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Exploring the Handshake in Employment Interviews

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The authors examined how an applicant's handshake influences hiring recommendations formed during the employment interview. A sample of 98 undergraduate students provided personality measures and participated in mock interviews during which the students received ratings of employment suitability. Five trained raters independently evaluated the quality of the handshake for each participant. Quality of handshake was related to interviewer hiring recommendations. Path analysis supported the handshake as mediating the effect of applicant extraversion on interviewer hiring recommendations, even after controlling for differences in candidate physical appearance and dress. Although women received lower ratings for the handshake, they did not on average receive lower assessments of employment suitability. Exploratory analysis suggested that the relationship between a firm handshake and interview ratings may be stronger for women than for men.

Keywords: handshake, employment interviews, first impressions

A firm handshake is often identified as an aspect of nonverbal communication that has a critical influence on impressions formed during employment interviews. Indeed, a recent search of the Internet revealed nearly a million listings that detailed the importance of the handshake and gave advice about the proper way to shake hands during an interview. In spite of seemingly widespread acceptance of the important role the handshake plays in interview success, empirical research examining the handshake in employment interviews is lacking.

Nonverbal cues other than the handshake, such as eye contact during discussions and smiling, have been shown to have a critical influence on interview assessments (DeGroot & Motowidlo, 1999). Although not studied in the interview context, the ubiquitous prevalence of the handshake at both the beginning and the end of interviews suggests that nonverbal cues communicated through the shaking of hands may convey important information about job applicants. The handshake may specifically convey information about an individual's personality, as early research suggested a traitlike relationship between the handshake and personality (Chaplin, Phillips, Brown, Clanton, & Stein, 2000; Vanderbilt, 1957). In short, good handshakes are believed to communicate sociability, friendliness, and dominance, whereas poor handshakes may communicate introversion, shyness, and neuroticism (Chaplin et al., 2000). Yet, research has not explored relationships between the nonverbal act of shaking hands and employment interview evaluations.

In this article, we empirically examine the role of the handshake in employment interviews. We first seek to determine whether quality of the handshake does indeed correspond with interviewer assessments. We then explore the nature of what is being conveyed through the handshake by examining relationships between the handshake and personality. We also assess the effect of potential gender differences in handshaking.

Is Handshake Quality Related to Ratings in Employment Interviews?

In the interview context, nonverbal behaviors are assumed to convey useful information (Gifford, Ng, & Wilkinson, 1985; Schlenker, 1980). The category of nonverbal cues can be broadly defined as cues, other than the content of responses, or demographic differences like sex and race (Parsons & Liden, 1984). Nonverbal behaviors commonly thought to be important during an interview include eye contact, smiling, posture, interpersonal distance, and body orientation (Forbes & Jackson, 1980; Imada & Hakel, 1977; Motowidlo & Burnett, 1995; Young & Beier, 1977). These behaviors are assumed to influence interviewer reactions, which in turn result in attributions of applicant characteristics such as communication ability, intelligence, and self-confidence (DeGroot & Motowidlo, 1999; McGovern & Tinsley, 1978).

Given that a handshake typically occurs in the interview setting, it is surprising that researchers have not looked at the role this form of tactile nonverbal communication may play in the interview setting. The handshake is a nonverbal touch behavior that can convey an "immediacy" dimension in interviews (Imada & Hakel, 1977). Immediacy is an interaction between two individuals that involves close physical proximity and/or perceptual availability (Mehrabian, 1972). It has been theorized that greater immediacy

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leads to attributions of greater liking (Imada & Hakel, 1977; Mehrabian, 1967). Because the act of shaking hands requires physical contact, the handshake should influence immediacy evaluations. Physical touch is generally associated with warmth, closeness, caring, and intimacy (Edinger & Patterson, 1983). Of course, awkward handshakes can also communicate negative information (Edinger & Patterson, 1983; Schlenker, 1980). Desirable handshakes have been described as firm handshakes that include a strong and complete grip, vigorous shaking for a lasting duration, and eye contact while hands are clasped (Chaplin et al., 2000). Given the high correspondence between other nonverbal cues and interview assessments, we predicted that handshakes demonstrating these desirable characteristics would communicate positive information about the individual being evaluated.

Hypothesis 1: Individuals with a firm handshake will receive more positive evaluations during employment interviews.

What Does the Handshake Communicate?

Because shaking hands is often the first behavioral act that occurs when people meet, information conveyed through the handshake is potentially critical. But what information does a handshake convey? What specific cues communicated through the handshake might enhance an interviewer's evaluation?

One possibility is that shaking hands during an interview creates an impression about candidate personality traits that in turn influences assessments of suitability for employment. To explore this effect, we examined existing research on the relationship between traits and the handshake. Greeting behavior, such as the handshake, has mainly been investigated in anthropological and ethnographic studies (Astrom & Thorell, 1996; Schiffrin, 1974; Webster, 1984). Our search of the literature found only four empirical studies related to handshaking, and none of them was conducted in the interview context. Three studies were conducted in Sweden by Astrom and associates (Astrom, 1994; Astrom & Thorell, 1996; Astrom, Thorell, Holmlund, & d'Elia, 1993), who found moderate relationships between the handshake and personality characteristics such as social extraversion. However, the generalizability of these conclusions to an interview setting is limited, as participants included psychiatric patients, therapists, and clergymen. Another study by Chaplin et al. (2000) in a noninterview setting found a firm handshake to be positively related to extraversion ($r = .19$) and emotional expressiveness ($r = .16$) but to be negatively related to shyness ($r = -.29$) and neuroticism ($r = -.24$). The findings across studies suggest that the handshake is particularly informative for assessment of two personality traits: extraversion and neuroticism (Chaplin et al., 2000).

Of the two personality traits identified as likely to be communicated through the handshake, extraversion, but not neuroticism, appears to correspond with interview assessments. Tay, Ang, and Van Dyne (2006) specifically found evidence of a relationship with interview success for extraversion ($r = .24$) but not for neuroticism ($r = .06$). Other studies (e.g., Caldwell & Burger, 1998; DeFruyt & Mervielde, 1999) have similarly identified extraversion as the personality trait most strongly related to employment interview outcomes. Moreover, meta-analytic evidence suggests that interviewer assessments of extraversion are related to evaluations of work contribution ($\rho = .33$; Huffcutt, Conway, Roth, & Stone, 2001). Thus, cues related to extraversion appear to be particularly relevant for interpretation of personality information conveyed through shaking hands during employment interviews.

In the interview setting, a firm handshake may convey that the applicant has a high level of extraversion and thus lead to a more positive evaluation. In short, a firm handshake signifies persuasive ability, sociability, and interpersonal skills (Astrom & Thorell, 1996; Chaplin et al., 2000), which are aspects of extraversion that are particularly related to success in social interactions (Costa & McCrae, 1992; Tay et al., 2006). We therefore hypothesized that the handshake represents a behavioral manifestation of an individual's extraversion.

Hypothesis 2: Extraversion will correlate positively with handshake ratings.

Hypothesis 3: The handshake is a behavioral mediator of the relationship between extraversion and hirability evaluations in employment interviews.

Although extraversion is the only five factor model (FFM) trait previously linked both to the handshake and to interview outcomes, we sought additional insight concerning traits. We thus included the remaining FFM traits—neuroticism, agreeableness, conscientiousness, and openness to experience—as exploratory measures.

Meta-analytic evidence also suggests that interviewers may use candidate appearance for spontaneous personality assessments at the beginning of the interview (Hosoda, Stone-Romero, & Coats, 2003). To control for possible effects of the "what is beautiful is good" stereotype (Eagly, Ashmore, Makhijani, & Longo, 1991), we obtained measures of candidate physical attractiveness and professional appearance. Prior research suggests that physically attractive candidates obtain more positive interviewer evaluations than do candidates who are less attractive (Forsythe, Drake, & Cox, 1985; Motowidlo & Burnett, 1995). Professional appearance, which includes appropriateness of hygiene, personal grooming, and dress (Kinicki & Lockwood, 1985; Mack & Rainey, 1990), is expected to have even larger effects during the interview, because candidates are assumed to have more control over their own cleanliness and dress and interviewers are influenced by expectations about customary social behavior or conduct during the interview (Posthuma, Morgeson, & Campion, 2002). To better isolate the effect of shaking hands, we included both measures of candidate appearance as covariates.

Does a Weaker Handshake Place Women at a Disadvantage in Employment Interviews?

Considerable research has investigated how demographic characteristics, including gender, impact interview outcomes. Given equal qualifications, research suggests that women tend to be evaluated less positively than do men in ratings of their credentials on paper (Arvey, 1979; Barr & Hitt, 1986; Hitt & Barr, 1989; Parsons & Liden, 1984). On the other hand, female applicants have been found to be judged more favorably than male applicants on some nonverbal interview behaviors, such as posture and eye contact (Parsons & Liden, 1984). Nevertheless, many of these

effects are modest and may largely reflect similarity between applicant and interviewer (Arvey & Campion, 1982; Dipboye, 1982; Harris, 1989; Posthuma et al., 2002; Schmitt, 1976).

Goldberg and Cohen (2004) posited that, in relation to nonverbal cues, gender may impact recruiters' assessments of applicants differently than do verbal cues. For example, research suggests that women are perceived as being more adept at conveying nonverbal communication than are men (Buck, Miller, & Caul, 1974; Goldberg & Cohen, 2004; Graham, Unruh, & Jennings, 1991; LaFrance & Mayo, 1979). In contrast, men are typically seen as being more rational in their presentation of ideas than are women (Burke, 1996). Goldberg and Cohen (2004) found that nonverbal skills were a stronger predictor than were verbal skills of overall interview assessments. However, they found only marginal support for expected gender differences. This finding highlights the need for research that clarifies gender differences associated with nonverbal communication.

Potential gender differences are of particular concern when it comes to the handshake. Chaplin et al. (2000) found handshaking scores to be lower for women than for men. They suggested that this may be so because women have less experience in handshaking, as the practice has historically been more common between men than it has been between women or between women and men. Thus, a positive relationship between the handshake and interview outcomes might have a negative impact on women. If handshakes for women are evaluated as less desirable, the result might be lower interviewer assessments of suitability for hiring. This expected difference in handshaking resulted in our final hypothesis.

> *Hypothesis 4:* Handshakes from women will be rated less favorably than are handshakes from men, which will result in lower interviewer assessments for women.

Method

Participants and Procedures

Participants in this study were 98 undergraduate students enrolled in an elective, one-credit career preparations class at a large midwestern university. Their mean age was 21 years (SD = 2.7), and 69% were juniors and seniors. Of the participants, 50 were women and 90% were Caucasian. As part of the class, students participated in a mock interview. Participants were instructed to treat this experience just as they would a "real" interview (e.g., by dressing appropriately and researching the company prior to the interview). They were also informed that past participants had occasionally obtained real interviews, which led to actual jobs, as a result of favorable mock interviews. Informal conversations with participants and interviewers following the mock interviews indicated that the participants did take the opportunity seriously and put forth their best effort.

Human resources professionals from local organizations volunteered their time to conduct the mock interviews, which typically lasted about 1 hr. A mock interview included a 30- to 45-min interview and 15–20 min of feedback provided to the participant. Interviewers were instructed to use the same interview format they presently followed with actual candidates and to focus on the job with the most frequent openings. Hence, the mock interview was based on actual selection practices and corresponded to an interview the candidates could expect to engage in during their own job search. Because some interviewers conducted more than one interview, we assessed potential bias from nonindependence of measures. Following the procedures of Kenny and Judd (1986), we conducted an analysis of variance, with interview ratings as the dependent variable and interviewer as the independent factor, and found no evidence of rater effects, $F(26, 74) = 1.26$, *ns*. The obtaining of multiple ratings from interviewers thus appears not to have created problems associated with nonindependence of measures.

Handshake firmness was assessed by five independent raters, who scored each participant's handshake at different times during the mock interview process. The raters shook hands while greeting each participant, either before or after the mock interview, so both interviewees and interviewers were unaware that handshakes were being evaluated. None of the handshake evaluators served as an interviewer. Two raters greeted and shook hands when a participant arrived for the mock interview. Participants were then introduced to a third rater, who shook hands. After the mock interview, a fourth rater greeted participants, shook hands, and introduced them to the fifth rater, who shook hands. Within 5–10 s of shaking hands, raters excused themselves from participants and completed an evaluation form. To avoid priming interviewers to pay undue attention to the handshake, we did not ask them to provide explicit assessments of the handshake.

Rater Training

Following the procedures of Chaplin et al. (2000), we trained raters in handshake evaluation. On contact with an individual's hand, raters were instructed to close their hand around the participant's hand but to wait for the participant to initiate the strength of the grip and the upward-and-downward shaking. Furthermore, the raters were instructed to release their grip only when the participant began to relax his or her grip or otherwise show signs of terminating the handshake. Raters practiced their handshaking technique on each other and on other individuals until they had mastered the evaluation concepts and technique.

The training included information about the handshake dimensions. Definitions of the completeness of grip, strength, duration, vigor, and eye contact were provided. Extreme examples of each dimension were illustrated. Individuals were recruited to shake hands with the raters and were instructed to shake hands the same way with all five raters. The raters coded the practice handshakes on all dimensions. We discussed discrepancies in the ratings to create a common frame of reference among raters.

Measures

Handshake ratings. The raters assessed the five handshake characteristics on 5-point rating scales (Chaplin et al., 2000). Given that each student's handshake was scored by five independent raters, we calculated estimates of interrater reliability for completeness of grip (1 = *very incomplete* to 5 = *full;* intraclass correlation [ICC(2)] = .77), strength (1 = *weak* to 5 = *strong;* ICC = .83), duration (1 = *brief* to 5 = *long;* ICC = .73), vigor (1 = *low* to 5 = *high;* ICC = .71), and eye contact while grasping hands (1 = *none* to 5 = *direct;* ICC = .68). Given high intercorrelation among the handshake characteristics, we also created an overall handshake score represented by the mean of the five items (ICC = .85).

Personality. Participants completed the Personal Characteristics Inventory (Mount, Barrick, & Wonderlic Consulting, 2002) in

a classroom context not directly related to the mock interview. The inventory comprises 150 Likert-type items that measure conscientiousness, extraversion, agreeableness, emotional stability, and openness to experience. Coefficient alpha estimates are .89, .90, .91, .90, and .85, respectively.

Hiring recommendation. Interviewers completed a final hiring recommendation at the end of the interview. The evaluation consisted of five questions that are used to assess perceived applicant suitability (Cable & Judge, 1997; Higgins & Judge, 2004; Stevens & Kristof, 1995). Questions were rated on a 5-point scale. Examples include "This student appears to be very qualified" (response options ranged from *strongly disagree* to *strongly agree*) and "How satisfied do you think you would be if you were to hire this student for a full-time position?" (response options ranged from *strongly dissatisfied* to *very satisfied*). Coefficient alpha for the hiring recommendation was .90 in this sample.

Candidate appearance. Each candidate was videotaped while sitting for 5 s (with no audio). Four raters, independent from the interviewers and other raters in the study, evaluated applicant physical attractiveness and professional appearance. Physical attractiveness was assessed according to the single-item measure used by Cable and Judge (1997): "Please rate the overall level of physical attractiveness of this candidate on a 5-point scale ranging from 1 (*very unattractive*) to 5 (*very attractive*)." Ratings of professional dress relied on a five-item scale adapted from Parsons and Liden (1984) and Kinicki and Lockwood (1985). Items include "The applicant was appropriately dressed," with answers ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Coefficient alpha for the five-item professional dress scale was .80. Interrater agreement was shown by ICC values of .79 for physical attractiveness and .89 for professional dress.

Results

Table 1 shows means, standard deviations, and intercorrelations among the variables. Hypothesis 1 predicted a relationship between a firm handshake and interview ratings and was supported ($r = .29$, $p < .05$). All five handshake dimensions also related significantly to the interviewer evaluation (rs .24–.31), although none were significantly different from the effect found for the overall handshake. We thus include only the overall average rating for our tests of mediation. As expected, extraversion correlated positively with interviewer ratings ($r = .28$, $p < .05$). Supporting Hypothesis 2, extraversion correlated positively with handshake quality ($r = .23$, $p < .05$). The two covariates, physical appearance and professional dress, were not significantly correlated with the interviewer's hiring recommendation (rs = −.01 and .15, respectively) but were correlated with the ratings of the handshake (r = .19 and .42, respectively). None of the other FFM traits were related to either the handshake or the interviewer evaluations.

In a result similar to those of previous studies, women received lower ratings for the overall handshake rating ($M = 3.47$ for women vs. $M = 3.70$ for men). As shown in Table 2, item-level analysis revealed that this effect was attributable to gender differences on handshake strength ($M = 3.11$ vs. $M = 3.64$) and grip (M = 3.51 vs. $M = 3.89$).

We used path analysis (Bentler & Wu, 1995) to test Hypotheses 3 and 4. We tested and compared three models. Model 1 includes both direct and indirect effects for extraversion and gender. Models 2 and 3 are nested within Model 1. To test whether part of the effect of extraversion and gender on interviewer ratings is mediated by the handshake, Model 2 eliminates paths from these variables to the handshake by fixing these parameters to zero. Comparison of the fit of Model 2 to that obtained for Model 1 enabled us to test whether there were mediation effects. Model 3 removes the direct paths from extraversion and gender to interviewer ratings. Lack of difference in the fit of Models 1 and 3 would provide support for the more parsimonious complete mediation model (Model 3). Each model controlled for the effect of agreeableness, conscientiousness, emotional stability, openness to experience, physical attractiveness, and professional dress on in-

Table 1
Means, Standard Deviations, and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Applicant gender	1.51	0.50	—														
2. Conscientiousness	115.3	12.14	−.10	(.89)													
3. Extraversion	115.0	13.31	.11	.36*	(.90)												
4. Agreeableness	76.6	9.97	−.22*	.37*	.42*	(.91)											
5. Emotional stability	105.1	14.22	.16	.47*	.58*	.33*	(.90)										
6. Openness to experience	69.5	9.51	.06	.26*	.44*	.23*	.28*	(.85)									
7. Overall handshake	3.58	0.55	.20*	.09	.23*	.05	.12	.05	(.85)								
8. Strength	3.37	0.72	.34*	.12	.26*	.03	.19	.06	.92*	(.83)							
9. Vigor	3.33	0.53	.14	.09	.20*	.08	.08	−.01	.92*	.88*	(.71)						
10. Grip	3.70	0.75	.24*	.02	.19	−.03	.11	.09	.91*	.82*	.77*	(.77)					
11. Duration	3.57	0.48	.14	.09	.18	−.01	.11	.01	.92*	.82*	.82*	.78*	(.73)				
12. Eye contact	3.93	0.59	−.06	.11	.18	.14	.01	.04	.82*	.61*	.71*	.66*	.75*	(.68)			
13. Physical attractiveness	4.43	0.61	−.17	.12	.14	.15	.06	.01	.19	.09	.19	.11	.17	.33*	(.79)		
14. Professional dress	6.79	1.43	.03	.12	.17	.11	.05	.13	.42*	.32*	.44*	.33*	.39*	.43*	.38*	(.89)	
15. Interviewer assessment	3.77	0.93	−.06	.17	.28*	.13	.12	.16	.29*	.24*	.25*	.24*	.26*	.31*	−.01	.15	(.94)

Note. $N = 98$. Reliabilities are shown in the diagonal.
*$p < .05$.

Table 2
Variable Means by Participant Gender

Variable	Men		Women	
	M	*SD*	*M*	*SD*
Conscientiousness	3.80_a	0.41	3.88_a	0.40
Extraversion	3.88_a	0.45	3.79_a	0.44
Agreeableness	3.72_a	0.49	3.94_b	0.49
Emotional stability	3.58_a	0.48	3.43_a	0.46
Openness to experience	3.50_a	0.50	3.45_a	0.45
Overall handshake	3.70_a	0.55	3.47_b	0.53
Strength	3.64_a	0.66	3.11_b	0.68
Vigor	3.42_a	0.55	3.25_a	0.49
Grip	3.89_a	0.70	3.51_b	0.75
Duration	3.65_a	0.51	3.50_a	0.44
Eye contact	3.90_a	0.65	3.96_a	0.53
Physical attractiveness	6.84_a	1.71	6.75_a	1.13
Professional dress	4.33_a	0.51	4.53_a	0.68
Interviewer assessment	3.72_a	0.93	3.83_a	0.93

Note. $N = 48$ men and 50 women. Means in a row that do not share a subscript are significantly different.

terviewer ratings. Given an expected relationship between physical appearance and professional dress, we allowed the error terms for these variables to covary.

Table 3 shows results for each model.To estimate model fit, we evaluated the chi-square statistic, root-mean-square error of approximation (RMSEA; Browne & Cudeck, 1993), goodness of fit index (GFI; Jöreskog & Sörbom, 1993), and comparative fit index (CFI; Bentler, 1990). Model 1, with both direct and indirect effects, exhibited good fit, $\chi^2(16, N = 98) = 24.15$, $p = .09$, RMSEA = .07, GFI = .95, CFI = .95. Fit for Model 2 was not as good, $\chi^2(18, N = 98) = 31.68$, $p = .02$, RMSEA = .09, GFI = .94, CFI = .91, and a chi-square difference test suggested that it was significantly worse, $\chi^2(2, N = 98) = 7.15$, $p < .05$, than was the fit for a model that included mediating effects (Model 1). This result shows that at least some of the effect of extraversion and gender on interviewer assessments was mediated by the handshake. Fit for Model 3 was marginal, $\chi^2(18, N = 98) = 31.28$, $p = .03$, RMSEA = .09, GFI = .94, CFI = .91, and the chi-square difference test suggested that fit for Model 3 was significantly worse than was fit for Model 1, $\Delta\chi^2(2) = 7.13$, $p < .05$. This result supports partial mediation, as the direct paths from gender and extraversion (included in Model 1) retain some explanatory power.

Results for the best fitting model—Model 1—are shown in Figure 1. Extraversion had an indirect effect on interviewer ratings through its relationship with the handshake ($\beta = .19$), as well as a direct effect ($\beta = .31$). Hypothesis 3 was supported, as the handshake operated as a mediator of the relationship between extraversion and interviewer assessments. Hypothesis 4 was not supported. Women received lower ratings for the handshake ($\beta = .18$) but somewhat higher interviewer ratings ($\beta = -.14$). Weaker handshakes for women did not translate into lower interviewer assessments. In fact, the negative indirect relationship for women through the handshake was compensated for by a positive but nonsignificant direct relationship with the interviewer assessment. This effect is labeled suppression by Cohen and Cohen (1983). Negative relationships with some personality traits for women created additional indirect paths that were negative. Taken together, these effects show that about one half of the positive effect for women on interviewer ratings was nullified by indirect and spurious effects through the handshake.

None of the covariates exhibited a significant relationship with the interviewer assessment. However, the handshake influenced interviewer ratings even after we had controlled for ratings of physical attractiveness and professional dress, as well as for the remaining FFM personality traits.

Discussion

To our knowledge, this is the first study that empirically supports the commonly held assumption that the handshake matters in employment interviews. The high degree of interrater reliability associated with the handshake evaluation provides strong support for the notion that people present a consistent handshake when greeting others. Furthermore, as hypothesized, individuals who follow common prescriptions for shaking hands, such as having a firm grip and looking the other person in the eye, receive higher ratings of employment suitability from interviewers.

As this is the first empirical study to have examined the handshake in employment interviews, a number of issues that still need clarification. One issue is the extent to which our findings generalize to other settings. Our data were collected in a mock interview setting, in which interviewers evaluated the suitability of candidates for a wide variety of jobs. Future studies should assess whether the same relationships exist in actual interviews, with real job offers on the line, and whether the effect is stronger for some jobs than for others. Most of the interviewers in our study chose to interview for jobs with at least moderate social demands, and it may be that the handshake is not as strongly related to evaluations for jobs in which social interaction is not integral. We also chose to isolate the effect of the handshake by not sharing preinterview information, such as test scores and résumés. Such information has been linked to interview assessments (Macan & Dipboye, 1990),

Table 3
Fit Indices for Path Models

Model	χ^2	*df*	RMSEA	GFI	CFI	$\Delta\chi^2$	*df*
1. Hypothesized model (partial mediation)	24.15	16	.07	.95	.95		
2. Paths removed to handshake (no mediation)	31.68	18	.09	.94	.91	7.15^*	2
3. Paths removed to interview assessment (full mediation)	31.28	18	.09	.94	.91	7.13^*	2

Note. $N = 98$. For $\Delta\chi^2$, Models 2 and 3 were compared with Model 1. RMSEA = root-mean-square error of approximation; GFI = goodness of fit index; CFI = comparative fit index.
$^*p < .05$.

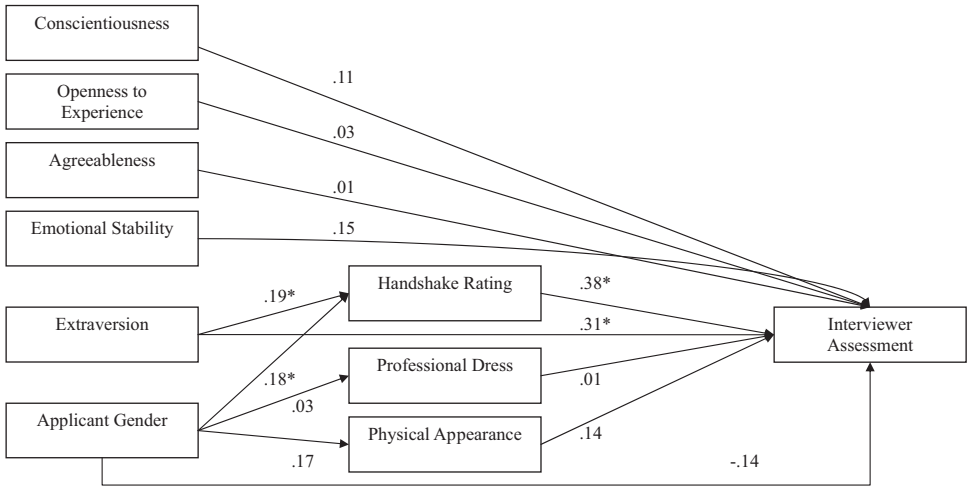

Figure 1. Path model with direct and indirect effects. Values are standardized coefficients. Personality and gender variables are allowed to intercorrelate. Error terms between ratings of professional dress and physical appearance are allowed to covary. $^{*}p < .05$.

and provision of additional details about interviewee characteristics and qualifications may result in interviewers being less influenced by nonverbal cues like the handshake. Future studies should thus explore whether or not the inclusion of preinterview information alters the relationship between the handshake and interview evaluations.

Perhaps the most important question for future investigation is whether the handshake represents superficial bias or truly communicates important information about job candidates. A longstanding concern about employment interviews is the possibility that interviewers make quick first impressions and then seek information that verifies their early perceptions (Dougherty, Turban, & Callender, 1994; Macan & Dipboye, 1988). Is the relationship between the handshake and hiring recommendation evidence of quick judgmental bias for interviewers, or are interviewers actually obtaining valid information when they shake hands? In the present study, we sought to minimize judgmental bias by obtaining handshake ratings from a source other than the interviewers. The link between interviewer evaluation of the candidate and handshake ratings provided by other individuals increases our confidence that a quality handshake conveys something meaningful about the interviewee that is also reflected in the rating of employment suitability. Moreover, the link between handshake quality and personality is consistent with the notion of information relevant to job performance (i.e., extraversion; Huffcutt et al., 2001) being communicated through this nonverbal interaction. Nevertheless, additional research should clarify the extent to which the handshake operates as either a biasing influence or an indicator of valid information.

Of course, interviewee actions during the course of the interview will result in additional information that should be taken into account when the interviewer makes a hiring recommendation. This fact illustrates how noteworthy it is to find a consistent effect for the handshake even after 30 min of social interaction during the interview. One explanation for the relationship is the possibility that the handshake itself is recalled and factored into the final evaluation. Another explanation is that individuals with a firm handshake engage in other positive behaviors during the interview. Once again, the link between extraversion and interview ratings supports such an effect. More extraverted interviewees present a firmer handshake, and they likely engage in other positive behaviors that reflect their ability to perform work successfully. Indeed, Huffcutt et al. (2001) found interviewer assessments of extraversion to be an important predictor of job performance. It thus seems likely that interviewers subconsciously combine information obtained during the handshake with other information obtained during the interview to arrive at an evaluation of employment suitability that is a valuable predictor of future performance.

Our findings also provide important insights concerning gender and the handshake. The suppression effect identified in our data illustrates that, even though women may be less adept at handshaking, they engage in other actions that overcome the effects of a weak handshake. Our dimensional results show that the negative effect for women is carried through strength and grip rather than through eye contact. This finding, coupled with other research demonstrating that women excel at coding and decoding other nonverbal cues (e.g., facial expression and posture; Graham et al., 1991), suggests that women have other strengths that can overcome the liability of a handshake that lacks a firm and complete grip.

In terms of gender, our a priori prediction was simply that women would receive lower ratings for quality of handshake. We did not hypothesize that the influence of the handshake on evaluations provided at the end of the interview would differ for men and for women. Yet, post hoc exploratory analyses also suggest that women may benefit more from a firm handshake than do men. Specifically, we probed how gender interacts with the handshake by regressing interviewer ratings on handshake ratings, gender, and the interaction between gender and handshake. A possible trend we identified suggests that handshake firmness (a combined measure of strength and grip) interacts with gender. Although this relationship was below conventional standards for statistical significance (ΔR^2 for interaction term = .02, $p = .20$), a plot of the

results suggests a stronger relationship with a firm handshake for women than for men. Men and women with a weak handshake (one standard deviation below the mean) received almost identical ratings for employment suitability, but women with a firm handshake (one standard deviation above the mean) received substantially higher ratings than did men with a handshake of the same firmness. Thus, even though women on average present a weaker handshake, those women who do present a very firm handshake receive higher ratings than do men with an equally firm handshake. This effect was not found for the eye contact dimension or for the overall handshake rating. The combined findings that there is a potential interaction between firmness and gender and that the same dimensions of strength and grip are, on average, lower for women suggest that the value of a firm handshake may be greater for women than for men. The fact that an interviewer is less likely to receive a firm handshake from a woman than a man makes handshake firmness more salient to the interviewer when he or she evaluates women and thereby increases the potential benefit of a strong and complete grip for women.

The results of this study therefore provide three specific contributions toward an understanding of the handshake in employment interviews. First, we provide the first empirical link between the handshake and interviewer assessments. Second, we show that a firm handshake partially mediates the effect of extraversion, which implies that the handshake is more than a biasing factor and can indeed communicate meaningful information about job applicants. Third, we demonstrate that women overcome the effects of weaker handshakes, such that on average they do not receive lower interview performance ratings from interviewers, and that women may actually benefit more than do men if they present a strong and complete grip when they shake hands.

From a practical perspective, our findings suggest that the effect of the handshake in employment interviews should not be ignored. Interviewers can obtain important information about interviewee traits through the nonverbal cue of the handshake. Indeed, given that Huffcutt et al. (2001) found a stronger correlation with job performance for a rating of extraversion from interviewers ($\rho = .33$) than is typical for a correlation with self-report measures ($\rho = .15$; Barrick, Mount, & Judge, 2001), obtaining trait evaluations through behavioral indicators such as the handshake may be a valuable approach that can increase the validity of selection decisions. Of course, the likelihood of accurate assessment of traits through behavioral acts such as the handshake is likely to attenuate if job applicants receive training to provide firmer handshakes. When it comes to handshake training, a practical implication of the results is that women, as compared with men, have a greater chance of improving their interview evaluations by learning to shake hands with a firm and complete grip.

In the end, our findings add to a long-running historical analysis of the handshake. The handshake is thought to have originated in medieval Europe as a way for kings and knights to show that they did not intend to harm each other and possessed no concealed weapons (Hall & Hall, 1983). The results presented in this study show that this age-old social custom has an important place in modern business interactions. Although the handshake may appear to be a business formality, it can indeed communicate critical information and influence interviewer assessments.

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