

HOW VERB ASPECT INFLUENCES PERCEPTIONS OF AGENCY AND  
HIRING DECISIONS DIFFERENTLY FOR MEN AND WOMEN

by

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## ABSTRACT

The current research tests whether prior work-related activities framed as ongoing in terms of what one *was doing* (the imperfective verb aspect) versus as completed as what one *did* (the perfective verb aspect) are perceived as more agentic behaviors and, in turn, make the agent appear more suitable for a management position. In Experiment 1, participants read a fictional resume from either a male or female applicant that was written in either the perfective or imperfective aspect. They were then asked to rate the employability of the candidate for the job, as well as judge the effort and intentionality of the candidate's actions. Results revealed that the imperfective aspect increased the perceived agency and employability of the male applicant but unexpectedly reduced the perceived agency and employability of the female applicant. Furthermore, mediation analyses revealed that, for both the male and female applicants, the effects of aspect on ratings of employability were at least partially mediated by perceived agency. This interaction was theorized to be caused by gender stereotyping. Specifically, the imperfective (vs. perfective) aspect may have caused a more elaborative visualization of the female candidate performing communal actions. Experiment 2 addressed this possibility by adding a manipulation of agency expectation into the experimental design. Before reading the resume, the participant read a short questionnaire that conveyed a highly agentic personality, a highly communal personality, or a neutral personality (control, no-expectation condition). Signs of an interaction appeared: When participants had clear agency expectations, the effect of verb aspect on employability appeared to become attenuated.

## DEDICATION

I dedicate this thesis to my entire household. In particular, I want to thank Blake and Chris for always providing information and guidance about the path ahead, and for celebrating the good times and getting over the bad times. Thanks to Harley, for always being happy to see me even if I had spent fifteen straight hours in the office. Most importantly, I want to thank M.K. Alsip whose unflagging support, love, and knowledge contributed more to this manuscript than she will ever know. This thesis is dedicated to you, and the knowledge that nothing can be done alone that cannot be done better with other people.

## LIST OF ABBREVIATIONS AND SYMBOLS

$\beta$	Standardized regression coefficient
$F$	Fisher's $F$ ratio: A ration of two variances
$M$	Mean: the sum of a set of measurements divided by the number of measurements in the set
$p$	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
$SD$	Standard deviation
$t$	Computed value of $t$ test
$\eta^2$	Eta-squared: Estimate of variance explained
$<$	Less than
$>$	Greater than
$=$	Equal to

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## INTRODUCTION

Lois Wyse once said, “Men are taught to apologize for their weaknesses, women for their strengths.” This idiom accurately encompasses the struggle women in the American workforce have faced since World War II pushed women into traditionally male industries. Despite decades of integration, the continued disparity between male and female workers in pay and opportunities for advancement has caused researchers to revisit the issues of gender in the workplace with renewed vigor (Colwill, 1993; Segal, 1992; Strohm, Brett, & Reilly, 1992; Thacker, 1995). Research seeking to understand the underlying differences that create this gender gap has only led to answers that result in new questions. Guadagno and Cialdini (2007) found that the impression management styles of men and women in a business environment were different. The dominant, assertive presentational styles typically used by men are valued the most within the corporate environment, but the women who try to exemplify these agentic personality traits are stigmatized and negatively evaluated for violating gender norms (Rudman & Glick, 1999).

Clearly, a strategy that makes women appear more assertive and prepared for high-pressure positions without causing an equal decline in perceived femininity could improve women’s success in attaining management positions. This study will examine if framing an applicant’s past employment activities using the imperfective (vs. perfective) aspect will increase the perception of agency applied to a male and female applicant. This increase in perceived agency should, in turn, increase the applicant’s chances of landing a job. The imperfective aspect (i.e., *I was supervising*) represents a past action as ongoing and dynamic, whereas the

perfective aspect (i.e., I *supervised*) represents a past action as a completed whole (Comrie, 1976; Madden & Zwaan, 2003; Morrow, 1990). Interestingly, research into verb aspect has shown that the subtle shift from the perfective to the imperfective in describing actions creates a greater perception of the actor's effort and intent (Hart & Albarracin, 2011). In other words, the linguistic effects associated with choosing the imperfective instead of the perfective should increase the perception of agentic behavior, which is highly valued in business (Abele, 2003).

### Effects of Verb Aspect on Cognition and Perceptions of Agency

The proposed hypotheses are partly rooted in prior research on verb aspect conducted in the context of narrative comprehension. This research has addressed how subtle changes in verb aspect applied to descriptions of a target's behavior influence how the target's behavior is imagined. For example, in a study by Morrow (1990) participants were instructed to memorize floor plans of a house then read stories of a character's movement within the house. When participants were given the story in the perfective aspect (e.g., John *walked* from the living room to the kitchen) the participants imagined John already in the kitchen, the action complete. When presented with the story in the imperfective aspect (e.g., John *was walking* from the living room to the kitchen) participants reported picturing John moving from the living room to the kitchen. As another example, Madden and Zwaan (2003) presented participants with sentences in either the perfective (e.g., The girl *tied* her shoe) or imperfective aspect (e.g., The girl *was tying* her shoe). In a subsequent task, participants who had read imperfective phrases were more likely to select images that portrayed the action as ongoing rather than completed.

Other research shows that the influence of verb aspect extends to basic memory processes. Magliano and Schleich (2000) had participants read six sentences and then view a verb phrase briefly displayed on a screen. Participants were asked to determine whether or not

that particular verb phrase was present in the previous sentences as quickly as possible. The researchers randomized whether the participant saw six sentences written in the perfective or in the imperfective aspect. Suggesting a heightened memory, participants reacted more quickly to verb phrases that were initially written in an imperfective (vs. perfective) aspect. Carreiras, Carriedo, Alonso, and Fernandez (1997) found additional evidence that information written in the imperfective aspect persists longer in an individual's working memory. Participants read short vignettes about a target where key information about the target (e.g., the target's career) was written in either a perfective (e.g., John had *finished* his waiting shift) or imperfective aspect (e.g., John *was finishing* his waiting shift). The researchers found significantly greater recall of information about the target (e.g., the target's job: "waiter") as well as shorter reaction times identifying target-relevant information when the target's information was initially presented in an imperfective aspect instead of the perfective.

Perhaps most relevant to the current research question, Hart and Albarracin (2011) found that verb aspect changes applied to descriptions of a person's behavior can influence attributions of intentionality to the person. In line with past research in narrative comprehension, the researchers assumed that action descriptions marked with an imperfective (vs. perfective) aspect should promote a more vivid, concrete representation of the action. Furthermore, this enhanced detail in the representation should make the actions appear more effortful and intentional. Consistent with these ideas, participants imagined more details and attributed more intentionality to the target when his behavior was described in the imperfective (vs. perfective) aspect. This pattern was even replicated in the context of a criminal behavior. When a criminal case report was written in the imperfective aspect (e.g., Westmoreland *was firing* gun shots), participants attributed greater amounts of *criminal* intentionality to the target than when the case was

presented in the perfective (e.g., Westmoreland *fired* gun shots). These effects of verb aspect on criminal intentionality were traced to the imperfective aspect description creating a more vivid portrayal of the criminal actions.

Yet, the research on how verb aspect relates to impression formation is incomplete because it has exclusively focused on male targets and impressions of intentionality. The current research extends this past work by observing the effects of verb aspect when applied to a female target's past behavior and examining the effects of verb aspect on judgments of employability (an important judgment in everyday life). Consistent with the research reviewed here, this study predicts that describing a man's or woman's past actions with an imperfective (vs. perfective) aspect will increase the perception that these job-related actions were intentional and effortful. Consequently, because highly intentional and effortful past employment behaviors are valued in business (i.e., agency is highly desirable; Phelan, Moss-Racusin, & Rudman, 2008), men and women should be perceived as more employable when past actions are described with an imperfective (vs. perfective) aspect.

### Agency and Employability

Agency is typically a valued trait in a worker. Numerous studies have shown individuals' predilection for selecting an agentic target for an open position even when that position is gender-neutral or even communally oriented (Glick, 1991). Francesco and Hakel (1981) performed an experiment where participants were asked to pick among eight applicants to fill a position at the company. Participants were randomly assigned one of three positions they were hiring an applicant for: a highly agentic job, highly communal job, or a neutral job. Even in this case, where jobs were tailored for different personality types, participants far more often selected the most agentic target as the one they would be most likely to hire regardless of their condition.

Hansson, O'Connor, Jones, and Milhelich (1980) produced similar effects in a conceptually similar study. In their study, participants were given a dozen resumes that contained personality descriptions that described highly agentic to highly communal applicants. The participant was then given five graduate school positions to fill that seemingly required either an agentic or communal personality (e.g., nursing was considered highly communal, law school highly agentic). Interestingly, instead of matching the applicants to positions based on how well their personality conformed to the positions, participants were more likely to hire the five candidates highest in agency to fill the positions.

Why would individuals think of agentic personalities as more desirable when it is more logical to match personality types with similar jobs? Presumably, accomplishments accrued by agentic personalities are more likely to be attributed to internal factors (e.g., high intelligence or astute decision making) rather than external factors (e.g., a helpful colleague). By contrast, communal individuals' achievements are more likely to be attributed to external factors (e.g., sharing group success) than internal factors (e.g., business acumen). Hence, there is an apparent bias towards agentic personality types (for similar ideas, see Kelly & Worell, 1977).

### Overview of Conducted Studies

This research focuses on how describing past job-related actions as ongoing or completed using verb aspect influences perceptions of effort and intentionality attributed to the actions and perceptions of the actor's employability. As the imperfective (vs. perfective) aspect has been shown to increase attributions of intent and purpose to actions, work behaviors framed in terms of the imperfective (vs. perfective) should be perceived as more intended and effortful and increase one's chances of getting a job. It is predicted that self-presenting past work-related behavior in the imperfective (vs. perfective) aspect will give both a male and a female applicant

a boost in perceived agency and ratings of employability. This prediction is presumed under the idea that the use of the imperfective aspect will provide an increase in perceived agency in both male and female applicants in such a way that the female applicant does not evoke the negative social evaluation usually encountered by females that bend traditional gender norms (Eagly, 1987, Rudman & Glick, 1999).

## EXPERIMENT 1

Participants were presented with a single resume for a managerial position and asked to evaluate the applicant's employability (i.e., "fit" for the position), the perceived effort and intentionality of the actions presented in the resume, and the likeability of the applicant. The resumes were varied according to gender of the applicant (i.e., the resume was either attributed to "John" or "Jane" Smith) and the verb aspect (imperfective vs. perfective) used in the descriptions of past employment behaviors. The researcher predicted that the imperfective (vs. perfective) resume would enhance employability by making the applicant's past employment behaviors appear more agentic. This effect should hold across both genders.

### Method

#### Design

This experiment used a 2 (gender of the resume's author: male vs. female) x 2 (aspect applied to target's behavior: perfective vs. imperfective) between-subjects design. The dependent variables were participant ratings of the applicant's employability, the perceived effort and intentionality of the actions listed within the resume, and ratings of the applicant's likeability.

#### Participants

Participants were 128 (97 female, 31 male) students in an introductory psychology class who were given partial class credit for their participation in the study. Participants ranged from 18 to 23 years of age ( $M = 18.86$ ,  $SD = 1.02$ ) and were predominantly Caucasian.

## Procedure

Participants were escorted by an experimenter into the lab and seated at a workstation. The experimenter began the study and informed participants that instructions would be given to them via the computer and that if they needed assistance at any time to get them from the other room. Participants were informed via the computer that they would participate in a study on the accuracy and fairness of hiring practices at a local store. Participants were told they would take the perspective of a store manager interested in hiring for an open managerial position in the store. In that context, the participant was given a short job description and the prerequisites and responsibilities of an open managerial position. The job requirements included responsibilities of the job (i.e., plan and lead the team to ensure all positions in the department are staffed with exceptional and productive team members), as well as position requirements (i.e., previous sales and management experience).

Subsequently, participants were presented with a resume of an applicant for the advertised position. The computer program randomly assigned the participant to one of four resume conditions, which were created by crossing verb aspect with the gender of the applicant. As a manipulation of gender, the resumes were attributed to “John Smith” (male) or “Jane Smith” (female). As a manipulation of verb aspect, past accomplishments conveyed via the resume were described in either the past perfective (i.e., I *supervised* five to seven sales associates per shift) or in the past imperfective verb aspect (i.e., I *was supervising* five to seven sales associates per shift). Other than these manipulations, the resumes were identical. The resume for the female applicant in both verb aspects can be found in the appendix.

Upon indicating they had reviewed the resume, the participant completed questions assessing the employability of the applicant, the effort and intentionality attributed to the



employment behaviors in the resume, and finally the likeability of the applicant. At the end of the study, participants were asked if they remembered the gender of the applicant as the manipulation check. Fourteen participants either replied incorrectly or indicated that they did not remember. The exclusion of these fourteen participants did not influence the pattern of means in any of the reported analyses. Participants then filled out a short demographic information questionnaire, were thanked for their time, given credit, and dismissed.

### Measures

Employability. The primary measure was participant evaluations of how employable they thought the applicant was for the position. Participants responded to six questions one at a time on appropriately labeled 1 (Not [None] at All) to 7 (Extremely [All]) scales: “How qualified do you think the applicant is for the Sales Manager Position?”, “How successful do you think the applicant would be in the Sales Manager Position?”, “How much do you recommend hiring the applicant for the Sales Manager Position?”, “For starting pay, where do you think this applicant deserves to be in the salary range?”, “Relative to the average Sales Manager, how much compensation does this applicant deserve if given this job?”, “There are a range of potential benefits (e.g., healthcare, vacation, etc.) that are optional benefits given to individuals based on their qualifications. How many of those benefits do you think this individual should receive if hired?”. Responses to the six questions were averaged into a single index of employability ( $\alpha = 0.88$ ). A list of the questions and accompanying response scales appear in the appendix.

Effort and Intentionality of Applicant’s Actions. Participants then completed an assessment of how intentional and effortful the applicant’s actions from the resume were perceived. Specifically, participants were shown each discreet action (eight in all) from the resume (e.g., John [Jane] supervised [was supervising] five to seven sales associates per shift).

The participant then judged how purposeful the action seemed on four separate scales: -5 (*effortless*) to +5 (*effortful*), -5 (*easy*) to +5 (*difficult*), -5 (*unintentional*) to +5 (*intentional*), and -5 (*accidental*) to +5 (*deliberate*). These four scales were then combined into a single index of effort and intentionality for each of the eight discreet actions taken from the resume (e.g., Hart & Albarracin, 2011). The scores for the eight actions were then averaged together to get a single measurement of effort and intentionality ( $\alpha = 0.92$ ).

Likeability. Participants were given a series of one-word adjectives and were asked to rate to which extent each word applied to the applicant whose resume they had just read using a scale that ranged from 1 (*not at all*) to 7 (*very*). Specifically, twenty-three separate adjectives were displayed one at a time, some of these adjectives referred to traits that were likeable (e.g., warm, kind, and friendly) or unlikable traits (e.g., mean, rigid, and rude). The unlikable traits were reverse scored and then all of the values were averaged together into a single index of likeability ( $\alpha = 0.90$ ).

## Results

### Awareness Check

None of the participants expressed awareness of the experiment's purpose.

### Employability

A 2 (gender of the resume's author: male vs. female) x 2 (aspect applied to target's behavior: perfective vs. imperfective) between subjects ANOVA was run with the employability index as the dependent variable. In contrast to predictions, this analysis revealed no significant main effects of either variable, ( $F_s < 0.4$ ,  $p_s > .5$ ). However, there was a significant interaction between gender and aspect,  $F(1, 124) = 6.66$ ,  $p = .011$ ,  $\eta^2 = .05$ . To probe this interaction, simple-effect analyses were performed for verb aspect within each gender. For the male

applicant, ratings of employability were marginally greater in the imperfective aspect ( $M = 5.40$ ,  $SD = 0.61$ ) than the perfective aspect condition ( $M = 5.09$ ,  $SD = 0.96$ ),  $t(124) = 2.33$ ,  $p = .13$ .

This finding is consistent with past research showing that the imperfective aspect (vs. perfective) promotes judgments of intentionality for males (Hart & Albarracin, 2011). For the female applicant the opposite effect was found: ratings of employability were lower in the imperfective aspect ( $M = 4.93$ ,  $SD = 0.81$ ) than the perfective aspect condition ( $M = 5.38$ ,  $SD = 0.96$ ),  $t(124) = 4.47$ ,  $p = .04$ . Hence, these data were inconsistent with the hypothesis that the aspect manipulation would work in the same manner for females as it did for males.

#### Effort and Intentionality of Target's Actions

Next, a 2 (gender of the resume's author: male vs. female) x 2 (aspect applied to target's behavior: perfective vs. imperfective) between subjects ANOVA was run with the effort and intentionality index as the dependent variable. Similar to the employability ratings, this analysis revealed no significant main effect of either variable, ( $F_s < 1.5$ ,  $p_s > .2$ ) and a significant interaction between gender and aspect,  $F(1,124) = 13.93$ ,  $p < .01$ ,  $\eta^2 = .10$ . To break this interaction down, simple-effect analyses were performed for verb aspect within each gender. For the male applicant, perceived effort and intentionality was significantly greater in the imperfective aspect ( $M = 9.19$ ,  $SD = 1.20$ ) as opposed to the perfective aspect condition ( $M = 8.34$ ,  $SD = 1.16$ ),  $t(124) = 5.93$ ,  $p < .02$ . These findings conceptually replicate those of Hart and Albarracin (2011) in a business context. Conversely, for the female applicant, perceived effort and intentionality was significantly lower in the imperfective condition ( $M = 7.94$ ,  $SD = 1.88$ ) as opposed to the perfective condition ( $M = 8.96$ ,  $SD = 1.39$ ),  $t(124) = 6.42$ ,  $p < .01$ . This latter finding was of course unanticipated and does not cohere well with past findings.

## Likeability

Next, a 2 (gender of the resume's author: male vs. female) x 2 (aspect applied to target's behavior: perfective vs. imperfective) between subjects ANOVA was run with the likability index as the dependent variable. Similar to the previous ratings, this analysis revealed no significant main effect of either variable, ( $F_s < 1.0$ ,  $p_s > .31$ ) but a significant interaction between gender and aspect,  $F(1,124) = 5.92$ ,  $p < .02$ ,  $\eta^2 = .05$ . An inspection of the means revealed that, for the male applicant, perceived likeability was rated significantly higher in the imperfective condition ( $M = 5.76$ ,  $SD = 0.44$ ) as opposed to the perfective condition ( $M = 5.37$ ,  $SD = 0.64$ ),  $t(124) = 6.13$ ,  $p < .02$ . Conversely, there was not a significant difference for the female applicant, yet, perceived likeability was rated lower in the imperfective condition ( $M = 5.50$ ,  $SD = 0.69$ ) and higher in the perfective condition ( $M = 5.66$ ,  $SD = 0.72$ ),  $t(124) = 0.98$ ,  $p = .32$ .

## Mediation Analysis

We used a regression analysis to examine the effect of perceived agency on employability within each gender (controlling for verb aspect). Within the male applicant condition, there was a positive association between perceived agency and employability ( $\beta = 0.30$ ,  $p = .02$ ). Stated differently, the applicant was rated as more employable when he was perceived as more agentic. Within the female applicant condition, there was also a positive association between perceived agency and employability ( $\beta = 0.39$ ,  $p < .01$ ). Again, the applicant was rated as more employable when she was perceived as more agentic. As the effect of verb aspect on the mediator was moderated by the gender of the applicant, we tested for moderated-mediation using the PROCESS method (Hayes, 2012). In the analysis, verb aspect was the independent variable, employability was the dependent variable, the applicant's perceived agency was the mediator, and the gender of the applicant was the moderator of the path between

independent variable and the mediator. As expected, the analysis revealed that the indirect effect of aspect, via perceived agency, on employability was moderated by the gender of the applicant,  $t(124) = 7.28, p < .01$ . PROCESS estimated the 95% confidence interval (CI) for the (conditional) indirect effects of aspect via perceived agency on employability *within* each verb aspect condition using 1000 bootstrapped samples. Within the male applicant condition, the 95% CI was 0.07, 0.40. Within the female applicant condition, the 95% CI was -0.50, -0.07. As zero is outside both intervals, the effect of aspect on employability was apparently mediated by perceived agency of the applicant, regardless of the gender of the applicant.

### Discussion

The data were somewhat inconsistent with the hypotheses. As expected, the male applicant was rated as higher in perceived agency and employability in the imperfective aspect as opposed to the perfective. These effects conceptually replicated and extended previous research that has *exclusively* used male targets (Hart & Albarracin, 2011). In contrast, the female applicant was rated as lower in perceived agency and employability in the imperfective aspect as opposed to the perfective. One explanation is that imperfective (vs. perfective) aspect promoted an image of ongoing (vs. completed) action that conformed to the stereotype of women as communal (i.e., non-agentic; Fuegen, Biernat, Haines, & Deaux, 2004; Eagly, 1987). For example, the imperfective (vs. perfective) description may have facilitated visualizing a woman engaged in communal actions (e.g., aiding and being aided by a co-worker) rather than independent actions (e.g., achieving on one's own), an image that in turn lowered ratings of agency and suitability for the management position. If this explanation holds merit, then the effect of verb aspect for females may reverse or become attenuated when the female applicant is initially perceived as highly agentic (e.g., new experimental information suggesting high agency

is provided prior to reading the resume). Moreover, the effects of verb aspect may reverse or become attenuated among individuals who do *not* hold traditional stereotypes of women as communal. Indeed, to the extent the effects of the imperfective (vs. perfective) on ratings of employability are driven by the use of stereotypes of women as communal, then the effects should be weakened (or even reversed) amongst groups of people who are more egalitarian in their views about gender. To address each of these issues, Experiment 2 seeks to conceptually repeat Experiment 1, but focusing exclusively on female applicants and adding a manipulation of agency expectation and a measure of gender egalitarianism (indexed from the Egalitarian Sex Roles Inventory [ESRI]) (Suzuki, 1991).

## EXPERIMENT 2

Experiment 2 was similar to Experiment 1 with some modifications. For this study there was no male applicant in order to focus on explaining the unanticipated findings for the female applicant from Experiment 1. Excluding this condition streamlined a complex experimental design. In addition to that change, this study manipulated the agency expectations associated with the female applicant. Adapted from prior research (Phelan et al., 2008), participants were presented with the applicant's responses to a leadership questionnaire before being presented with the resume. These responses were used to cultivate either a highly agentic, highly communal, or neutral expectation for the applicant. Finally, after completing the resume review and rating the applicant, participants also completed the ESRI.

As in Experiment 1, it was predicted that when no agency expectations are provided (prior to review of the resume), ratings of agency and employability would be reduced in the imperfective (vs. perfective) aspect condition. However, when an agentic expectation is provided (prior to review of the resume), ratings of employability should be enhanced in the imperfective (vs. perfective) aspect condition. Moreover, when no agentic expectation is provided (as in Experiment 1), the verb aspect interaction might be moderated by scores on the ESRI. If the imperfective (vs. perfective) enhances the use of gender stereotypes, then the effect of verb aspect on employability ratings should be greater amongst individuals who hold (vs. those who do not hold) traditional stereotypes (i.e., people with high ESRI scores).

## Method

### Design

The design was a 2 (verb aspect: imperfective vs. perfective) x 3 (agency expectation: agentic vs. communal vs. no expectation control) x continuous (ESRI score) design with scores on employability and effort and intentionality serving as the main dependent variables. The dependent variables were participant ratings of the applicant's employability, the perceived agentic purposefulness in the actions listed within the resume (as measured by the effort and intentionality scale), and measures of the applicant's likeability.

### Participants

Participants were 143 (92 female, 51 male) students in an introductory psychology class who were given partial class credit for their participation in the study. Participants ranged from 18 to 27 years of age ( $M = 18.82$ ,  $SD = 1.21$ ) and were predominantly Caucasian.

### Procedure

Procedures were identical to those for Experiment 1 with three modifications. First, this experiment only used a female applicant. Second, to manipulate agency expectation, participants read a leadership questionnaire ostensibly filled out by the applicant as part of the application process before reviewing the applicant's resume, similar to the methods used by Phelan et al, (2008). The questionnaire consisted of four questions about the applicant's management style. Two of these questions had neutral answers that were identical across all three conditions, and two questions were written to convey an agentic or communal personality. For example, for the question "What is your management style?" in the agentic condition the response read: "There's no question about it, I like to be the boss. I let people know what's expected of them, and I'm able to lean on people if they lag behind. But, I'm also quick to spot talent and to promote



people who deserve it and who will do their best for me. But, I like being in charge, to be the person who makes the decisions. In my experience, that's the best way to get things done well." In the communal condition the response to that same question conveys a communal orientation: "Well, my preference is to get people together, to talk through whatever issues are on the table, and to come to some consensus about the decisions that have to be made. Sometimes people have to be encouraged to speak up, and I'll do my best to give them that opportunity. I like to have plenty of input from the people who work with me." In the no agency expectation condition the participant was only presented with the two neutral questions and answers and then continued on with the rest of the study. For this experiment participants completed an additional measure, the ESRI, after completing the employability, effort and intentionality, and likability scales. At the end of the study participants were asked if they remembered the gender of the applicant as a manipulation check. Ten participants had to be excluded because they did not remember the gender of the applicant whose resume they had reviewed, or indicated in free response questions that they had not paid attention to the study. The removal of these subjects did not alter the results as presented below.

### Measures

Egalitarian Sex Roles Inventory (ESRI). The ESRI is made up of 16 items and is designed to measure to what extent people endorse traditional sex stereotypes (Suzuki, 1991). Examples of the items included on the inventory are "Women should work even if they are not in need economically", "A mother who stays at home and raises children is not the only ideal type of mother", "Boys and girls should have equal opportunity in education", "A woman should have and raise at least one child" (reverse coded), and "Working women put a strain on the family" (reverse coded). Participants indicated agreement to each item using a 1 (*strongly disagree*) to 6

(*strongly agree*) scale. After reverse coding of items according to inventory instructions, all of the values were averaged together into a single index of ESRI ( $\alpha = 0.87$ ). A full list of the questions appears in the appendix.

## Results

### Awareness Check

None of the participants expressed awareness of the experiment's purpose.

### Employability

A 3 (agency expectation of resume's author: agentic vs. communal vs. neutral) x 2 (aspect applied to target's behavior: perfective vs. imperfective) between subjects ANOVA was ran with the employability index as the dependent variable. In contrast to predictions, there was only a main effect of agency expectation,  $F(2, 147) = 6.02, p < .01, \eta^2 = .08$ . As presented in Table 1, the applicant in the communal expectation was rated as significantly less employable than the applicant in the agentic expectation,  $t(147) = 2.75, p < .01$  or neutral expectation,  $t(147) = -2.65, p < .01$ . There was no significant difference between the agentic expectation and the neutral expectation conditions,  $t(147) = 0.57, p = .58$ . Although there was no significant interaction between agency expectation and verb aspect as hypothesized, the pattern of means shown in Table 1 implied that the presence of an agency expectation removed the effect of aspect on employability. Of key importance, as in Experiment 1, in the neutral expectation condition, perceived employability was higher in the perfective aspect ( $M = 5.49, SD = 0.78$ ) than in the imperfective aspect ( $M = 5.04, SD = 0.81$ ).

Table 1

*Means (and Standard Deviations) on Employability by Condition*

<b>Agency Expectation</b>	<b>Perfective Aspect</b>	<b>Imperfective Aspect</b>	<b>Total</b>
<b>Agentic</b>	5.25(0.91)	5.10(0.87)	5.18(0.88)
<b>Communal</b>	4.68(1.01)	4.68(1.08)	4.68(1.03)
<b>Neutral</b>	5.49(0.78)	5.05(0.81)	5.27(0.82)

To address the role of traditional gender stereotypes, employability was submitted to a 3 (agency expectation of resume's author: agentic vs. communal vs. neutral) x 2 (aspect applied to target's behavior: perfective vs. imperfective) x continuous (scores on the ESRI) regression with interaction terms. The ESRI had no main  $F(3, 142) = 0.85, p = .56$ , or any interaction effects with the other variables ( $F_s < 1.00, p_s > .50$ ). Although null results are difficult to interpret, it is possible that the ESRI was not sensitive to implicit stereotyping process that is responsible for the present effects of verb aspect on employability.

#### Effort and Intentionality of Target's Actions

A 3 (agency expectation of resume's author: agentic vs. communal vs. neutral) x 2 (aspect applied to target's behavior: perfective vs. imperfective) between subjects ANOVA was run with the effort and intentionality index as the dependent variable. The analysis revealed a marginal main effect of agency expectation,  $F(2, 147) = 2.10, p = .12$ . As presented in Table 2, the applicant in the communal expectation was rated marginally lower than the applicant in the agentic expectation,  $t(147) = 1.94, p = .06$ , and marginally lower than the applicant in the neutral expectation  $t(147) = 1.77, p = .08$ . There was not even a marginal difference between the agentic expectation and neutral expectation  $t(147) = 0.49, p = .62$ . This main effect, however, was qualified by a marginal interaction between agency expectation and verb aspect,  $F(2, 147) = 1.87, p = .15$ . Referring back to Table 2, the applicant in the agentic expectation was seen as

marginally more agentic in the imperfective (vs. perfective) aspect  $t(147) = 1.44, p = .23$ . Yet, the applicant in the neutral expectation was seen as marginally *less* agentic in the imperfective (vs. perfective) aspect  $t(147) = 2.21, p = .14$ . The applicant in the communal expectation was seen as less agentic in the imperfective (vs. perfective) aspect, but this pattern did not trend towards significance  $t(147) = 0.46, p = .50$ .

Table 2

*Means (and Standard Deviations) on Effort and Intentionality by Condition*

<b>Agency Expectation</b>	<b>Perfective Aspect</b>	<b>Imperfective Aspect</b>	<b>Difference</b>
<b>Agentic</b>	8.54(1.56)	8.98(0.74)	.44
<b>Communal</b>	8.38(1.27)	8.14(1.24)	-.24
<b>Neutral</b>	8.90(1.09)	8.40(1.76)	-.50

To examine whether traditional stereotypes moderated any of these effects, the effort and intentionality index was submitted to a 3 (agency expectation of resume’s author: agentic vs. communal vs. neutral) x 2 (aspect applied to target’s behavior: perfective vs. imperfective) x continuous (scores on the ESRI) regression with interaction terms. Inconsistent with predictions, the ESRI had no main  $F(3, 142) = 1.25, p = .33$ , or any interactions effects with any of the other variables ( $Fs < 1.00, ps > .50$ ).

### Likeability

A 3 (agency expectation of resume’s author: agentic vs. communal vs. neutral) x 2 (aspect applied to target’s behavior: perfective vs. imperfective) between subjects ANOVA was run with the likeability index as the dependent variable. In contrast to predictions, there was only a main effect of agency expectation,  $F(2, 147) = 4.89, p < .01, \eta^2 = .06$ . As presented in Table 3, the applicant in the neutral expectation was rated as significantly more likeable than the applicant in the agentic expectation  $t(147) = -2.92, p < .01$  or communal expectation  $t(147) = -$

2.74,  $p < .01$  conditions. There was no significant differences between the agentic expectation and communal expectation conditions  $t(147) = -0.16, p = .88$ . There were no other significant main effects or interactions.

Table 3

*Means (and Standard Deviations) on Likeability by Condition*

<b>Agency Expectation</b>	<b>Perfective Aspect</b>	<b>Imperfective Aspect</b>	<b>Total</b>
<b>Agentic</b>	5.23(0.74)	5.10(0.61)	5.17(0.68)
<b>Communal</b>	5.24(0.67)	5.13(0.68)	5.19(0.67)
<b>Neutral</b>	5.59(0.62)	5.46(0.65)	5.52(0.63)

To examine whether traditional stereotypes moderated any of these effects, the likeability index was submitted to a 3 (agency expectation of resume’s author: agentic vs. communal vs. neutral) x 2 (aspect applied to target’s behavior: perfective vs. imperfective) x continuous (scores on the ESRI) regression was ran with interaction terms, using the likeability index as the dependent variable. The ESRI had no main  $F(3, 142) = 1.02, p = .40$ , or any interactions effects with any of the other variables ( $F_s < 1.00, p_s > .50$ ).

### Discussion

The pattern of cell means for employability and agency seemed to suggest that the explicit expectations eliminated the effect of verb aspect. Yet when no agency expectation was given, employability and agency ratings were lower in the imperfective (vs. perfective) aspect, which are the same findings as in Experiment 1. This suggests that the effects of verb aspect on judgments of agency and employability can be overpowered by explicit information about agency.

## GENERAL DISCUSSION

An individual's ability to manage impression formation is an important aspect of every social encounter, but it is especially important in the job application and interview process. Research has previously shown that male workers are rewarded for demonstrating agentic behavior, but female workers receive negative social evaluations for doing the same. The ability of the imperfective (vs. perfective) aspect to portray actions as continuous, more detailed, and thus more intentional was studied as a possible way for applicants of both genders to be perceived as more agentic and thus more employable.

In Experiment 1, participants that viewed application materials (i.e., resumes) that had been written in either the imperfective or perfective aspect did indeed perceive the male applicant as more agentic and more employable in the imperfective (vs. perfective) aspect. Yet, participants perceived the female applicant as less agentic and less employable in the imperfective (vs. perfective) aspect. In Experiment 2, participants that had been given an agency expectation before viewing the application materials did not perceive any differences in the agency or employability of the applicant between verb aspect conditions. Yet, participants that had not been given any agency expectation perceived the female applicant as less agentic and less employable in the imperfective (vs. perfective) aspect. These results suggest that explicit agency expectations interfere with the effect of verb aspect.

As is true of all experimental research, the current research possesses several shortcomings. First, because this project used college students, it remains to be seen whether the current effects might be replicated with other populations such as trained professionals who

routinely make hiring decisions. It is reasonable to expect that even most professional employers would be susceptible to the present effects because most individuals are unaware of their underlying biases and the effects of verb aspect and hence would be unlikely to correct for their influence. Second, the current research required participants to make a hypothetical hiring decision in which the outcome would not affect them personally. Without a personal investment in the evaluations and hiring decision, it is possible that participants may rely on different criteria for making these decisions than if they felt that the decision could personally affect them. Third, the job description used in the present research may have favored an applicant with an agentic personality. To expand the present findings, future research might examine whether the present effects might flip when the job descriptions favors an applicant with more communal traits. Third, the current research examined the effects of verb aspect when applied to written materials. Future research might expand our findings to spoken language. Because speech is typically produced and interpreted at a much faster rate than most individuals read (Devito, 1966; Chafe, 1982), less time and processing capacity may be devoted to the verb aspect cue during speech comprehension. As a result, perhaps the effects of verb aspect on impression formation would be reduced.

Despite these shortcomings, the present research is still significant as it indicates the intriguing possibility that the relationship between verb aspect shifts and the perceptions of a target's actions is more complex than previously thought. At the core, the present findings highlight how the effects of verb aspect on impression formation are influenced by stereotypes of the agent. It is important that the role of verb aspect in relationship to other influences on perception (i.e., explicitly stated personality traits, situational expectations, social scripts) be examined.

The present findings are interesting in the context of examining how language shapes thought (for a review concerning this topic, see Carruthers, 2002). Prior research has focused on how the semantic aspects of language affects impression formation such as speech style (Erickson, Lind, Johnson, & O'barr, 2004), use of powerful (vs. powerless) language (Haleta, 1996), and language fluency (Vrij & Winkel, 1991). This research is unique in presenting findings that indicate that grammatical features (i.e., verb aspect) can affect impression formation as well. This novel finding provides another piece of evidence that the way an individual thinks about the world is filtered by their ability to interpret it through language.

While this research requires refinement and replication before stronger conclusions can be made, it already presents several practical applications. With the unemployment rate rising, strategies for increasing one's employability are quite valuable, and this data demonstrates that self-presenting as highly agentic increases one's employability. For male applicants, the simple use of framing one's previous accomplishments as ongoing using the imperfective (vs. perfective) aspect was enough to increase perceived agency and employability. The use of this simple aspect shift could be used in other self-presentational materials than just the ones seen here (i.e., letters of recommendation). For female applicants, this research demonstrated that more explicit methods of conveying an agentic personality are needed to increase perceived employability. While most research finds a negative relationship between agentic self-presentation in females and social liking (Guadagno & Cialdini, 2007; Rudman & Glick, 1999), they also focused on impression management strategies for individuals already employed. Experiment 2 found that the highly agentic female was rated as far more employable, but no less likeable, than the highly communal applicant. This indicates that while social stigmatization after being hired may reduce the effectiveness of using agentic impression management strategies for



women, self-presenting with as much agency as possible during the interview and application process appears beneficial.

The ability for the grammatical aspects of language to alter perceptions of others is as intriguing as it is unexplored. This project has demonstrated that a simple verb aspect shift can significantly alter something as important as an applicant's perceived employability, providing implications not only for how to best land a job, but also how the simple structures within grammar can affect cognitions. In other words, maybe the adage is true: it's not *what* you say but *how* you say it.

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## APPENDIX

### Resume

**John(Jane) Miller**  
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### **Experience**

- 2009 – pres. Shift Supervisor, JC Penny, Tuscaloosa, AL  
Duties: I was supervising (*supervised*) five to seven sales associates per shift. I was creating (*created*) shift schedules, overseeing (*oversaw*) disciplinary actions, and awarding (*awarded*) recognition incentives to sales associates.
- 2008 – 2009 Salesperson, JC Penny, Tuscaloosa, AL  
Duties: I was assisting (*assisted*) customers with product selections and publicizing (*publicized*) sales promotions. I was performing (*performed*) sales transactions and returns.
- June 2007 Sales Intern, Wal-Mart Headquarters, Bentonville, AR  
Duties: I was shadowing (*shadowed*) a junior vice president of sales for one month at the corporate headquarters. I was learning (*learned*) sales and supervisory techniques in workshops designed for future managers.

### **Service**

- 2007 – pres. Volunteer, First Connection, Tuscaloosa, AL  
Duties: I was tutoring (*tutored*) underprivileged kids in elementary schools and participating (*participated*) in multiple service projects at public parks.
- 2006-2007 Treasurer, Golden Key Honor Society, University of Alabama  
Duties: I was collecting (*collected*) dues of members and administering (*administered*) the organization's bank account.

### **Education**

- 2008 B.A., University of Alabama, Tuscaloosa, AL

Major: Liberal Arts

GPA: 3.5

Employability Measure

How qualified do you think the applicant is for the Sales Manager Position?

1-Not at all Qualified to 7-Very Qualified

How successful do you think the applicant would be in the Sales Manager Position?

1-Not at all Successful to 7-Very Successful

How much do you recommend hiring the applicant for the Sales Manager Position?

1-Not at All 7- Very Much

For starting pay, where do you think this applicant deserves to be in the salary range?

1-Low End of the Salary Range to 7- High End of the Salary Range

Relative to the average Sales Manager, how much compensation does this applicant deserve if given this job?

1-Less Compensation then Average to 7- More Compensation then Average

There are a range of potential benefits (e.g., healthcare, vacation, etc.) that are optional benefits given to individuals based on their qualifications. How many of those benefits do you think this individual should receive if hired?

1- None of the Benefits to 7- All of the Benefits

### Egalitarian Sex Role Inventory

All questions are answered on a score of 1- Strongly Disagree to 6- Strong Agree

Reverse Code numbers 2, 3, and 12.

1. Domestic chores should be shared between husband and wife.
2. A woman should have and raise one or more child.
3. Bringing up children is the most important job for a woman.
4. A working wife has more in common with her husband, so she is a better wife.
5. Boys and girls should play with the same toys.
6. Women should work even if they are not in need economically.
7. Whether married or not, for purposes of independence, women should work.
8. The differences of capabilities between individuals are more numerous than those between men and women.
9. There will be much social progress and development when more women work.
10. In order to be equal with men, women should aim to better their position through independence.
11. Women should try to better themselves as human beings and to pursue self-realization through working.
12. Working women put a strain on the family.
13. A mother who stays at home and raises children is not the only ideal type of mother.
14. Boys and girls should have equal opportunity in education.
15. For a woman, the roles of wife and mother are important, but working outside is equally important.



16. Women should enter into jobs traditionally held by men, those of pilot, engineer, taxi driver, and chef.