

Do Agentic Female Managers Receive Social Backlash from Workers? An Empirical Study

Benjamin Elman
Touro College and University System

Comila Shahani-Denning
Hofstra University

Adrien Kollar
Metropolitan Transport Authority

Shai Kopitnikoff
UJA - Federation of New York

The present study attempted to test whether a social backlash existed toward agentic female managers from the perspective of subordinates. Relationships between: manager agency, manager gender, and reference sex, on worker perceptions, were examined via text scripts. Findings indicated that workers prefer communal managers regardless of gender, but that communal managers may lack competence. Agentic women were rated equally to agentic men in terms of how participant workers perceived their social skills, which contradicted past Backlash literature. Finally, a two-way interaction also highlighted the benefits of competitive managers being introduced to their new subordinates via an informal positive female reference.

INTRODUCTION

Recent data show that women hold 51% of all mid-level management jobs in America (Solis, H. L., & Hall, K., 2009), as compared to 26% in the 1980's (Bureau of Labor Statistics, 1983). While this may indicate progress by women at work, female directors are still a distinct minority (Catalyst, 2013). Female directors currently hold only 17% of the executive seats in the US (Catalyst, 2013). Furthermore, females who exhibit a desire for competitiveness and social dominance in the workplace are subsequently viewed as less sociable, and therefore deemed less suitable to lead (Rudman, 1998; Rudman & Glick, 2001).

As the number of female CEOs continues to rise, leadership gender is starting to come into question. Much research to date has shown a preference for males for top leadership positions (Kirchmeyer, 1998; Kolb, 1997; Rudman & Kilianski, 2000). While attitudes can change toward female managers through the introduction of female managers to an organization, this doesn't necessarily lead to more women being

selected (Ferreira & Gyourko, 2014). In addition, mandating women into the boardroom can lead to a short-term drop in company stock price (Ahern & Dittmar, 2012).

Manager Qualities

When times are good for organizations they have different manager requirements, in comparison to when times are bad. Ryan et al. (2011) explained that during a crisis, certain communal managerial traits and behaviors (i.e. being warm, caring, and team focused) do become more relevant to the organizational needs. However, outside of the context of crisis in organizations, preferred leadership hiring has been traditionally been male (Agars, 2004). Willemsen (2002) found that participants tend to think of a manager as male.

Agentic and Communal Managerial Competencies

Research by Robertson, Brummel, & Salvaggio (2011) surveyed US business professionals and managers between 1999 and 2007, and found that communal characteristics were minimally required as a manager. Agentic behaviors were originally evaluated as stereotypically masculine (Bakan, 1966) such as behaving with confidence, skillfulness, exhibiting capability, expressing power, showing aggression, being assertive, independent, and having self-confidence. More recently the term agentic was defined as being: individualistic, competitive, independent, hierarchical, self-sufficient, and autonomous (Glick & Fiske, 1996). Communal competencies are the opposite of agentic competencies, and have been stereotypically viewed as a combination of feminine behaviors that include being caring, emotional, kind, sympathetic, sensitive, and nurturing (Abele, 2003; Bakan, 1966; Madera, Hebl, & Martin, 2009).

Bartram (2005) and Damaschke (2012) researched leadership competencies and found traits and behaviors that combined both agency and communion. Agentic traits were found to dominate their lists of competencies. This leadership research has focused heavily on the experiences and perspectives of executives, but it has ignored the viewpoint of the worker about their manager (Robertson, Brummel, & Salvaggio, 2011). The leader-follower relationship has been established as a critical component of any leader success (Hollander, 2012). In the current study, it is anticipated that the workers themselves will prefer to work for a boss with communal traits, even though from a senior leadership perspective these traits may not be enough to lead effectively.

The challenge for women in management is that often they must adopt behaviors that conflict with gender role norms. Seeking power, being competitive, negotiating aggressively over starting salary, and being comfortable delivering criticism, are all traits and behaviors that could be perceived to be as stereotypically masculine and “unladylike” (Okimoto and Brescoll, 2010). A social backlash in ratings of hirability and sociability has been found to exist toward such agentic and socially dominant women (Okimoto and Brescoll, 2010; Phelan, Moss-Racusin, & Rudman, 2008; Moss-Racusin, Phelan, & Rudman, 2010).

Backlash and Agency

Rudman (1998) introduced the topic of “backlash” as a negative outcome received by women during job interviews as a result of self-promoting. Rudman and Glick (2001) argued that backlash is better understood by evaluating the psychological construct of agency. Agency according to Rudman and Glick (2001) is made up of two factors; competence (the positive traits), and social dominance (composed of competence traits plus, forcefulness, and aggressiveness). Social dominance is argued to be the main trigger to elicit backlash. In the present study agency will be manipulated in one of two categories: either positive (competitive) or negative (socially dominant), and there will be one type of communal.

Phelan, Moss-Racusin & Rudman (2008) studied the backlash effect against competent, agentic women, and found a significant negative relationship between being communal, and the overall hirability of women. Being agentic was positively correlated with hirability regardless of the applicant’s gender. However, agentic women were rated lower in respect to social skills which is the major theme of the backlash effect. Backlash attitudes toward agentic female managers may vary depending on the hierarchical direct report level. For example, a worker reports to his or her manager, a Vice President

reports to the CEO, and the CEO reports to the shareholders. This study attempts to understand the lowest of these dyadic categories.

Sex of Reference

Existing research on agentic females in managerial roles has required participants to rate agentic women with limited background information (Rudman & Glick, 2001). A positive work recommendation provided by a colleague about the female manager may moderate worker gender biased attitudes. This bias can be explained by understanding gender stereotypical beliefs about what gender a manager should be, and how a woman should behave (Pierre & Heilman, 2012). A gender stereotype bias may exist in relation to the interpretation of a verbal recommendation. Specifically, a verbal or written recommendation from a male may lead to a different outcome than from a female. In the present study, positive references will be provided from a work colleague who is either male or female to determine whether a positive reference can reduce the social backlash toward agentic female managers, should it be found to exist. The present study will also look at whether the sex of that reference makes a significant difference to attitudes workers have toward the manager.

Present Study

The backlash effect as described by Rudman and Glick (2001) indicated that being female and showing competitive and socially dominant traits and behaviors as a manager, would lead to a social backlash from those around her that an equivalent male manager would not encounter. However, the present study argues that an agentic female manager will not receive social backlash in an upward direction from hypothetical subordinates. The present study argues that either the backlash effect as described by Rudman and Glick (2001) has reduced significantly, or the population deemed to be responsible for backlash toward agentic female managers should not have included subordinates. Competent and agentic female managers may no longer be as disadvantaged when taking charge of a work team as compared to competent and agentic male managers. The present study attempted to identify whether or not gender differences existed in outcome ratings of sociability, likability, competency, or boss desirability (Elman, 2015). The manager was manipulated by gender, and by the agency of their managerial style. The participant was informed this person would be their new department manager. The present study also attempted to identify whether or not a positive work reference from a male or female colleague could impact the ratings participants give to their new managers.

RESEARCH QUESTION

Since no backlash study has created dyadic levels of backlash between manager and worker, this is exploratory research. We are looking to see that the null hypothesis is true: That female managers' do not receive social backlash from subordinates. Backlash may exist at a higher level, which further research can verify.

Hypothesis 1. The null hypothesis will be true (contradicting research by Rudman and Glick, 2001). There will be no main effect for boss gender, and no interaction found between boss gender and boss agency. Female managers, regardless of their agentic attributes, will be rated as equally desirable to work for, and as equally competent, sociable, and likable as equivalent male managers.

Hypothesis 2. There will be a main effect for boss agency, such that managers who display communal attributes will be found more desirable to work for than agentic or socially dominant managers. Communal managers will also be rated as more sociable, more likable, but less competent than agentic or socially dominant managers.

- Hypothesis 3.* There will be a main effect for reference sex, such that presenting a positive male reference to participants will increase their overall ratings of the manager compared to presenting a female reference, or no reference.
- Hypothesis 4.* There will be an interaction between boss gender, boss agency, and sex of reference on ratings of boss desirability, sociability, likability, and competency. When the participant is provided with a positive male reference for their new male manager, or a positive female reference for their new female manager, higher ratings of all measures are expected as compared to when no reference is provided.

METHOD

Sample

360 participants were calculated using G*Power for power analysis (Faul, Erdfelder, Lang, & Buchner, 2007), and were recruited from Amazon's Mechanical Turk (www.mturk.com). Participants were offered 50 cents to complete the 8 minute online survey.

Design, Materials, & Variables

This experiment was a 2 (Boss Gender: male/female) x 3 (Boss Agency: competent agentic/socially dominant agentic/communal) x 3 (Gender Reference: male/female/no reference) between-subjects design with approximately 20 participants for each individual group. Boss Gender is operationally defined as the sex of the new manager in the participant's department. Boss Agency is operationally defined in the same way Glick & Fiske (1996) define an agentic job applicant: as a manager who has traits that are either: competent agentic, e.g. individualistic, competitive, independent, hierarchical, self-sufficient, and autonomous; communal, e.g. attached, committed, communal, cooperative, kinship-oriented, together; or lastly as agentic with social-dominance that adds onto competent agentic with, e.g. aggressiveness and forceful (Rudman and Glick, 2001). Gender of Reference is operationally defined as the sex of the person writing a positive reference. Each participant was then presented with a written quote from their new boss about their managerial style. The study materials were presented electronically using Qualtrics Labs, Inc. software. Three pilot tests were run using MTurk participants to confirm the unique properties of agency conditions.

Measures

The likability scale was measured using three items and a Cronbach's alpha of .74 as adopted from Moss-Racusin, Phelan, & Rudman (2010). These items were anchored with end points of 1= Not at all likely, to 5 = Extremely likely). Boss sociability was measured with 10 characteristics including: "kind, supportive, warm, sincere, helpful, likable, friendly, popular, good listener, sensitive to needs of others" with a Cronbach's alpha of .92, and was adapted from Rudman & Glick (2001). In addition, boss competency was measured using 9 characteristics including: "competent, independent, confident, determined, computer-skilled, analytical, ambitious, competitive, and works well under pressure", with a Cronbach's alpha of .86 and was also adapted from Rudman & Glick (2001). Lastly, a boss desirability scale was added using three items that had been adapted from the hirability measure developed by Moss-Racusin, Phelan, & Rudman (2010). Specifically, these items included: 1. How much would you like to personally work for this manager? 2. How likely would you be to perform well for this manager? 3. How likely is it that this manager will motivate you?

RESULTS

Descriptive Statistics and Intercorrelations

All participants were from the United States, and their mean age was 37 years old. The mean number of work experience years for participants was 16 (of which 19 had less than two years' experience, 140

had between three and 10 years' experience, and 201 participants had between 11 and 56 years of work experience).

All the descriptive statistics for the dependent variables can be found in Table 1, which provided the means and the standard deviations for all 4 of the dependent variables. Table 2 provides the intercorrelations between the dependent variables.

Correlations

Dependent measures of boss desirability, sociability, and likability showed strong positive intercorrelations (Table 2). Subsequently a MANOVA was run with three independent variables specifically on the intercorrelated variables. A three-way ANOVA was then run with the three IVs on the remaining outcome variable "Boss Desirability".

Main Effects

Hypothesis 1 was supported. The null hypothesis was found to be true, and no backlash effect was discovered. Specifically, there was no significant main effect of boss gender, or interaction between boss gender and boss agency on ratings of any outcome variable (see Table 3 for MANOVA and Table 5, 6, 7, and 8 for means and standard deviations). This indicates that female managers regardless of the degree to which they are socially dominant agentic or agentic were not receiving any backlash in relation to their sociability or likability from participants as compared to equivalent male managers.

Hypothesis 2 was supported, as a main effect for boss agency was revealed across all outcome measures. Data from tests of between-subjects effects MANOVA selected on three outcome measures due to significant dependent variable intercorrelations, specifically showed communal managers were rated as significantly more desirable to work for, than agentic or socially dominant agentic managers ($\eta^2 = .24$, $F(2,360) = 55.13$, $p < .01$). Communal managers were also rated as significantly more likable ($\eta^2 = .37$, $F(2,360) = 100.90$, $p < .01$) and sociable ($\eta^2 = .50$, $F(2,360) = 168.96$, $p < .01$) than agentic or socially dominant agentic managers (see Table 3 for MANOVA; Table 5, 6, and 7 for means and standard deviations; and Figure 1 for the main effect of agency on desirability). Communal managers were rated as significantly less competent than agentic or socially dominant agentic managers although with a smaller effect size ($\eta^2 = .07$, $F(2,360) = 13.31$, $p < .01$) (see Table 4 for ANOVA; Table 8 for means and standard deviations). Hypothesis 3 was not supported, as reference sex had no significant main effect on participant ratings.

Interactions

Hypothesis 4 was partially supported. A weak but significant interaction was found between boss agency and reference sex on ratings of boss likability ($\eta^2 = .02$, $F(4,360) = 3.49$, $p < .01$). A marginally significant interaction was found between boss agency and reference sex on ratings of boss desirability ($\eta^2 = .03$, $F(4,360) = 2.34$, $p < .06$) (see Table 3 for MANOVA; Table 5 and 7 for means and standard deviations; and Fig. 2 for the interaction between boss agency and reference sex). No significant three-way interactions were found on boss desirability, sociability, likability, or ratings of boss competency. Data from pairwise comparisons (see Table 9) specifically showed that agentic bosses who were introduced with a female reference received significantly greater ratings of likability ($p < .01$, Mean = 3.12, SD = .94) than when no reference was provided (Mean = 2.43, SD = 1.05). To calculate the means and standard deviations above, the male and female agentic boss ratings were averaged (see Table 7). Also, socially dominant agentic bosses who were introduced with a male reference received marginally significantly greater ratings of desirability (Mean = 2.89, SD = 1.33) than when no reference was provided (Mean = 2.30, SD = 1.21). To calculate the means and standard deviations above, the male and female agentic boss ratings were averaged (see Table 5).

DISCUSSION

The biggest effects found in the current study were from worker perceptions of a communal manager on all outcome measures. Workers seem to want warmth and support rather than dominance and ego from their manager, but they may not have faith in the competence of a communal boss. The importance of competence and agency was discussed by Robertson, Brummel, & Salvaggio (2011) through the survey of US business professionals and leaders between 1999 and 2007. They found agreement as to the traits and competencies required to be a successful manager or executive. Just one of the ten leadership competencies were categorized as “Communal”, five were labeled “Agentic”, and the other four were neutral. From the present study it seems clear that workers like communal managers but will need to see some agentic or socially dominant behaviors from that manager in order to rate them as competent.

The most controversial finding in the current study was that no interaction was found between boss agency and boss gender on any of the outcome measures. This result indicates that workers hold no social bias toward agentic female managers. Perhaps the continuing advancement of women in the workforce in recent years has reduced the importance of gender role norms in society? In other words as a worker becomes more experienced with female leadership, so they may become less uncomfortable around women who exhibit agentic behaviors. A worker with no female managerial experience at all may not have developed their gender role perceptions beyond the females present in their home-life, or in supportive work roles. It should be noted however, that since the sample used represented workers and not senior managers, it is still possible that a backlash effect exists from top leadership down, especially since top executive leaders report only to the organizational President, and shareholders who are overwhelmingly male (Catalyst, 2013).

Of the two-way interactions found in the present study, boss agency and reference sex on ratings of boss likability were the most significant. The results indicated that when a female introduces an incoming agentic boss she will make that boss more likable than if no reference takes place. Perhaps intimidating news can be less intimidating when a female delivers it? Ryan et al. (2011) argued for “Think Crisis – Think Female” explaining that bad news is often given to female leaders to deliver. Examples of this can be found in politics where after the U.K “Brexit” vote, the conservative party selected Theresa May to be their Prime Minister, and in the private sector with Mary Barra being put in charge of General Motors (GM) in 2014, just two months before GM announced that 2.6 million of their small cars would need to be returned for faulty ignition switches (Seitel, 2014). Bauer and Baltes, (2002) reasoned that when subjects have limited information, they increasingly lean on gender stereotypes. The conclusion that a female work reference will make a competitive and competent manager more favorable to their work team does not seem unreasonable when considering the value society puts on female stereotypes and word-of-mouth references.

Implications

In the applied world, the results of this study are generally positive for women who are in managerial positions. Without using a senior leadership sample however, it will be impossible to rule out the existence of a backlash effect. Even though Rudman and Glick (2001) argued strongly that agentic women would receive lower social skills ratings, the findings of this study did not find an effect when using participants with work experience averaging 16 years. The findings also revealed that workers find a communal manager more desirable to work for, which is in contrast with the type of manager top leadership looks for (Robertson, Brummel, & Salvaggio, 2011). If workers want a communal manager, and business leaders want an agentic manager, perhaps this explains why employee turnover is continuously an issue organizations attempt to solve? What this does indicate, is that managers of all backgrounds may benefit significantly by introducing some communal behaviors into their interactions with subordinates.

LIMITATIONS AND FUTURE RESEARCH

In the present study, a significant limitation was the medium by which the treatment was delivered to participants. Specifically, the treatment was presented via text on a computer screen, while Rudman and Glick's used video interviews (2001). Boss quotes and references may not have been read diligently enough or interpreted in the correct tone (participants were timed and removed if they completed the study in less than 100 seconds). Although a video has a number of construct confounding concerns, it may be that the presentation of stimuli would be significantly more visual and mentally stimulating to a participant than text on a screen might be (De Leng et al., 2007). Subsequently, it may be possible that no backlash effect was found toward agentic female managers due to a type two error. However, a meta-analysis by Eagly, Karau, and Makhijani (1995) manipulated the wording in a job description, and found this was enough to change participant gender preferences.

A second limitation reflects the MTurk participants' ability to opt-in to the study via the Amazon website. This is a form of convenience sampling which is not a preferred method for sampling (Acharya et al., 2013). Questions were asked of each participant in relation to their work history, and anyone stating less than 1 year full-time work experience was removed from the study.

Future research can investigate other possible confounding variables that may be influencing a social backlash toward female managers such as: gender neutral clothing being worn at meetings (Rudman & Glick, 2001); or the handshakes that female managers introduce themselves with. In addition, a replication of the current study using only senior leadership executives as a sample may contribute significantly to the literature on the backlash effect. Male corporate executives may be found to exhibit the social backlash effect toward female managers.

CONCLUSION

The present study tackles whether competent or socially dominant female managers would be perceived as lacking social skills or be found less desirable to work for than equivalent males. The present findings revealed that competent or socially dominant agentic women did not receive a negative bias toward them from workers. Additionally this research found that male and female agentic managers may benefit from a female work reference before being introduced to their work team if they wish to be more popular among workers. Lastly, the current study confirms that workers prefer a communal boss, although they also recognize that the communal boss may not be competent.

REFERENCES

- Abele, A. E. (2003). The dynamics of masculine-agentic and feminine-communal traits: Findings from a prospective study. *Journal Of Personality And Social Psychology*, 85(4), 768-776. doi:10.1037/0022-3514.85.4.768
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330-333.
- Agars, M. D. (2004). Reconsidering the impact of gender stereotypes on the advancement of women in organizations. *Psychology of Women Quarterly*, 28(2), 103-111.
- Ahern, K. R., & Dittmar, A. K. (2012). The changing of the boards: The impact on firm valuation of mandated female board representation. *The Quarterly Journal of Economics*, 127(1), 137-197.
- Bakan, D. (1966). *The duality of human existence: Isolation and communion in Western man*. Beacon Press (MA).
- Bartram, D. (2005). The Great Eight Competencies: A Criterion-Centric Approach to Validation. *Journal Of Applied Psychology*, 90(6), 1185-1203. doi:10.1037/0021-9010.90.6.1185
- Bauer, C. C., & Baltes, B. B. (2002). Reducing the effects of gender stereotypes on performance evaluations. *Sex Roles*, 47(9-10), 465-476.

- Bureau of Labor Statistics. (1983). Table 16: Employed Civilians by Sex, Race, Hispanic Origins, and Occupation, 1958-82, *In Handbook of Labor Statistics*. Bulletin 2175.
- Catalyst.org. (2013). *2013 Catalyst Census Fortune 500 Women Board Directors*. Retrieved from <http://www.catalyst.org/knowledge/2013-catalyst-census-fortune-500-women-board-directors>
- Damaschke, K. C. (2012). First impression 2.0: competency representation on LinkedIn. Retrieved from <http://essay.utwente.nl/61652/>
- De Leng, B. A., Dolmans, D. H., Van de Wiel, M. W., Muijtjens, A. M. M., & Van Der Vleuten, C. P. (2007). How video cases should be used as authentic stimuli in problem-based medical education. *Medical education*, *41*(2), 181-188.
- Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin*, *117*(1), 125-145. doi:10.1037/0033-2909.117.1.125
- Elman, B. (2015). *Is There Evidence of a Backlash Effect? An Empirical Investigation*. Hofstra University.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191.
- Ferreira, F., & Gyorko, J. (2014). Does gender matter for political leadership? The case of US mayors. *Journal of Public Economics*, *112*, 24-39. doi:<http://dx.doi.org.ezproxy.hofstra.edu/10.1016/j.jpubeco.2014.01.006>
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, *70*, 491-512. doi:10.1037/0022-3514.70.3.491
- Hollander, E. (2012). *Inclusive leadership: The essential leader-follower relationship*. Routledge.
- Kirchmeyer, C. (1998). Determinants of managerial career success: Evidence and explanation of male/female differences. *Journal Of Management*, *24*(6), 673-692.
- Kolb, J. A. (1997). Are we still stereotyping leadership? *Small Group Research*, *28*(3), 370.
- Madera, J. M., Hebl, M. R., & Martin, R. C. (2009). Gender and letters of recommendation for academia: Agentive and communal differences. *Journal of Applied Psychology*, *94*(6), 1591-1599. doi:10.1037/a0016539
- Moss-Racusin, C. A., Phelan, J. E., & Rudman, L. A. (2010). When men break the gender rules: Status incongruity and backlash against modest men. *Psychology Of Men & Masculinity*, *11*(2), 140-151. doi:10.1037/a0018093
- Phelan, J. E., Moss-Racusin, C. A., & Rudman, L. A. (2008). Competent yet out in the Cold: Shifting Criteria for Hiring Reflect Backlash toward Agentive Women. *Psychology Of Women Quarterly*, *32*(4), 406-413.
- Pierre, G., & Heilman, M. E. (2012). Negating responsibility for gender stereotype violation: Its salutary effect for women. *Unpublished manuscript*.
- Robertson, L. N., Brummel, B. J., & Salvaggio, A. (2011). Gender perceptions of managerial positions: Implications for work-related outcomes. *The Psychologist-Manager Journal*, *14*(1), 1-28. doi:10.1080/10887156.2011.546171
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal Of Personality And Social Psychology*, *74*(3), 629-645. doi:10.1037/0022-3514.74.3.629
- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentive women. *Journal of social issues*, *57*(4), 743-762.
- Rudman, L. A., & Kilianski, S. E. (2000). Implicit and explicit attitudes toward female authority. *Personality and Social Psychology Bulletin*, *26*(11), 1315-1328. doi:10.1177/0146167200263001

- Ryan, M. K., Haslam, S. A., Hersby, M. D., & Bongiorno, R. (2011). Think crisis—think female: The glass cliff and contextual variation in the think manager—think male stereotype. *Journal of Applied Psychology, 96*(3), 470.
- Seitel, F. (2014). *GM's recall scandal: A scorecard on CEO Mary Barra*. Retrieved March 19, 2018 from <http://www.google.com/amp/amp.timeinc.net/fortune/2014/03/21/gms-recall-scandal-a-scorecard-on-ceo-mary-barra>
- Solis, H. L., & Hall, K. (2009). Women in the labor force: A databook. *US Bureau of Labor Statistics. Report, 1018*, 1-98.
- Willemssen, T. M. (2002). Gender typing of the successful manager—a stereotype reconsidered. *Sex Roles, 46*(11-12), 385-391.

APPENDIX

TABLE 1
DESCRIPTIVE STATISTICS OF ALL 4 MEASURES

| Scale | Mean | Std. Deviation | N |
|-------------------------------|------|----------------|-----|
| Boss Desirability index score | 3.28 | 1.24 | 360 |
| Sociability index score | 2.97 | 1.28 | 360 |
| Likability index score | 3.10 | 1.26 | 360 |
| Competency index score | 3.98 | 0.69 | 360 |

Note. Each index is a composite of all test items averaged.

TABLE 2
INTERCORRELATIONS OF BOSS DESIRABILITY, SOCIABILITY, LIKABILITY, AND COMPETENCY VARIABLES

| Measure | 1 | 2 | 3 | 4 |
|----------------------------------|--------|-------|------|------|
| | Desire | Soci | Like | Comp |
| 1. Boss Desirability index score | - | | | |
| 2. Sociability index score | | .80** | - | |
| 3. Likability index score | .88** | .89** | - | |
| 4. Competency index score | | .18** | .00 | .09 |

*Significant at $p < .05$ level, **Significant at $p < .01$ level

Note. Each index is a composite of all test items averaged.

TABLE 3
MANOVA TESTS OF BETWEEN-SUBJECTS EFFECTS OF HYPOTHESIS 1, 2, 3 & 4

| Source | Dependent Variables | Type III Sum of Squares | F | Mean Square | df | p-value | Partial Eta Squared |
|-------------|---------------------|-------------------------|--------|-------------|----|---------|---------------------|
| Boss | Desirability | .27 | .24 | .27 | 1 | .626 | .00 |
| Gender (H1) | Sociability | .03 | .03 | .03 | 1 | .855 | .00 |
| | Likability | .84 | .86 | .84 | 1 | .355 | .00 |
| Boss | Desirability | 2.34 | 1.02 | 1.17 | 2 | .361 | .01 |
| Gender | Sociability | 2.93 | 1.79 | 1.47 | 2 | .169 | .01 |
| *Boss | Likability | 3.93 | 2.01 | 1.96 | 2 | .136 | .01 |
| Agency (H1) | | | | | | | |
| Boss | Desirability | 126.38 | 55.13 | 63.19 | 2 | .000** | .24 |
| Agency (H2) | Sociability | 276.71 | 168.96 | 138.35 | 2 | .000** | .50 |
| | Likability | 197.51 | 100.90 | 98.75 | 2 | .000** | .37 |
| Reference | Desirability | 3.02 | 1.32 | 1.51 | 2 | .269 | .01 |
| Gender (H3) | Sociability | 2.26 | 1.38 | 1.13 | 2 | .254 | .01 |
| | Likability | 3.61 | 1.85 | 1.81 | 2 | .160 | .01 |
| Boss | Desirability | 10.73 | 2.34 | 2.68 | 4 | .055 | .03 |
| Agency | Sociability | 7.16 | 2.19 | 1.79 | 4 | .070 | .02 |
| *Reference | Likability | 13.67 | 3.49 | 3.42 | 4 | .008** | .04 |
| Gender (H4) | | | | | | | |

**Significant at $p < .05$ level, **Significant at $p < .01$ level*

TABLE 4
ANOVA TESTS OF BETWEEN-SUBJECTS EFFECTS OF HYPOTHESIS 1, 2 & 3

| Source | Dependent Variables | Type III Sum of Squares | F | Mean Square | df | p-value | Partial Eta Squared |
|--|---------------------|-------------------------|-------|-------------|----|---------|---------------------|
| Boss Gender (H1) | Boss Competency | .05 | .11 | .05 | 1 | .738 | .00 |
| Boss Gender *Boss Agency (H1) | Boss Competency | .65 | .72 | .32 | 2 | .490 | .00 |
| Boss Agency (H2) | Boss Competency | 12.07 | 13.31 | 6.04 | 2 | .000** | .07 |
| Reference Sex (H3) | Boss Competency | 1.15 | 1.27 | .58 | 2 | .282 | .01 |
| Boss Agency *Reference Sex (H3) | Boss Competency | 2.71 | 1.49 | .68 | 4 | .204 | .02 |
| Boss Gender *Reference Sex (H3) | Boss Competency | .26 | .28 | .13 | 2 | .754 | .00 |
| Boss Gender *Boss Agency *Reference Sex (H3) | Boss Competency | 1.28 | .70 | .32 | 4 | .590 | .01 |

**Significant at p<.05 level, **Significant at p<.01 level*

TABLE 5
MEANS AND STANDARD DEVIATIONS BETWEEN BOSS GENDER, BOSS AGENCY, AND
REFERENCE SEX ON BOSS DESIRABILITY

| DV | Independent Variable(s) | Mean | Std. Deviation | N |
|-------------------|-------------------------|------|----------------|----|
| Boss Desirability | | | | |
| | SD*MBoss*FRef | 2.96 | 1.11 | 17 |
| | SD*MBoss*MRef | 2.83 | 1.39 | 23 |
| | SD*MBoss*NoRef | 2.23 | 1.28 | 18 |
| | SD*FBoss*FRef | 2.60 | .87 | 15 |
| | SD*FBoss*MRef | 2.94 | 1.27 | 23 |
| | SD*FBoss*NoRef | 2.37 | 1.14 | 22 |
| | Agentic*MBoss*FRef | 3.04 | 1.26 | 19 |
| | Agentic*MBoss*MRef | 3.35 | 1.40 | 26 |
| | Agentic*MBoss*NoRef | 2.77 | 1.00 | 26 |
| | Agentic*FBoss*FRef | 3.48 | .78 | 20 |
| | Agentic*FBoss*MRef | 2.90 | 1.02 | 23 |
| | Agentic*FBoss*NoRef | 3.20 | .99 | 17 |
| | Comm.*MBoss*FRef | 4.39 | .98 | 12 |
| | Comm.*MBoss*MRef | 4.12 | .79 | 19 |
| | Comm.*MBoss*NoRef | 4.32 | .80 | 20 |
| | Comm.*FBoss*FRef | 4.12 | .74 | 23 |
| | Comm.*FBoss*MRef | 3.60 | 1.14 | 15 |
| | Comm.*FBoss*NoRef | 4.30 | .76 | 22 |

TABLE 6
MEANS AND STANDARD DEVIATIONS BETWEEN BOSS GENDER, BOSS AGENCY, AND
REFERENCE SEX ON BOSS SOCIABILITY

| DV | Independent Variable(s) | Mean | Std. Deviation | N |
|------------------|-------------------------|------|----------------|----|
| Boss Sociability | | | | |
| | SD*MBoss*FRef | 2.19 | 1.07 | 17 |
| | SD*MBoss*MRef | 2.10 | 1.00 | 23 |
| | SD*MBoss*NoRef | 1.92 | 1.15 | 18 |
| | SD*FBoss*FRef | 2.47 | .99 | 15 |
| | SD*FBoss*MRef | 2.33 | 1.04 | 23 |
| | SD*FBoss*NoRef | 2.02 | .89 | 22 |
| | Agentic*MBoss*FRef | 2.69 | .98 | 19 |
| | Agentic*MBoss*MRef | 2.74 | 1.06 | 26 |
| | Agentic*MBoss*NoRef | 2.27 | 1.03 | 26 |
| | Agentic*FBoss*FRef | 2.76 | .83 | 20 |
| | Agentic*FBoss*MRef | 2.58 | .74 | 23 |
| | Agentic*FBoss*NoRef | 2.38 | .85 | 17 |
| | Comm.*MBoss*FRef | 4.40 | .95 | 12 |
| | Comm.*MBoss*MRef | 4.33 | .79 | 19 |
| | Comm.*MBoss*NoRef | 4.53 | .59 | 20 |
| | Comm.*FBoss*FRef | 4.22 | .63 | 23 |
| | Comm.*FBoss*MRef | 3.82 | .95 | 15 |
| | Comm.*FBoss*NoRef | 4.43 | .56 | 22 |

TABLE 7
MEANS AND STANDARD DEVIATIONS BETWEEN BOSS GENDER, BOSS AGENCY, AND
REFERENCE SEX ON BOSS LIKABILITY

| DV | Independent Variable(s) | Mean | Std. Deviation | N |
|-----------------|-------------------------|------|----------------|----|
| Boss Likability | SD*MBoss*FRef | 2.32 | .89 | 17 |
| | SD*MBoss*MRef | 2.51 | 1.25 | 23 |
| | SD*MBoss*NoRef | 1.94 | 1.19 | 18 |
| | SD*FBoss*FRef | 2.33 | .78 | 15 |
| | SD*FBoss*MRef | 2.69 | 1.10 | 23 |
| | SD*FBoss*NoRef | 2.34 | 1.13 | 22 |
| | Agentic*MBoss*FRef | 3.02 | 1.02 | 19 |
| | Agentic*MBoss*MRef | 3.25 | 1.24 | 26 |
| | Agentic*MBoss*NoRef | 2.44 | .85 | 26 |
| | Agentic*FBoss*FRef | 3.22 | .86 | 20 |
| | Agentic*FBoss*MRef | 2.57 | 1.01 | 23 |
| | Agentic*FBoss*NoRef | 2.41 | 1.25 | 17 |
| | Comm.*MBoss*FRef | 4.39 | .98 | 12 |
| | Comm.*MBoss*MRef | 4.21 | .91 | 19 |
| | Comm.*MBoss*NoRef | 4.44 | .60 | 20 |
| | Comm.*FBoss*FRef | 4.04 | .65 | 23 |
| | Comm.*FBoss*MRef | 3.73 | 1.08 | 15 |
| | Comm.*FBoss*NoRef | 4.31 | .59 | 22 |

TABLE 8
MEANS AND STANDARD DEVIATIONS BETWEEN BOSS GENDER, BOSS AGENCY, AND
REFERENCE SEX ON BOSS COMPETENCY

| DV | Independent Variable(s) | Mean | Std. Deviation | N |
|-----------------|-------------------------|------|----------------|----|
| Boss Competency | SD*MBoss*FRef | 4.25 | .53 | 17 |
| | SD*MBoss*MRef | 3.99 | .74 | 23 |
| | SD*MBoss*NoRef | 4.00 | .47 | 18 |
| | SD*FBoss*FRef | 4.13 | .76 | 15 |
| | SD*FBoss*MRef | 4.25 | .56 | 23 |
| | SD*FBoss*NoRef | 3.90 | .58 | 22 |
| | Agentic*MBoss*FRef | 4.09 | .69 | 19 |
| | Agentic*MBoss*MRef | 4.06 | .75 | 26 |
| | Agentic*MBoss*NoRef | 4.00 | .86 | 26 |
| | Agentic*FBoss*FRef | 4.20 | .48 | 20 |
| | Agentic*FBoss*MRef | 4.15 | .76 | 23 |
| | Agentic*FBoss*NoRef | 4.21 | .49 | 17 |
| | Comm.*MBoss*FRef | 3.88 | .40 | 12 |
| | Comm.*MBoss*MRef | 3.58 | .77 | 19 |
| | Comm.*MBoss*NoRef | 3.76 | .76 | 20 |
| | Comm.*FBoss*FRef | 3.73 | .65 | 23 |
| | Comm.*FBoss*MRef | 3.39 | .80 | 15 |
| | Comm.*FBoss*NoRef | 3.87 | .68 | 22 |

TABLE 9
PAIRWISE COMPARISONS OF HYPOTHESIS 4

| Source | Dependent Variables | IV1 Boss Agency | IV3 R.Sex | IV3 R.Sex | Mean Diff. | Std. Error | p-value |
|----------------------------|---------------------|-----------------|-----------|-----------|------------|------------|---------|
| Boss Agency | Likability | Agentic | None | Male | -.48 | .21 | .065 |
| | | | Female | | -.69 | .22 | .006** |
| <i>*Reference Sex (H4)</i> | | | | | | | |
| Boss Agency | Desirability | Socially Dom. | None | Male | -.59 | .23 | .036* |
| | | | Female | | -.48 | .26 | .179 |
| <i>*Reference Sex (H4)</i> | | | | | | | |

**Significant at $p < .05$ level, **Significant at $p < .01$ level*

FIGURE 1
MEAN CORRECT AS A FUNCTION OF BOSS DESIRABILITY AND BOSS AGENCY

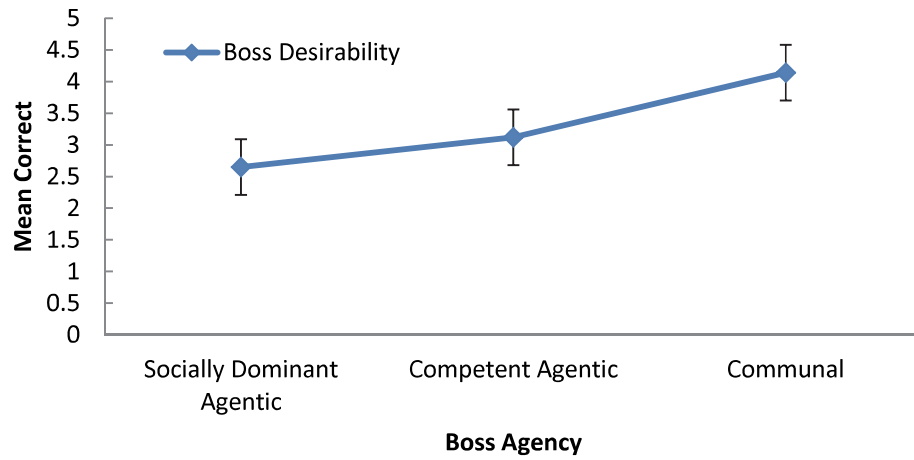


FIGURE 2
MEAN CORRECT AS A FUNCTION OF BOSS LIKABILITY AND THE INTERACTION
BETWEEN BOSS AGENCY AND REFERENCE SEX

