PERCEIVED STEWARD SUCCESS AND LEADERSHIP EFFICACY: THE ROLE OF GENDER SIMILARITY*

LIZABETH A. BARCLAY
Oakland University, Rochester, Michigan

STEVEN MELLOR
University of Connecticut

CARRIE A. BULGER

Quinnipiac University, Connecticut

LISA M. KATH University of Connecticut

ABSTRACT

We investigated the interactive effect of gender similarity and the self-efficacy induction mode of vicarious experience (modeling) on leadership self-efficacy in a union. Members of a local union responded to a mail-in survey that included items on modeling (perceived steward success), self-efficacy to be a steward, and gender of member and steward. We proposed that the effect of modeling on self-efficacy to be a steward would be augmented by gender as a shared attribute of members and stewards. In particular, we hypothesized that positive modeling-efficacy relationships would be strongest in the same-gender (women with women stewards, men with men stewards) and weakest in cross-gender cases (women with men stewards, men with women stewards). The results confirmed our hypothesis. We offered intervention suggestions that might be used to increase the potency of modeling in developing future union leaders, especially women leaders.

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Although the percentage of women who are union members has increased, the number of women assuming leadership positions within union organizations remains low [1, 2]. In response to the problem of gender disparity in union leadership, studies have focused on the differential experience of women and men members, seeking to identify perceived barriers to union participation [3, 4]. Family responsibilities, inconvenient meeting times, and lack of leadership experience are some of the barriers perceived by women who might otherwise participate as leaders. Still, there are women who do lead in spite of these barriers.

In one of the few studies to address the effect of perceived barriers, Bulger and Mellor found that women's union self-efficacy, defined as expectation of success in pursuit of union activities, mediated the relationship between perceived barriers and participation [3]. As such, self-efficacy, or beliefs about one's ability to perform successfully [5] may play a key role in women's decisions to seek leadership positions. In extending this work, we investigated a possible source of self-efficacy for performing as a union leader, with the intent of applying this knowledge to the gender-disparity problem. Specifically, this study examined the self-efficacy induction mode of vicarious experience (modeling) to determine whether gender similarity of a member and the member's steward is related to the member's beliefs about performing successfully as a steward.

SELF-EFFICACY

As a component of social cognitive theory, Bandura defined the construct of perceived self-efficacy as people's beliefs about their ability to pursue successful courses of action to achieve designated types of performance [6]. Importantly, self-efficacy is not concerned with one's actual ability, but with one's beliefs about what one expects to achieve with one's ability. Germane to our study is Bandura's proposal that efficacy beliefs about performance success are influenced by induction modes that naturally occur in the environment [7]. These induction modes have been articulated and demonstrated in a variety of applied settings with the intent of showing how they might be further articulated to increase their effect—that is, their potency—on people's efficacy beliefs [8].

The most-investigated induction mode is performance mastery. This mode is based on the idea that when people experience performance success in a particular situation, they are expected to have stronger efficacy beliefs [6]. However, since the number of women who serve as union leaders is low, we sought an alternative source of leadership efficacy, one that did not require actual performance success in the situation, and as a result, one that might have greater potential for intervention. We selected vicarious experience (interchangeably referred to as modeling). This mode relies on observational learning and acts as a social source of efficacy beliefs. The idea is that when people observe others (called models) experience performance success in a particular situation, these

people (acting as observers) are expected to have stronger efficacy beliefs [6]. Stated differently, people who observe models performing successfully in a situation are expected to use this information to positively appraise their own ability to perform successfully in the situation.

AUGMENTING SELF-EFFICACY

Studies that have shown vicarious experience as a source of self-efficacy have noted an augmenting effect when models and observers share salient personal attributes [9, 10]. The general finding is that under conditions of modeling, efficacy beliefs are stronger when observers perceive that they and models share personal attributes of social or contextual significance. Shared attributes shown to increase the potency of modeling as a source of efficacy beliefs include gender, ethnicity, age, education, and socioeconomic status [11].

The theoretical intent of this article was to examine the augmenting effect of gender as a shared attribute of models and observers in relation to the influence of vicarious experience on efficacy beliefs about being a steward. As a general proposal, we expected that gender similarity would augment the effect of vicarious experience, such that efficacy beliefs about being a steward would be strongest for same-gender models and observers and weakest for cross-gender models and observers. To date, this proposal has not been examined in relation to efficacy beliefs about being a union leader.

To examine the proposal in a union environment, gender similarity was defined by the member's gender and the steward's gender. Same-gender cases were defined as women with women stewards and men with men stewards. Cross-gender cases were defined as women with men stewards and men with women stewards. Vicarious experience was defined as perceived steward success, in which members were asked to indicate the extent to which their steward had been successful in performing the duties of the office. Self-efficacy was defined as self-efficacy to be a steward, in which members were asked to indicate their beliefs about their ability to perform successfully as a steward.

Our confidence in the augmenting effect of gender similarity was greatest for women with women stewards. Our thinking was that gender disparity might contribute to gender salience as reflected in studies on women managers with minority status and studies on women's reactions to stress [12, 13]. In general, we expected that gender as a shared attribute may be made salient by gender disparity in the steward office, the effect of which is that gender similarity increases the potency of women as models for women.

Based on prior research, we predicted the following:

Hypothesis: Gender similarity and perceived steward success interact to influence self-efficacy to be a steward, such that the influence of perceived steward success on self-efficacy to be a steward will be strongest for same-gender cases and weakest for cross-gender cases.

METHOD

Sample and Procedure

Anonymous mail-in surveys were received from 412 members of a local union in the northeastern United States (22 percent response rate). The local represents workers with semiskilled jobs at hotels, restaurants, school cafeterias, and special-event facilities. The response rate was comparable to that of other union surveys [14].

Surveys were sent to every member in the local excluding members who held office. The survey included a letter from local officials encouraging participation and assuring members of anonymity. Surveys with no missing data were retained for analyses (N = 352).

Members' age in the sample ranged from 18 to 73 years (M = 42.83, SD = 12.86). Fifty-nine percent were women. Local tenure ranged from one to thirty-two years (M = 17.76, SD = 6.36). Demographic variables were used to test for differences between retained and discarded surveys. No significant differences were revealed (ts, $\chi^2 s \le 1.00$, ts).

The representativeness of the sample in relation to members in the local could not be addressed statistically. The survey was the first census survey of members in the local. Feedback from local officials suggested that sample demographics were representative of members in the local.

Members provided demographic information about their steward. For steward's age and steward's office tenure, members were asked to estimate when exact information was unknown. Unlikely responses (e.g., 80 years for steward's age) occurred in less than 5 percent of cases and were replaced with sample averages.

Steward's age ranged frm 21 to 66 years (M = 43.36, SD = 10.72). Fifty-two percent of stewards were men. Steward's office tenure ranged from one to twenty-six years (M = 5.35, SD = 4.37). Local officials confirmed that sample demographics for stewards were representative of stewards in the local.

Same-Gender, Cross-Gender Cases. Member's gender (0 = men; 1 = women) and steward's gender (0 = men; 1 = women) were used to identify members in same-gender and cross-gender cases.

Measures

Self-Efficacy to be a Steward. Members were presented with a twelve-item list of union activities. For each item, members were asked to indicate whether they perceived they had the ability to successfully perform the activity. A yes-no response scale was provided for each item.

Ten of the twelve items were assigned to two categories: "Activities performed by stewards on-site" (i.e., in the work environment) and "Activities performed by members off-site" (i.e., away form the work environment). The two

discarded items were "File a grievance with your steward" (an on-site member activity) and "Serve as a staff organizer" (a regional union office). The categories were formed to distinguish the core duties of the steward office. Two of the five items in the on-site category were "Serve as a shop steward" and "Represent a co-worker in a grievance case." Two of the five items in the off-site category were "Phone nonunion workers to talk about the union" and "Talk to religious and community groups about the union."

Convergent validity coefficients were computed based on these categories, wherein convergence was expected between the "Serve as shop steward" item and other on-site items. Correlations between the "Serve as a shop steward" item and other on-site items ranged from .49 to .61 (the mean r was .54), whereas the correlations between the serve as a steward item and off-site items ranged from .05 to .27 (the mean r was .19).

The implied factor structure of the items was examined with maximum likelihood (ML) analysis. As expected, the analysis showed two factors with eigenvalues greater than 1.00 (the two factors explained 61 percent of the total variance). After rotation for correlated factors, the items loaded on expected factors (i.e., the five on-site items loaded on one factor, and the five off-site items loaded on the other). The alpha estimate for internal consistency for the on-site items was .84; for the off-site items, the alpha estimate was .79.

Self-efficacy to be a steward scores were based on the on-site items, wherein yes responses to on-site items were summed and divided by the number of on-site items [15]. Conceptually, this operationalization produces self-efficacy scores from 0 (low efficacy) to 1 (high efficacy). The actual scores ranged from 0 to 1 (M = .57, SD = .34).

Perceived Steward Success. Like Van Vianen, who measured vicarious experience by asking subordinates to evaluate the leadership behaviors of their supervisor [16], we asked members to indicate how successful they thought their steward had been in performing the duties of the office. A Likert-type response scale was used (1 = very unsuccessful, 6 = very successful). Perceived steward success scores ranged from 1 to 6 (M = 4.57, SD = 1.27).

Because perceived steward success scores were based on a single item, we could not compute classic reliability and validity estimates. As an alternative, we submitted the perceived steward success scores to several logical tests (e.g., significant correlations based on the scores and other variables showed no unexpected relationships; see Table 1), in which failure to detect an expected relationship could be attributed to measurement unreliability.

Among the tests, the most stringent was Bandura's proposal that when models are perceived to be performing successfully, the relationship between vicarious experience scores and self-efficacy scores will be positive [7]. In contrast, when models are perceived to be performing unsuccessfully, the relationship between vicarious experience scores and self-efficacy scores will be negative or zero. To test this proposal, two groups were formed, one for members with responses

Table 1. Means, Standard Deviations, and Correlations (N = 352)

Variable	M	SD	-	2	8	4	2	9	7	8
1. Member's local tenure	7.76	6.36								
2. Gender job-typing ^a	2.32	.60	Ε.							
3. Contact with steward ^b	4.58	1.24	.16	.00						
4. Steward's office tenure	5.35	4.37	19	19	.17					
5. Member's gender ^c	.59	.46	.17	.33	01	.19				
6. Steward's gender c	.48	.48	.02	.43	90.–	.16	.38			
7. Perceived steward success d	4.57	1.27	02	.03	.20	.08	.00	.05		
8. Self-efficacy to be a steward $^{\rm e}$.57	.34	02	.03	90.	04	02	00.	90.	

 a1 = stewards more likely to be men, 2 = stewards equally likely to be men or women, 3 = stewards more likely to be women. b1 = rarely speak with steward, 5 = speak with steward daily. c0 = men, 1 = women d1 = very unsuccessful, 6 = very successful. 60 = low self-efficacy, 1 = high self-efficacy. c1 = c1 =

below the midpoint of the scale (very unsuccessful to somewhat unsuccessful) and one for members with responses above the scale midpoint (somewhat successful to very successful). For members in the perceived-as-successful group, the correlation between perceived steward success scores and self-efficacy to be a steward scores was .21 (p < .01; n = 238); in the perceived-as-unsuccessful group, the correlation between perceived steward success scores and self-efficacy scores was -.17 (*ns*; n = 114).

Perceived steward success scores were coded dichotomously only in the test above. Otherwise, in all other analyses, perceived steward success scores were based on responses from 1 to 6.

Controls. Member's local tenure and steward's office tenure were included as control variables in analyses. Other variables shown to be related to union leadership in prior studies [3, 17] were assessed with Likert-type response scales and included as well. They were: gender job-typing of the steward office (1 = stewards are more likely to be men, 2 = stewards are equally likely to be men or women, 3 = stewards are more likely to be women) and contact with steward (1 = rarely speak to steward, 2 = speak to steward yearly, 3 = speak to steward)monthly, 4 = speak to steward weekly, 5 = speak to steward daily).

RESULTS

Table 1 presents means, standard deviations, and the zero-order correlations for the study variables.

We tested the hypothesis with moderated regression analysis [18]. Because gender similarity was defined by two variables—member's gender and steward's gender—a significant three-way interaction term would indicate support for the hypothesis.

The hypothesis predicted that the relationship between perceived steward success and self-efficacy to be a steward would be strongest for same-gender cases and weakest for cross-gender cases. As indicated in Table 2, the Member's Gender × Steward's Gender × Perceived Steward Success three-way interaction term explained a significant amount of the variance in self-efficacy to be a steward above and beyond that accounted for by the control variables, the three main effects, and the three two-way cross-product terms ($\Delta R^2 = .03, p < .01$).

As shown in Figure 1, the relationship between perceived steward success and self-efficacy to be a steward was significant for women with women stewards (B = .40, p < .01) and for men with men stewards (B = .36, p < .01). In contrast, the relationship between perceived steward success and self-efficacy to be steward for women with men stewards was nonsignificant (B = .04, ns). For men with women stewards, the relationship was also nonsignificant (B = -.17, ns). These results support the hypothesis.

Controlling for Step 1 variables, separate partial correlations between perceived steward success and self-efficacy to be a steward were computed for the

Table 2. Moderated Regression Analysis for Gender Similarity and Perceived Steward Success in Relation to Self-Efficacy to Be a Steward (N = 352)

	ļ:	3		
Step and predictor	At step	Final	R^2	ΔR^2
1. Members' local tenure	11	05		
Gender job-typing	.02	.05		
Contact with steward	.05	04		
Stewards' office tenure	.13	.13	.08*	
2. Members' gender	08	14		
Stewards' gender	.02	.16		
Perceived steward success	.04	.18	.09**	.01
3. Members' gender × Stewards' gender	.45**	24		
Members' gender × Perceived steward success	.08	18		
Stewards' gender × Perceived steward success	21	41	.12**	.03*
4. Members' gender × Stewards' gender × Perceived steward success		.53**	.15**	.03**

 $[\]beta$ is the standardized regression coefficient. Increments for variables entered at the ΔR^2 significance levels are based on F tests for that step. Unstandardized regression coefficients and standard errors are available from the second author.

subgroups. The z' transformations of r are presented in Table 3. The relationship between perceived steward success and self-efficacy to be a steward was significantly stronger for women with women stewards than for either women with men stewards or men with women stewards (zs > 2.33, ps < .01). The relationship between perceived steward success and self-efficacy to be a steward was significantly stronger for men with men stewards than for either women with men stewards or men with women stewards (zs > 1.65, ps < .05). As indicated in Table 3, relationships did not significant differ within same-gender cases or within cross-gender cases.

DISCUSSION

Our results suggested that the gender similarity of members and stewards augmented the effect of vicarious experience on self-efficacy to be a steward. We had hypothesized that the member's gender, the steward's gender, and the perceived success of the steward would interact to influence self-efficacy to be a

^{*}p < .05.

^{**}p < .01.

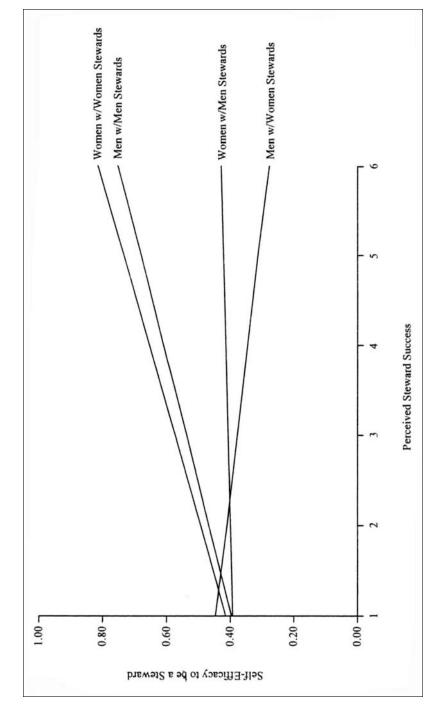


Figure 1. Members' Gender \times Stewards' Gender \times Perceived Steward Success interaction on self-efficacy to be a steward.

Table 3. Tests for Independent Correlations between Induction Mode and Self-Efficacy to Be a Steward by Same-Gender and Cross-Gender Cases

	Z'					
	Same g	gender	Cross	-gender		
Relationship	Women with women stewards	Men with men stewards	Women with men stewards	Men with women stewards		
Perceived steward success and self-efficacy to be a steward	.421 _a	.371 _a	.036 _b	−.169 _b		

Note: z' is the transformed case r. zs that do not share subscripts differ at p < .05 based on the standard normal curve deviate (z).

steward. Although prior research has indicated that modeling is augmented by the perceived similarity of models and observes [11], our study was the first to examine the augmenting effect of gender similarity on efficacy beliefs about being a leader in a union environment.

In support of the hypothesis, the relationship between the steward's perceived success and self-efficacy to be a steward were significant only in same-gender cases (women with women stewards, men with men stewards), and the relationship was significantly stronger in same-gender cases than in cross-gender cases (women with men stewards, men with women stewards). Also, the relationship between the steward's perceived success and self-efficacy to be a steward did not significantly differ within same-gender cases (women with women vs men with men stewards), nor did the relationship differ within cross-gender cases (women with men stewards vs. men with women stewards).

Our results extended the theoretical importance of gender as a shared attribute of models and observers in relation to vicarious experience. In particular, we expected that the effect of modeling—a mode that acts as social source of efficacy beliefs—would be particularly strong under conditions in which gender was made salient by the minority status of models who share that attribute with observers. That is, in relation to studies on token managers [19], we thought that the minority status of women leaders would increase the saliency of their performance success and, as a result, increase their potency as models. Our results are consistent with this thinking.

Our results may also reflect contrast effects. To the extent that women have replaced men in office, past and present discrepancies in performance success may add to the potency of women as models. In light of studies on stress reactions [13], it is possible that gender disparity in leadership places all parties under stress, resulting in increased potency of both women and men as models. As indicated in this cited research, under stress, women tend to seek out and attend to other women, whereas, men tend to band together or withdraw from the situation. Thus, future research might extend our study by exploring other shared attributes of models and observers that reflect disparity in the situation. In general, it may be that attributes that reflect disparity set in motion contrast effects that increase the potency of both majority and minority models. In relation to efficacy beliefs about performing as a leader, we think that several attributes may produce similar effects, including ethnicity, age, gender in relation to ethnicity, gender in relation to age, and bilingual competence.

As in all studies, our results should be interpreted with caution for a number of reasons. First, the cross-sectional nature of our study requires replication with longitudinal field data. Inclusion of omitted time-related variables, such as length of time that members had to observe stewards performing in office, are needed to address the causal direction of the modeling-efficacy relationship. No such direction is implied in our study.

Second, the single-source, self-report nature of our study requires attention to common method variance. However, the potential for such variance is negligible when an interaction is hypothesized and tested. Evans, in a Monte Carlo study to test whether method variance could produce artifactual interactions, stated that his results were unequivocal: "Artifactual interactions could not be created [from method variance]; true interactions could not be attenuated" [20, p. 305].

Third, a measure of vicarious experience that allows for better estimates of reliability and validity is needed. In particular, a multiple-item measure of perceived steward success is needed to estimate the extent of item consistency, and in conjunction with other time-related variables, a multiple-source approach is needed to estimate convergent and discriminate construct validity. Our decision to use a single-item measure for perceived steward success was rooted in our effort to maintain cooperative relations with local officials. Understandably, officials were reluctant to collect performance data on stewards. In hindsight, we believe that inclusion of a multi-item measure of performance may require more collaborative work with officials to strengthen their confidence in the use of secure data.

Sampling issues also require attention. We cannot verify how often members observed their steward performing the duties of the office. However, we observed stewards performing duties for six months in the field. Steward contact with members was notably high, and duties performed by stewards were frequently public. Also, in response to our item about "contact with steward," members indicated that, on average, they spoke with their steward daily. We also acknowledge that gender disparity in the steward office was not extreme in our study. However, it should be noted that men dominated the top local offices, as well as the regional and national offices.

In sum, our results suggested that the effect of vicarious experience, as a social source of self-efficacy, was augmented by gender as a shared attribute of models and observers in a union. Knowledge of this augmenting effect holds promise for interventions directed at the problem of gender disparity in union leadership. In general, we suggest interventions that strengthen the awareness of stewards about the effect of their performance success on the efficacy beliefs of members who observe their performance. In particular, we suggest interventions that strengthen the awareness of women stewards about the effect of their observed performance on women. Our results are clear: The potency of women stewards as models for women's beliefs about performing successfully as stewards is second to none in strength. As such, women stewards might be encouraged to provide women with every possible opportunity to observe their performance as stewards.

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Direct reprint requests to:

Lizabeth A. Barclay School of Business Administration Oakland University Rochester, MI 48309 e-mail: barclay@oakland.edu