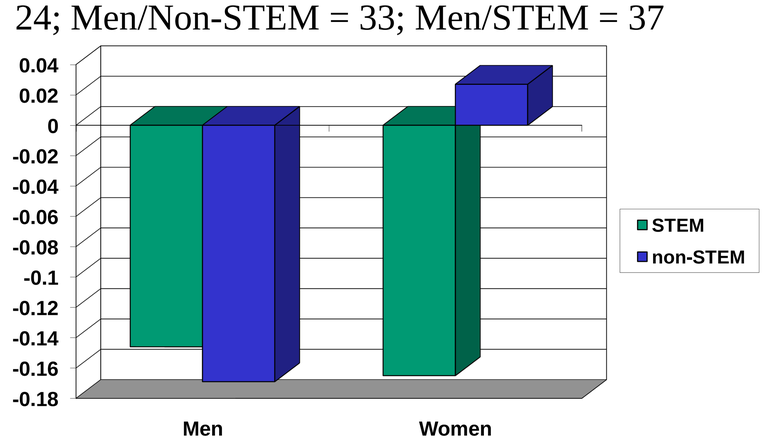
No significant results were found for explicit associations with faculty positions, or for the discipline main effect or discipline x gender interaction for administrative positions. For the gender main effect ($p < .01$), female faculty more strongly associated administrative positions with men than did male faculty. (Scale: 1 = strongly with men; 4 = with neither men or women; 7 = strongly with women.)



Implicit Association Results:

Results for the average response latencies:
Women significantly faster (675 msec) to identify women when paired with faculty titles than men (751 msec, $p < .01$). Women significantly faster (739 msec) to identify men when paired with administrative titles than men (813 msec, $p<.05$).

Results for D, an effect size-like measure of the latency to identify women when paired with faculty vs. administrator titles**:**
Gender ($F(1,126) = 2.50$, $p = 0.12$
Discipline ($F(1,126) = 2.29$, $p = 0.13$
Gender x discipline ($F(1, 126) = 3.69$, $p = 0.06$
Cell Ns: Women/non-STEM = 38; W/STEM = 24; Men/Non-STEM = 33; Men/STEM = 37



Summary and Future Directions:

- No differences in explicit or implicit associations were found for faculty in STEM versus non-STEM disciplines.
- In terms of explicit associations with administrative positions, women faculty associated administrative positions with men more strongly than did male faculty
- In terms of implicit associations, women faculty were quicker to associate women with faculty positions and men with administrative positions than were men.
- Non-STEM women more rapidly associated women with faculty positions than women with administrative positions; all other faculty (all men and women in STEM units) more rapidly associated women with administrative positions than women with faculty positions.

Future Directions: (1) Examine explicit and implicit associations to junior and senior faculty titles, by gender and discipline. (2) Replicate at other institutions.