

Supplemental Materials

Pretesting the Gender Typing of Startup Ideas

Pilot Study 1

In Studies 1 and 2 we presented participants with a home energy solutions startup that provides advice to home-owners on reducing energy loss (see Appendix A for a complete description of the startup idea). This startup idea was developed and empirically tested by Lee and Huang (2018) to be perceived as gender-neutral. Specifically, in a pilot study with a sample of 150 participants (82 men and 68 women) and a 7-point scale (1 = male-typed to a great extent; 4 = neither male- nor female-typed; 7 = female-typed to a great extent), Lee and Huang (2018) found that this home energy solutions company was perceived as gender neutral ($M = 3.89$, $SD = 1.12$, and this mean was not significantly different from 4).

We also conducted our own pilot study and found the same result. Specifically, we recruited a separate sample of 400 business undergraduate students from the sample recruited in Study 1 and asked them to rate the extent to which they perceive this startup idea to be male-typed or female-typed using the same scale as Lee and Huang (2018). We excluded 12 participants who chose not to answer this question, resulting in a final sample of 388 participants (age: $M = 20$ years, $SD = 1.56$). Within this sample, 53% identified as men, 46% as women, and the rest (1%) indicated they belonged to other gender groups or preferred not to answer. Further, 55% identified as White, 18% as East Asian, 13% as South Asian, 6% as Southeast Asian, 4% as mixed, 1% as Black, 1% as Middle Eastern, 1% as West Indian, and the rest (2%) indicated they belonged to other racial groups or preferred not to answer.

To examine the gender typing of this startup idea, we ran a one-sample t -test examining whether the mean score is significantly different from the midpoint of the scale, i.e., 4, reflecting

that the idea is gender neutral. The results indicated that participants perceived this startup idea as gender neutral ($M = 3.92$, $SD = 1.28$, and this score was not significantly different from 4, $t(387) = -1.19$, $p = .235$). The results did not change when we conducted the analysis for men and women participants separately, with both groups perceiving the startup as gender-neutral (men participants: $M = 3.92$, $SD = 1.22$, and this score was not significantly different from 4, $t(176) = -0.86$, $p = .390$; women participants: $M = 3.93$, $SD = 1.33$, and this score was not significantly different from 4, $t(206) = -0.78$, $p = .434$).

Thus, both our own pilot study and Lee and Huang's (2018) pilot study suggested that this home energy solutions startup idea was perceived as gender-neutral. Therefore, we proceeded to use this startup idea in Studies 1 and 2 to test the effect of benevolent sexism on evaluation of startups in gender-neutral sectors.

Pilot Study 2

In Study 3 we used an artificial intelligence startup that leverages machine learning to provide financial advice to business owners (see Appendix B for a complete description of the startup idea). Following past research (Tsay, 2016), we constructed this startup idea based on a pitch for a startup that was chosen as one of the finalists in the MIT Entrepreneurship Competition. To test the gender typing of this startup, we conducted another pilot study with a separate sample of 100 undergraduate business students. Similar to Pilot Study 1, we asked participants to rate the extent to which they perceive the startup idea as male-typed or female-typed on a 7-point scale (1 = male-typed to a great extent; 4 = neither male- nor female-typed; 7 = female-typed to a great extent). We excluded 3 participants who chose not to answer this question, and thus the final sample consisted of 97 participants (age: $M = 20.50$ years, $SD = 0.91$). Within this sample, 55% identified as men and 45% as women. Further, 63% identified as

White, 18% as East Asian, 9% as South Asian, 5% as mixed, 2% as Southeast Asian, 1% as Black, and the rest (2%) indicated they belonged to other racial groups or preferred not to answer.

Similar to Pilot Study 1, we ran a one-sample t -test examining whether the mean score is significantly different from the mid-point of the scale, i.e., 4. The observed rating was significantly lower than 4, suggesting that participants considered the startup to be male-typed ($M = 3.08$, $SD = 1.10$, $t(96) = -8.24$, $p < .001$). Further, when the analysis was conducted separately for men and women participants, the results indicated that both men and women considered the startup to be male-typed (men participants: $M = 3.20$, $SD = 1.05$, and this score was significantly lower than 4, $t(43) = -5.04$, $p < .001$; women participants: $M = 2.98$, $SD = 1.13$, and this score was significantly lower than 4, $t(52) = -6.54$, $p < .001$). As such, we proceeded to use this start idea in Study 3 to test the effects of benevolent sexism on evaluations of startups in masculine-typed sectors.

Analyses with Additional Control Variables

In line with the review team's suggestions, we re-ran our analyses controlling for several participants' characteristics. Specifically, we controlled for age, education, and startup founding experience (in Studies 2 and 3; these characteristics were homogenous in Study 1), startup investing experience (in Study 2; this characteristic was homogenous in Studies 1 and 3), entrepreneurship courses attendance (in Study 2; in Study 1 and 3 we did not have this question). Age was measured in years. Education was measured as a categorical variable with the following categories: No Formal Education, Elementary School, High School, Vocational/Technical School, Community College Graduate, College Graduate, Master's Degree, Doctoral Degree (with College Graduate taken as the reference category as it was the largest group in both Studies 2 and 3). Startup founding experience, startup investing experience, and entrepreneurship courses attendance were measured as dichotomous variables coded as 1 if participants had that experience and 0 if they did not have that experience (see Table 1 and Figure 1 for Study 2 regression results and interaction graphs, and Table 2 and Figure 2 for Study 3 regression results and interaction graphs).

The patterns and conclusions of our results remain the same after controlling for these individual difference variables. Namely, in Study 2 the interaction between participant benevolent sexism, founder gender, and participant gender remains significant in predicting startup viability after controlling for age ($b = 0.52, p = .045$; see Model 1 in Table 1), founding experience ($b = 0.52, p = .049$; see Model 2 in Table 1), investing experience ($b = 0.52, p = .046$; see Model 3 in Table 1), education ($b = 0.52, p = .047$; see Model 4 in Table 1), and entrepreneurship courses attendance ($b = 0.52, p = .044$; see Model 5 in Table 1). In Study 3, the interaction between benevolent sexism and founder gender also remains significant in predicting

startup viability after controlling for age ($b = -0.33, p = .033$; see Model 1 in Table 2), founding experience ($b = -0.30, p = .048$; see Model 2 in Table 2), and while this interaction term loses significance at the .05 level when controlling for education, the pattern of the interaction effect does not change substantively ($b = -0.24, p = .137$; see Model 3 in Table 2).

References

- Lee, M., & Huang, L. (2018). Gender bias, social impact framing, and evaluation of entrepreneurial ventures. *Organization Science*, 29(1), 1-16.
- Tsay, C. J. (2016). Privileging naturals over strivers: the costs of the naturalness bias. *Personality and Social Psychology Bulletin*, 42(1), 40-53.

Table 1
Regression Analyses Predicting Perceptions of Startup Viability (Study 2)

	Main model		Model 1		Model 2		Model 3	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Constant	4.87***	0.13	5.03***	0.22	4.89***	0.13	4.88***	0.13
Hostile sexism	-0.10	0.06	-0.09	0.06	-0.09	0.06	-0.09	0.06
Evaluator gender	0.51**	0.19	0.52**	0.19	0.51**	0.19	0.51**	0.19
Founder gender	-0.01	0.18	-0.01	0.18	0.001	0.18	0.01	0.18
Benevolent sexism	0.61***	0.14	0.61***	0.14	0.62***	0.14	0.62***	0.14
Founder gender × Benevolent sexism	-0.44*	0.19	-0.43*	0.19	-0.43*	0.19	-0.43*	0.19
Founder gender × Evaluator gender	-0.21	0.26	-0.21	0.26	-0.22	0.26	-0.22	0.26
Benevolent sexism × Evaluator gender	-0.29	0.19	-0.29	0.19	-0.29	0.19	-0.29	0.19
Founder gender × Benevolent sexism × Evaluator gender	0.53*	0.26	0.52*	0.26	0.52*	0.26	0.52*	0.26
Age			-0.01	0.01				
Founding experience					-0.12	0.17		
Investing experience							-0.06	0.19
Model summary	$R^2 = 0.07$ $F(8, 558) = 4.89^{***}$		$R^2 = 0.07$ $F(9, 557) = 4.42^{***}$		$R^2 = 0.07$ $F(9, 557) = 4.40^{***}$		$R^2 = 0.07$ $F(9, 557) = 4.32^{***}$	

Table 1*Continued*

	Model 4		Model 5	
	Estimate	SE	Estimate	SE
Constant	4.74***	0.14	4.90***	0.13
Hostile sexism	-0.12	0.06	-0.10	0.06
Evaluator gender	0.52**	0.19	0.49**	0.19
Founder gender	-0.001	0.18	-0.01	0.18
Benevolent sexism	0.59***	0.14	0.62***	0.14
Founder gender × Benevolent sexism	-0.42*	0.19	-0.44*	0.19
Founder gender × Evaluator gender	-0.21	0.26	-0.20	0.26
Benevolent sexism × Evaluator gender	-0.26	0.19	-0.29	0.19
Founder gender × Benevolent sexism × Evaluator gender	0.52*	0.26	0.52*	0.26
Education: High School	0.32	0.17		
Education: Vocational/Technical School	0.16	0.24		
Education: Community College Graduate	0.41	0.21		
Education: Master's Degree	0.10	0.18		
Education: Doctoral Degree	-0.19	0.36		
Entrepreneurship courses			-0.14	0.16
Model summary	$R^2 = 0.08$		$R^2 = 0.07$	
	$F(13, 553) = 3.53***$		$F(9, 557) = 4.42***$	

Note. $N = 572$. Unstandardized coefficients are reported. Founder gender and evaluator gender are coded as 0 = men and 1 = women. Benevolent sexism and hostile sexism are centered. Founding experience, investing experience, and entrepreneurship courses are coded as 1 if a participant had that experience and 0 otherwise. College Graduate is coded as the reference category for education. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2
Regression Analyses Predicting Perceptions of Startup Viability (Study 3)

	Main model		Model 1		Model 2		Model 3	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Constant	4.03***	0.13	4.53***	0.31	4.09***	0.13	4.06***	0.15
Hostile sexism	-0.13	0.07	-0.13	0.07	-0.11	0.07	-0.16*	0.08
Evaluator gender	0.37*	0.17	0.41*	0.17	0.38*	0.17	0.35*	0.17
Founder gender	0.30	0.16	0.29	0.15	0.30	0.15	0.30	0.16
Benevolent sexism	0.40**	0.12	0.40**	0.12	0.38**	0.12	0.38**	0.12
Founder gender × Benevolent sexism	-0.31*	0.15	-0.33*	0.15	-0.30*	0.15	-0.24	0.16
Age			-0.01	0.01				
Founding experience					-0.47*	0.23		
Education: Elementary School							0.22	0.71
Education: High School							0.22	0.22
Education: Vocational/Technical School							0.19	0.80
Education: Community College Graduate							0.07	0.40
Education: Master's Degree							-0.12	0.20
Education: Doctoral Degree							-0.40	0.35
Model summary	$R^2 = 0.06$		$R^2 = 0.07$		$R^2 = 0.07$		$R^2 = 0.07$	
	$F(5, 304) = 3.86^{**}$		$F(6, 303) = 3.78^{**}$		$F(6, 303) = 3.93^{***}$		$F(11, 291) = 2.01^*$	

Note. $N = 312$. Unstandardized coefficients are reported. Founder gender and evaluator gender are coded as 0 = men and 1 = women. Benevolent sexism and hostile sexism are centered. Founding experience is coded as 1 if a participant had that experience and 0 otherwise. College Graduate is coded as the reference category for education. * $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 1

An Interaction between Participant's Benevolent Sexism, Entrepreneur's Gender, and Participant's Gender in Predicting Perceptions of Startup Viability (Study 2)

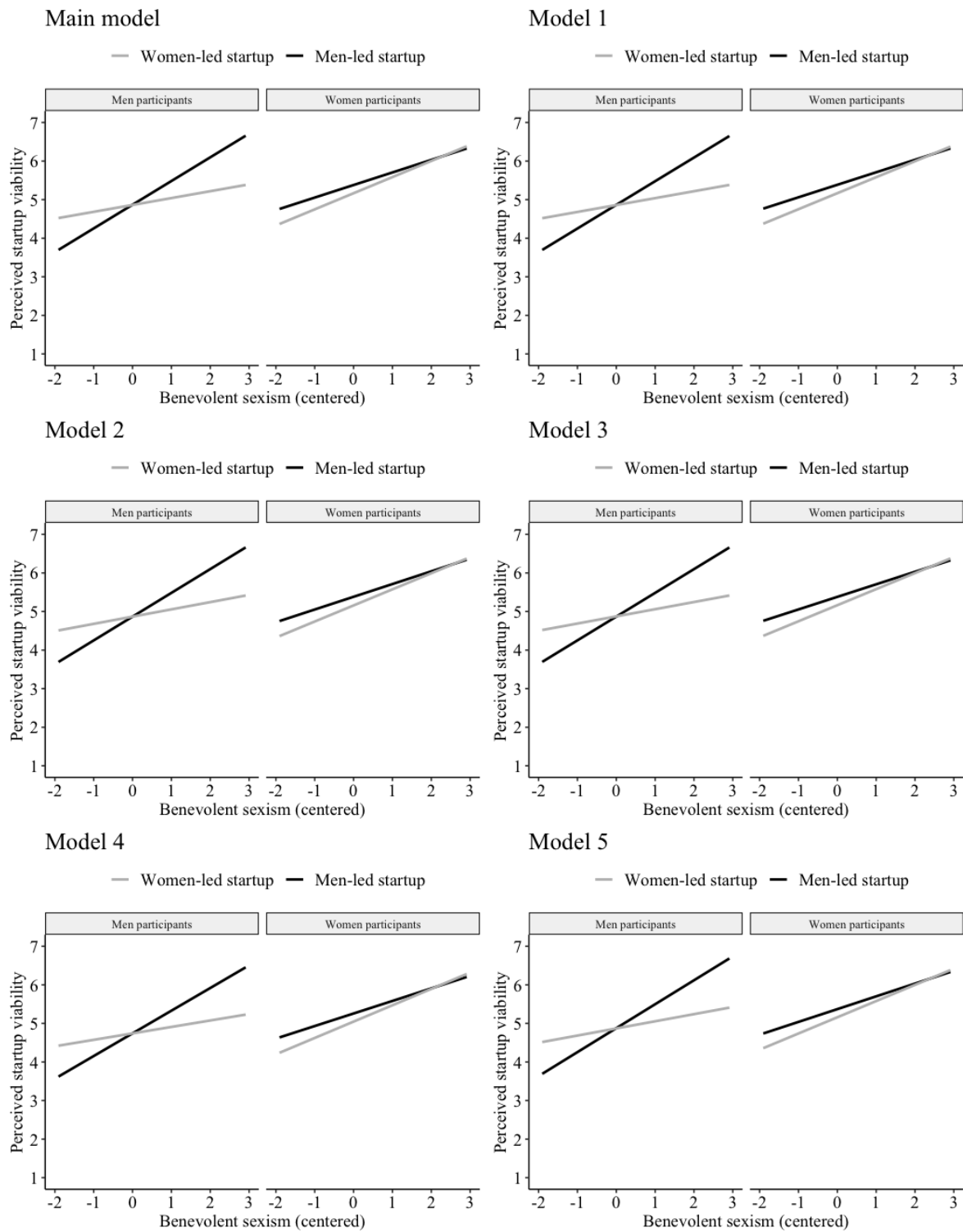


Figure 2

An Interaction between Participant's Benevolent Sexism and Entrepreneur's Gender in Predicting Perceptions of Startup Viability (Study 3)

