Bridging the Gender Wage Gap: A Multidimensional Model of Occupational Gender Stratification

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Why do occupations employing more women pay less on average than occupations with more men? Two main explanations for the persistence of occupational wage inequality presently dominate the debate: human capital theory and devaluation theory. Human capital theory (Becker 1985; Polachek 1981; Tam 1997) argues that occupational wages are driven by market forces especially differential investments in human capital (e.g., education, training, tenure). From this perspective, occupational wage differences occur because women are concentrated into occupations requiring lower levels of human capital investment. Devaluation theory (Acker 1989; England 1992; 2010; Reskin and Maroto 2011) counters that in addition to market forces, female-domination occupations are culturally devalued *because* they involve traits associated with women, finding that the proportion of women in an occupation is negatively associated with mean occupational wages net of human capital controls.

Central to this debate is the role of gendered cultural meanings. Devaluation scholars theorize that they have a direct negative effect on wages while human capital scholars contend that that have no direct wage-setting effect. We argue that because the workplace is embedded within a larger gendered social system, a broader, more comprehensive conceptualization of cultural sentiments is required to bridge these two perspectives. We build on Risman's (2004) theory of "gender as a social structure," that conceptualizes this structure as three distinct yet interlocking levels – individual, interactional, and institution. We contend that gendered cultural sentiments operate within and link levels by providing cultural knowledge used to enact this structure.

In contrast to current unidimensional approaches focused on the direct negative effect of feminine evaluative traits (goodness, caring, warmth), we contend that sentiments are a multidimensional construct consisting of evaluation (goodness), potency (power), and activity (liveliness) and that these dimensions must be considered in concert because it is the conflation of these dimensions that create wage differentials. Specifically, occupations with higher concentrations of women are high in evaluation but low in potency with only the potency having a direct, positive effect on wages. This suggests that cultural sentiments do influence wages but not in the simple and direct manner currently theorized.

To test and support our theory we combine, and then analyze, data from three different sources: the 2011 American Community Survey (ACS), the U.S. Department of Labor's Occupational Network (O*NET), and a newly collected dictionary of affective meaning. Our results find that women are over-represented in occupations that score high on evaluation, while men are over-represented in occupations that score high on activity and potency as shown in Table 1. Figures 1-3 show the strong positive association between potency and wages. Table 2 shows the results from a series of Hierarchical Linear Regression models demonstrating that cultural beliefs about an occupations' potency (associated with masculinity) has a significant positive effect on occupational wages, net of human capital characteristics while evaluation (associated with femininity) has no direct effect. Gendered cultural meanings thus drive occupational segregation and contribute to occupational wage inequality.

Table 1: Descriptive Statistics for the 20 Occupations with the Highest and Lowest Percentage of Female Workers

	Evaluation	Potency	Activity	Income	College degree
Highest % female	1.77	0.49	0.05	\$25,523	31%
Lowest % female	1.23	0.82	0.76	\$37,581	8%
Difference	0.53	-0.33	-0.71	-\$12,058	23%

Notes: Mean income; college degree = percent of workers with college degree; excludes occupations comprising less than 0.1% of workers

Figures 1-3

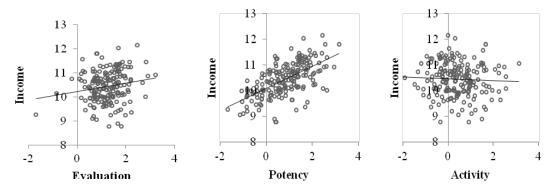


Table 2: Occupation-level Coefficients for Hierarchical Linear Regression Predicting Income

	Model 1	Model 2	Model 3	Model 4
	Gender	Complexity	EPA	Full
	Coeff (s.e.)	Coeff (s.e.)	Coeff (s.e.)	Coeff (s.e.)
Percent female	.273 (.094) **	026 (.082)	001 (.067)	001 (.083)
Complex problem solving		.310 (.054) ***		.226 (.053) **
Vocational preparation		.083 (.025) ***		.072 (.025) **
Service orientation		.043 (.038)		.044 (.037)
Physical		025 (.020)		029 (.019)
Hazardous		.042 (.023)		.049 (.023) *
Evaluation			029 (.031)	007 (.023)
Potency			.234 (.022) *	* .055 (.021) *
Activity			076 (.022) *	*007 (.017)