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Investigating the unique predictability and boundary conditions of applicant physical attractiveness and non-verbal behaviours on interviewer evaluations in job interviews

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Through the lens of the dramaturgical perspective, the present study investigated (1) the unique predictability of applicant non-verbal cues (physical attractiveness and non-verbal behaviours) on interviewer evaluation, and (2) whether situational variables (i.e., customer-contact requirement and sex-type consistency) moderate the relationships between applicant non-verbal cues and interviewer evaluations. Data were collected from 177 interview sessions held in 39 firms in Taiwan. Results showed that applicant physical attractiveness explained unique variance in interviewer evaluations beyond that explained by applicant verbal content. Moreover, the effect of physical attractiveness became weaker when jobs possessed lower customer-contact requirements, or when the applicant's gender was inconsistent with the interviewer's sex-type belief relative to the job. No main or moderating effects, however, were found for non-verbal behaviours on interviewer evaluations.

In both popular and academic literature, considerable attention has been paid to the role of non-verbal cues in the formation of initial impressions. Knapp and Hall (1992), for example, suggested a two-category taxonomy of non-verbal cues: *physical attractiveness*, comprising such static cues as facial appearance, body shape, and grooming; and *non-verbal behaviours*, comprising such dynamic cues as gestures, eye contact, and smiling.[1] Although a recent meta-analysis found that both applicant physical attractiveness and non-verbal behaviours are positively associated with interviewer evaluations (Barrick, Shaffer, & DeGrassi, 2009), the effects of physical attractiveness

[1] *Following Barrick et al. (2009), the term 'nonverbal behaviors' used in the present study is limited to behaviours such as smiling, head nodding, leaning forward, making hand gestures, and establishing eye contact.*

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and non-verbal behaviours were examined separately without controlling for other information sources that are usually available for interviewers (e.g., the verbal content of the applicant's responses). Some researchers believe that 'actions speak louder than words'. For example, in summarizing research evidence concerning the effectiveness of non-verbal communication, Mehrabian (1969, p. 43) ranked the importance of communication channels and noted that 'the impact of facial expression is greatest, then the impact of . . . and finally that of words'. Such an argument, however, may not hold true in the context of job interviews, because applicants' verbal responses to interview questions are, according to some researchers, one of the most influential factors that affect interviewers' hiring decisions (e.g., Burnett & Motowidlo, 1998; Hollandsworth, Kazelskis, Stevens, & Dressel, 1979). Hence, the first objective of this study is to investigate whether applicant non-verbal cues predict interviewer evaluations above and beyond applicant verbal content in job interviews.

In the present study, we employed the dramaturgical perspective to elucidate the roles of applicant physical attractiveness and non-verbal behaviours in job interviews. The dramaturgical perspective is based on the 'behaviour as drama' metaphor and has been applied to fields such as charismatic leadership (Gardner & Avolio, 1998) and employee affective delivery (Grandey, 2003). The dramaturgical perspective describes human behaviours as a theatrical performance in which actors strive to 'create and maintain a definition of reality to which other parties will respond' (Grove & Fisk, 1989, p. 430). That is, the audience's evaluation of the actor is dependent upon norms, scripts, and the actor's actions. Norms constitute a consensus regarding the scripts that people should or should not use to guide their behaviours (Sutton & Rafaeli, 1988), whereas scripts are coherent sequences of events expected by the individuals who participate in or observe social interactions (Abelson, 1976). People who enter into a given social interaction typically enact a given script that guides their actions, as well as their reactions to others' behaviours. If we view a job interview as a theatre, the interviewer is likely to play the role of an audience while the applicant may take the role of an actor. Applicants would strive to manage their gestures, facial expressions, clothing, and personal appearance, as well as their spoken words, and these may independently or jointly affect the evaluations made by the interviewer. On the other side, as the role of job applicant is usually well-defined by interview norms, the interviewers would evaluate job applicants based on their understanding of how the role of job candidate should be played.

The second objective of the present study was to examine two potential moderators of the relationship between applicant non-verbal cues and interviewer evaluations. Specifically, we examined the extent to which the effects of applicant non-verbal cues are influenced by two situational factors: customer-contact requirement (i.e., the extent to which the job requires its incumbent to interact with external customers) and sex-type consistency (i.e., the degree to which the applicant's gender matches the interviewer's sex-type belief relative to the job). Such an examination is consistent with the basic tenet of the dramaturgical perspective that situational cues influence not only an actor's behaviour, but also an audience's expectation of what an ideal performer should be (Grove & Fisk, 1989). Customers in an upscale restaurant, for example, may have different behavioural expectations of waiters or waitresses from those in a family restaurant. Another example is that customers in high-paced convenience stores anticipate weaker displays of positive emotions from clerks than the customers would do in slow-paced stores (Sutton & Rafaeli, 1988). It follows that when evaluating the effects of applicant non-verbal cues in job interviews, we should also pay careful attention

to how situational factors interact with non-verbal cues in influencing interviewer evaluations. As manufacturing employment shrinks and service employment soars in most developed economies (Massey, 2003), there is a need for interview researchers to investigate how interviewers evaluate those applicants who are applying for jobs that involve interaction with external customers. In addition, applicants applying for a job with low sex-type consistency may influence the attributions made about applicant personalities (Dipboye, 1982; Gillen & Sherman, 1980), and thus may undermine the applicant's dramaturgical performance. Nonetheless, the moderating effects of these two variables have yet to receive a full exploration in the interview literature. By examining the moderating effects of customer-contact requirement and sex-type consistency, the present study contributes to the literature by illustrating how situational factors interact with applicant non-verbal cues in influencing interviewer evaluations.

Theory and hypotheses

Effects of non-verbal cues

Although the quality of applicant verbal content may be one of the most important factors influencing selection decisions (Burnett & Motowidlo, 1998; Hollandsworth *et al*., 1979), we believe that, for several reasons, applicants' non-verbal cues can predict interviewer evaluations beyond the effects of their verbal content. First, according to the dramaturgical perspective, an actor's performance is a compound of his or her appearance, words, and non-verbal behaviours (Gardner, 1992). Each of these elements can influence other people's perception of the actor. As such, applicants' physical attractiveness and non-verbal behaviours, as well as their verbal responses, may each explain a unique portion of rating variability in interviewer evaluations. Second, verbal cues are likely to elicit systematic information processing, whereas non-verbal cues may automatically induce heuristic processing of messages (Burgoon & Hoobler, 2002). Because heuristic information processing requires recipients to exert comparatively little effort in judging message validity, interviewers may use relatively general rules (scripts, schemata) to evaluate applicants (e.g., 'what is beautiful is good' effect; Feingold, 1992). Moreover, while using non-verbal cues to attribute personality characteristics to the applicant, interviewers may use applicant verbal responses to assess the extent to which the applicant possesses job-related knowledge and skills (Conway & Peneno, 1999; Taylor & Small, 2002). For example, physical attractiveness is associated with perceptions of extraversion, dominance, warmth, and intelligence (Albright, Kenny, & Malloy, 1988; Feingold, 1992), whereas the uses of smiles, eye contact, hand gestures, and head movements lead to perceptions such as directness, honesty, consciousness, warmth, and friendliness (Bayes, 1972; DeGroot & Gooty, 2009; Gifford, Ng, & Wilkinson, 1985). Taken together, we expect that both applicant physical attractiveness and non-verbal behaviours would explain unique variance in interviewer evaluation beyond the effect of applicant verbal content.

Hypothesis 1: After the effect of applicant verbal content is controlled for, physical attractiveness will be positively related to interviewer evaluation.

Hypothesis 2: After the effect of applicant verbal content is controlled for, non-verbal behaviours will be positively related to interviewer evaluation.

As noted earlier, the audience's evaluation of the actor is dependent upon norms, scripts, and the actor's actions. Moreover, situational cues can serve as a primary cue that determines which norms and scripts apply at a given moment and how an actor's performance would be evaluated by an audience. For example, although research on employee affective delivery generally has found that employees' displays of pleasant emotions to customers (e.g., offering smiles, greetings, eye contact, and thanks to customers) are positively associated with customer reactions (Pugh, 2001; Tsai & Huang, 2002), researchers have also found that customers are willing to tolerate clerks who express relatively few positive emotions during busy hours (Sutton & Rafaeli, 1988). According to this line of reasoning, situational cues may affect how interviewers react to applicants' dramaturgical performance. In the following sections, we proposed that two job-related factors, namely customer-contact requirement and sex-type consistency, may interact with applicant non-verbal cues in influencing interviewer evaluation.

The moderating role of customer-contact requirement

According to Grove and Fisk (1989), employees' dramaturgical performance (e.g., physical attractiveness and non-verbal behaviours) becomes more important when (1) the job requires its occupants to perform before a large audience; and (2) the job requires a high degree of contact between its occupants and customers. For example, physical appearance and the ability to effectively display non-verbal behaviours are more important for flight attendants and restaurant servers than for automobile mechanics or plumbers.

Why do physical attractiveness and non-verbal behaviours matter for jobs with high customer-contact requirements? With regards to physical attractiveness, the explanation may come from the notion that 'what is beautiful is good' (Feingold, 1992). In other words, a common judgment is that the personality traits of physically attractive individuals are more desirable than are those of physically unattractive individuals. Physical attractiveness can also induce favourable emotion-based responses on the part of receivers (Barrick *et al*., 2009). Thus, other things being equal, customers would prefer to interact with physically attractive employees than with unattractive ones. Empirical evidence from consumer psychology shows that customers generally behave more cordially, respond to sales pitches more readily, and have higher purchase intentions when dealing with attractive salespeople than when dealing with unattractive ones (DeShields, Kara, & Kaynak, 1996; Reingen & Kernan, 1993). Similarly, employees' non-verbal behaviours can influence service outcomes. Non-verbal behaviours, such as facial expressions, body movements, and eye contact, can lead to more intense, more affective, and more immediate interactions (Mehrabian, 1969). In addition, non-verbal behaviours may help to reduce physical distance between service employees and customers, thus improving the quality of service exchanges (Sundaram & Webster, 2000).

Our discussion pertaining to the outcomes of physical attractiveness and non-verbal behaviours in service contexts suggests that interviewers may consider these non-verbal cues job-relevant factors for jobs with high customer-contact requirements. As one primary objective of a selection interview is to collect the data needed to assess the congruence between an applicant's skills and the demands of a job, it follows that interviewers may place greater weight on these non-verbal cues when interviewing for jobs with high customer-contact requirements than on the same non-verbal cues when interviewing for jobs requiring little or no interaction with customers (Beehr & Gilmore, 1982; Tews, Stafford, & Zhu, 2009).

Hypothesis 3: Customer-contact requirements will moderate the positive relationship between physical attractiveness and interviewer evaluation, such that the lower the customer-contact requirement, the weaker the positive relationship will be between physical attractiveness and interviewer evaluation.

Hypothesis 4: Customer-contact requirements will moderate the positive relationship between non-verbal behaviours and interviewer evaluation, such that the lower the customer-contact requirement, the weaker the positive relationship will be between non-verbal behaviours and interviewer evaluation.

The moderating role of sex-type consistency

A major theme of the dramaturgical perspective is the importance of having an agreed-upon definition of the situation in a given interaction (Goffman, 1959). In a convenience store, it is important for the clerks and the customers to have a shared understanding of the store's pace, thereby helping to ensure that the clerks display appropriate emotions (i.e., neutral or positive) that satisfy customers' needs within the particular context of expectations (Sutton & Rafaeli, 1988). In job interviews, as well, applicants should not only present themselves in a positive light but also convince interviewers to accept the applicants' preferred definitions of a given matter (e.g., 'I am worth your time/attention'). If such an agreed-upon definition fails to take hold, the applicant's dramaturgical performance would be less fruitful than he or she would likely desire.

As noted earlier, applicant non-verbal cues may induce positive personality attributions, which in turn lead to favourable interviewer evaluations. Nonetheless, such an attribution process may be hindered under certain conditions. One such condition is when an applicant applies for a job with low sex-type consistency.

According to Gillen and Sherman (1980), physical attractiveness can lead to various favourable trait attributions. Some traits, such as dominant, independent, and emotional, were characterized by 'their gender implicational properties and not by their positive or negative qualities' (i.e., sex-linked traits; p. 435), while others (i.e., sex-irrelevant traits), such as friendly, honest, and helpful, were characterized by their socially desirable qualities (good or bad). Hence, physical attractiveness can influence interviewer evaluations through its impact on sex-linked and sex-irrelevant trait attributions. When sex-type consistency is high (i.e., an applicant's gender is consistent with the perceived sex-type of the job), both trait attribution processes would lead to the conclusion that this applicant has desirable sex-linked *and* sex-irrelevant traits. When sex-type consistency is low, however, favourable attributions regarding sex-linked traits are less likely to translate into higher interviewer evaluations. For example, interviewers may consider physically attractive male applicants as being more dominant (a typical masculine trait) than less attractive ones. Nonetheless, such an inference does not appear to be an advantage to men applying to a female sex-typed job requiring feminine characteristics. Instead, under such a circumstance, physically attractive applicants can only benefit from interviewers' sex-irrelevant trait attributions (e.g., 'physically attractive people are intelligent'). Hence, the positive effect of physical attractiveness on interviewer evaluations would be weaker when applicants apply for jobs with low sex-type consistency.

In addition, it has been proposed that interviewers may attribute causes for an applicant's interview performance to sources either internal or external to the applicant's behaviour (Dipboye, 1982). External attributions are most likely to be made if the applicant's performance is inconsistent with the interviewer's initial impressions resulting from application forms or applicant characteristics that are easily observable early on.

It follows that a perception of low sex-type consistency may inhibit interviewers from attributing a good interview performance (e.g., demonstrating friendly and desirable non-verbal behaviours) to the applicant's internal causes (e.g., dispositions or efforts). Hence, when sex-type consistency is low, applicant non-verbal cues would induce less positive personality attributions, which in turn attenuate the positive relationship between applicant non-verbal behaviours and interviewer evaluations.

Hypothesis 5: Sex-type consistency will moderate the positive relationship between physical attractiveness and interviewer evaluation, such that the lower the sex-type consistency, the weaker the positive relationship will be between physical attractiveness and interviewer evaluation.

Hypothesis 6: Sex-type consistency will moderate the positive relationship between non-verbal behaviours and interviewer evaluation, such that the lower the sex-type consistency, the weaker the positive relationship will be between non-verbal behaviour and interviewer evaluation.

Method

Participants

Data for this study were collected from multiple companies and industries to increase the generalizability of findings and to maximize the variation of the customer-contact requirement and the sex-type consistency of the job vacancies. Participants were all native Chinese and consisted of 177 applicants and 114 interviewers from 39 firms in Taiwan. Of the 114 interviewers, 89 (78.1%) interviewed only one applicant, while the remaining interviewers ($n = 25$) conducted more than one interview session (mean = 3.52). The unit of analysis in this study was the interview *per se*, and therefore, the subsequent statistical analyses were drawn from 177 interview sessions.

The 177 interview sessions served to fill various types of job vacancies: sales representative (19%), R&D engineer (18%), administration staff (15%), HR personnel (10%), technicians (10%), and other job vacancies (28%). On average, 4.54 applicants in each firm participated in this study, applying for the same or different types of jobs. Of the 177 job applicants, 100 (56.5%) were male (mean age = 28.3 years). Of the 114 interviewers, 65 (57.02%) were male (mean age = 37.0). On average, interviewers had received interviewer training once and had conducted 200.58 interviews.[2]

Procedure

The interview sessions were exclusively first-stage interviews conducted by one interviewer and one applicant. Our data were collected at two time points. Immediately preceding each interview, the interviewer completed a survey regarding the characteristics of the job under consideration (i.e., perceived job sex-type and customer-contact requirement) and their pre-interview assessments of applicant qualification. At the completion of the interview, applicants were approached to fill out a survey

[2] *Because 16 interviewers in our data set were relatively more experienced in conducting job interviews than others (someone's interview experience might be as high as 5,000 times), we have excluded data from these 16 interviewers (35 interview sessions) and re-analysed our model with the remaining sample to see if our conclusions remain the same. The two data sets (n = 177 and 142) produced exactly the same results. Consequently, we have reported only the analysis of the full sample in this study.*

concerning their demographic information. Meanwhile, we asked interviewers to fill out a survey about their post-interview evaluations of the applicants, their demographic information, and the ratings of applicant physical attractiveness, non-verbal behaviours, and appropriateness of applicant verbal content. Interviewers and applicants were informed that their responses would be used solely for research purposes. We were able to retrieve 177 pairs of useable questionnaire from 193 interviews, meaning that the response rate was approximately 91.7%. All questionnaires used in the present study were in Chinese.

Measures

Because most scales were originally developed in English, all of these items underwent a translation-back translation process by four bilingual (English-Chinese) speakers. In this way, the cross-linguistic comparability of the scale contents (Brislin, 1986) can be achieved. Unless otherwise stated, all variables were measured with a 6-point scale ranging from (1) *strongly disagree* to (6) *strongly agree.*

Physical attractiveness

Four items ($\alpha = 0.84$) adapted from Cash, Gillen, and Burns (1977) and Riggio, Widaman, Tucker, and Salinas (1991) served to measure applicant physical attractiveness (the texts of all items appear in Appendix). Sample items included 'I think the applicant's face is attractive' and 'I think that this applicant's physical appearance is fairly attractive'.

Non-verbal behaviours

Six items derived from Forbes and Jackson (1980) served to measure applicants' non-verbal behaviours. Sample items included 'The applicant used appropriate hand gestures to support his or her verbal message', 'The applicant responded to my questions with head nodding', and 'The applicant smiled a lot during the interview' ($\alpha = 0.84$).

Customer-contact requirement

We followed Tsai, Chen, and Chiu's (2005) approach to determine the level of the job's customer-contact requirement. We asked interviewers to report the job title under consideration and then entered it into the National O $*$ NET database (http://online.onetcenter.org/). The results provided us with two ratings (ranging from 0 to 100) of the work activities of each job: 'Selling or influencing others' (i.e., convincing others to buy merchandise/goods, or otherwise changing their minds or actions) and 'Performing for or working directly with the public' (i.e., performing for people or dealing directly with the public, including serving persons in restaurants and stores, and receiving clients or guests). We then averaged the two ratings ($\alpha = 0.82$) to represent this construct.

Sex-type consistency

We first asked interviewers to indicate the sex-type of the job using Cash *et al.*'s (1977) single-item 9-point Likert scale ('How do you consider the given type of interviewing job?'), with anchors (1) *masculine job* to (9) *feminine job*. Next, to determine the extent to which the applicant's gender matches the perceived sex-type of the job, we

reversed the job sex-type scores for male applicants but made no adjustment for female applicants. That is, if a job was rated 8 on the original scale (i.e., a relatively feminine job), the score of sex-type consistency for a male applicant could be obtained by subtracting 8 from 10. For a female applicant, the original score was unchanged. Consequently, a high score of sex-type consistency indicates a good match between the applicant's gender and the sex-type of the job.

Interviewer evaluation

Five items adopted from Howard and Ferris (1996) and Stevens and Kristof (1995) served to measure the interviewer's post-interview evaluation of the applicant. Sample items included 'I would not offer this applicant a job' (reverse scored) and 'I consider this applicant suitable for hiring in this organization' ($\alpha = 0.95$).

Control variables

We controlled for applicant qualification, interviewer experience, interviewer training, gender of the interviewer, gender of the applicant, gender similarity, and applicant verbal content, all of which have been shown to affect interviewer ratings (Dipboye, Arvey, & Terpstra, 1977; Furnham & Burbeck, 1989; Rasmussen, 1984; Stevens, 1998). Applicant qualification was measured on the basis of five items, with three developed by Chapman and Rowe (2001) and two constructed for this study. Interviewers rated each applicant on the basis of their pre-interview evaluations of the applicant's résumés and credentials. Sample items included 'I think the previous work experience of the applicant is unsatisfactory' (reverse scored) and 'I think the educational background of the applicant is appropriate for this position' ($\alpha = 0.69$).

Interviewer experience and training were each measured with a single item. Interviewers were asked to report the total number of interviews they had previously participated in, and how many times they had participated in job-interview training programs. We also coded interviewer gender, applicant gender, and gender similarity in dummy variables. Finally, three items were developed, based on Rasmussen's (1984) definition, to measure applicant verbal content. Sample items included 'I am satisfied with the appropriateness of the applicant's verbal responses' and 'I consider the responses from this applicant to be germane and central to the issue' ($\alpha = 0.79$).

Results

Table 1 shows the means, standard deviations, and inter-correlations of all variables included in this study. To verify the construct validity of the measurement items, we estimated several alternative models using LISREL 8 with maximum likelihood estimation. In addition to the hypothesized five-factor model (i.e., applicant qualification, interviewer evaluation, physical attractiveness, non-verbal behaviours, and verbal content), the alternative models included 10 four-factor, one three-factor, one two-factor, and one single-factor model. We constructed the four-factor models by combining the manifested variables of two latent constructs at a time, and thus, the 10 four-factor models represented all possible combinations of the five hypothesized constructs. The three-factor model consisted of (1) the two unique latent factors of interviewer evaluation and applicant qualification and (2) a common latent factor representing physical

Table 1. Means, standard deviations, and correlations among variables

Variable	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Applicant qualification	4.29	0.66	(.69)											
2. Interviewer experience	200.58	527.48	.03	–										
3. Interviewer training	1.12	2.00	−.02	.18**	–									
4. Interviewer gender	–	–	−.03	.02	.20**	–								
5. Applicant gender	–	–	.08	−.09	.09	.37**	–							
6. Gender similarity	–	–	.14*	−.15*	−.02	−.05	.43**	–						
7. Applicant verbal content	4.23	0.82	.49**	.11	.14*	−.05	.00	.06	(.79)					
8. Physical attractiveness	4.23	0.86	.26**	.14*	.19**	.02	−.07	.03	.42**	(.84)				
9. Non-verbal Behaviours	4.37	0.71	.35**	.15*	.14*	−.05	−.06	−.05	.53**	.66**	(.84)			
10. Customer-contact requirement	49.90	26.22	.13*	−.18**	−.05	−.16*	−.11	−.04	.13*	.07	.21**	(.82)		
11. Sex-type consistency	6.83	2.05	.02	.01	−.13*	−.14*	.12	.32**	−.01	−.08	−.05	−.14*	–	
12. Interviewer evaluation	4.26	1.15	.45**	−.03	.14*	−.09	−.10	.06	.75**	.52**	.47**	.12	−.01	(.95)

Note. Sample size = 177. Coefficient alpha reliability estimates are presented in parentheses along the diagonal. Gender was coded 1 for female and 0 for male. Gender Similarity was coded 1 when the applicant and the interviewer were the same gender and 0 otherwise.
*$p < .05$; **$p < .01$.

Table 2. Results of model comparisons

	RMSEA	CFI	NNFI	χ^2 (*df*)	$\Delta\chi^2$ (*df*)[a]
Hypothesized (five-factor) model	.07	.97	.97	405.10 (220)	–
Four-factor model: (PA NVB) VR EVA QUAL[b]	.09	.96	.95	538.41 (224)	133.31 (4)
Four-factor model: (PA VR) NVB EVA QUAL	.11	.94	.94	732.71 (224)	327.61 (4)
Four-factor model: (PA EVA) NVB VR QUAL	.12	.93	.92	803.68 (224)	398.58 (4)
Four-factor model: (PA QUAL) NVB VR EVA	.11	.94	.94	659.53 (224)	254.43 (4)
Four-factor model: (EVA VR) PA NVB QUAL	.08	.96	.96	464.59 (224)	59.49 (4)
Four-factor model: (EVA NVB) PA VR QUAL	.14	.93	.92	995.67 (224)	590.57 (4)
Four-factor model: (EVA QUAL) PA NVB VR	.09	.95	.94	575.85 (224)	170.75 (4)
Four-factor model: (NVB VR) PA EVA QUAL	.11	.95	.94	666.94 (224)	264.84 (4)
Four-factor model: (NVB QUAL) PA VR EVA	.10	.95	.94	600.44 (224)	195.34 (4)
Four-factor model: (VR QUAL) PA NVB EVA	.09	.96	.95	513.68 (224)	108.58 (4)
Three-factor model: (PA NVB VR) EVA QUAL	0.12	0.93	0.92	796.47 (227)	391.37 (7)
Two-factor model: (PA NVB VR QUAL) EVA	0.14	0.91	0.90	992.96 (229)	587.86 (9)
Single-factor model: (PA NVB VR EVA QUAL)	.18	.87	.86	1598.20 (230)	1193.10 (10)

Note. [a]All $\Delta\chi^2$ scores are significant at the $p < .01$ level.
[b]Variables in parentheses were loaded on a same factor. PA, physical attractiveness; NVB, non-verbal behaviours; VR, applicant verbal content; EVA, interviewer evaluation; QUAL, applicant qualification.

attractiveness, non-verbal behaviours, and applicant verbal content. In the two-factor model, indicators of interviewer evaluation were loaded on a factor, while indicators of the other four constructs were together loaded on another. The results for these models are shown in Table 2.

Results showed that the designated five-factor model fits the data reasonably well ($\chi^2 = 405.10$, $df = 220$; RMSEA = .07, NNFI = .97, CFI = .97). All indicators in the hypothesized five-factor model were loaded significantly on their intended latent constructs (standardized $\lambda = .28 - .92$, $t > 1.96$, all $p < .05$). However, it should be noted the fit indices of the first four-factor model (row 2 in Table 2, in which physical attractiveness and non-verbal behaviours were combined to form a joint latent factor; RMSEA = .09, NNFI = .96, CFI = .95) were quite close to the hypothesized model. Thus, it is likely that our respondents (i.e., interviewers) were unable to make meaningful distinctions between the measures of physical attractiveness and non-verbal behaviours. To address this issue, we further performed χ^2 difference tests to assess the discriminant validity in the present study. Results of χ^2 difference tests indicated that the hypothesized five-factor model fits our data better than the first four-factor models ($\Delta\chi^2 = 133.31$, $df = 4$, $p < 0.1$). Similar results were found between the hypothesized five-factor and more constrained models (i.e., three-, two-, and one-factor models), indicating that our data were best represented by the five-factor model. Therefore, we believed it is appropriate not to combine physical attractiveness and non-verbal behaviours, but to treat them as separate variables in the subsequent analyses.

Common method variance

In this study, ratings of primary independent and depend variables were obtained from the same source. Thus, we employed the unmeasured latent method construct approach to assess the extent to which our results are affected by the problem of common method variance (CMV). Four nested models were used to evaluate the severity of CMV

(Richardson, Simmering, & Sturman, 2009): the trait-only model (i.e., the hypothesized model with a null method construct), the method-only model (i.e., substantive constructs were null, and paths from the method construct to all manifest indicators were allowed to be estimated), the trait/method model (i.e., the hypothesized model plus paths between all manifest indicators and the method construct), and the trait/method-R model (i.e., a trait/method model with latent construct correlations constrained to the value obtained from the trait-only model). Results showed that the trait-only model fit the data better ($\chi^2 = 405.10$, $df = 220$; NNFI = .97, CFI = .97) than did the method-only model ($\chi^2 = 1598.20$, $df = 220$; NNFI = .85, CFI = .87), suggesting that the observed variance in the substantive constructs was not because of the method alone. In addition, the trait/method model had a better fit ($\chi^2 = 282.80$, $df = 197$; NNFI = .98, CFI = .98; $\Delta\chi^2 = 122.30$, $\Delta df = 23$, $p < .01$) than did the trait-only model, indicating that both trait-based and method variance were present in our data. However, given that the trait/method model did not fit significantly better than did the trait/method-R model ($\chi^2 = 298.19$, $df = 207$; NNFI = .98, CFI = .98; $\Delta\chi^2 = 15.39$, $\Delta df = 10$, $p > .05$), there is no evidence suggesting CMV adversely affects the validity of statistical inferences reported in the present study (Richardson *et al.*, 2009).

Testing the proposed hypotheses

As shown in Table 3, we performed a series of ordinary least squares (OLS) regression analyses to test our hypotheses.[3] In Model 1, applicant qualification, interviewer experience, interviewer training, interviewer gender, applicant gender, and gender similarity were entered into the regression as the first set of control variables. Overall, the model accounted for 26% of variance in interviewer evaluation (adjusted $R^2 = .23$). Another control variable, applicant verbal content, was included in Model 2. This variable alone improved the *R*-square by .34. This finding was consistent with past interview studies' emphasis on the importance of applicant verbal response (e.g., Hollandsworth *et al.*, 1979).

In Model 3, physical attractiveness (PA) and non-verbal behaviours (NV) together explained a significant amount of variability in interviewer evaluation beyond what had been accounted for in Model 2 ($\Delta R^2 = .05$, $p < .01$). The standardized regression weight of physical attractiveness was statistically significant ($\beta = .28$, $p < .01$). Therefore, Hypothesis 1 was supported. However, the beta coefficient of non-verbal behaviours did not reach the traditional significance level ($\beta = -.08$, $p > .05$). Thus, Hypothesis 2 was not supported.

Hypotheses pertaining to the moderating effects of customer-contact requirement (CCR) and sex-type consistency (STC) were examined in Model 5. The four interaction terms together explained significant additional variance in interviewer evaluation ($\Delta R^2 = .03$, $p < .01$). As shown in Table 3 (Model 5), PA $\times$ CCR ($\beta = .13$, $p < .05$) and PA $\times$ STC ($\beta = .16$, $p < .05$) were significantly related to interviewer evaluation. The form of the PA $\times$ CCR interaction is presented in Figure 1. Simple slope analyses revealed that, for each level of the customer-contact requirement, the slope of attractiveness-evaluation

[3] *Because the 177 interview sessions were nested within a pool of 114 interviewers, we conducted a within and between analysis (WABA) to test whether or not the assumption of independence was violated among variables of interest (i.e., interviewer evaluations, applicant qualification, physical attractiveness, non-verbal behaviours, and verbal content; Dansereau, Alutto, & Yammarino, 1984). Results suggest that there is a considerable variance of interview ratings within interviewers, and this variance indicates that analysing our data at the interview-session level with OLS regressions is appropriate.*

Table 3. Prediction of interviewer evaluation from different sources of applicant information

	Interviewer evaluation				
Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Control variables					
Applicant qualification	.46**	.12*	.10	.10	.12*
Interviewer experience	−.08	−.13*	−.14**	−.15**	−.12*
Interviewer training	.19**	.08	.05	.05	.09
Interviewer gender	−.04	.00	−.03	−.03	−.03
Applicant gender	−.16*	−.14*	−.11	−.11	−.11*
Gender similarity	.06	.04	.02	.01	.01
Applicant verbal content		.69**	.63**	.63**	.64**
Independent variables					
Physical attractiveness (PA)			.28**	.28**	.20**
Non-verbal Behaviours (NV)			−.08	−.08	−.08
Moderators					
Customer-contact requirement (CCR)				−.02	.01
Sex-type consistency (STC)				.02	.01
Interaction terms					
PA × CCR					.13*
NV × CCR					.03
PA × STC					.16*
NV × STC					−.06
Model F	9.71	36.55	34.61	28.06	23.11
R^2	.26**	.60**	.65**	.65**	.68**
Adjusted R^2	.23	.59	.63	.63	.65
ΔR^2		.34**	.05**	.00	.03**

Note. The entries in the table are the standardized βs. All VIFs were under 2.5 for all predictor variables. *$p < .05$; **$p < .01$.

was significantly different from zero ($t(162) = 3.30\ -3.51, p < .01$). Our results indicate that no matter how extensively a job requires its incumbents to interact with customers, interviewers tend to give favourable evaluations to physically attractive applicants. Yet, the benefit of physical attractiveness is stronger for jobs involving ample interpersonal interactions. In a similar manner, our examination of the pattern of PA × STC interaction shows that (1) physical attractiveness had a positive effect on interviewer evaluation at each level of sex-type consistency ($t(162) = 3.17\ -3.44, p < .01$), and (2) the benefit of physical attractiveness is stronger when sex-type consistency is high (cf. Figure 2). Hence, Hypotheses 3 and 5 were supported. However, NV × CCR ($\beta = .03, p > .05$) and NV × STC ($\beta = -.06, p > .05$) were not statistically significant. Thus, Hypotheses 4 and 6 were not supported.[4]

[4] *We have performed additional hierarchical regressions to examine whether the effects of physical attractiveness and non-verbal behaviours were conditional upon gender-related variables (applicant gender, interviewer gender, and gender similarity). Results showed that none of these variables moderated the relationship between applicant non-verbal cues and interviewer evaluation.*

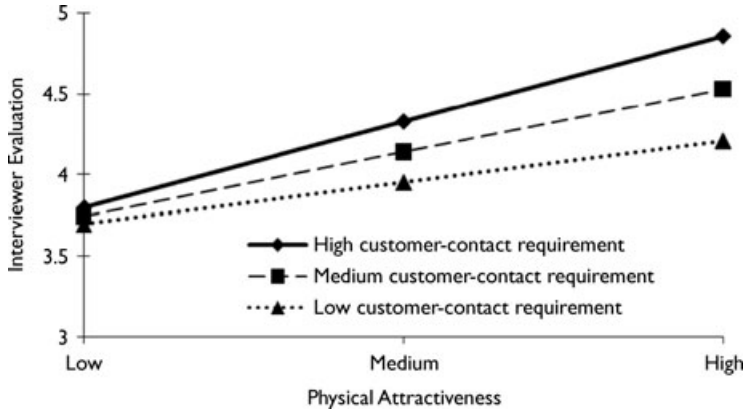

Figure 1. The moderating effect of customer-contact requirement on the relationship between physical attractiveness and interviewer evaluation.

Discussion

One purpose of the present study was to investigate the incremental predictability of applicant physical attractiveness and non-verbal behaviours in the context of job interviews. In addition, we examined the moderating effects of customer-contact requirement and sex-type consistency on the relationships between applicant non-verbal cues and interviewer evaluations. Results suggest that applicant physical attractiveness predicts interviewer evaluation above and beyond the effect of applicant verbal content, as well as applicant qualification and other demographic variables. More importantly, the magnitude of the positive effect of physical attractiveness depends on the extent to which the job requires incumbents to interact with customers and the extent to which the applicant's gender matches the perceived sex-type of the job. By identifying the situational constraints that affect the effect of physical attractiveness, the present study enriches the ongoing discussion on determinants of interviewer evaluations.

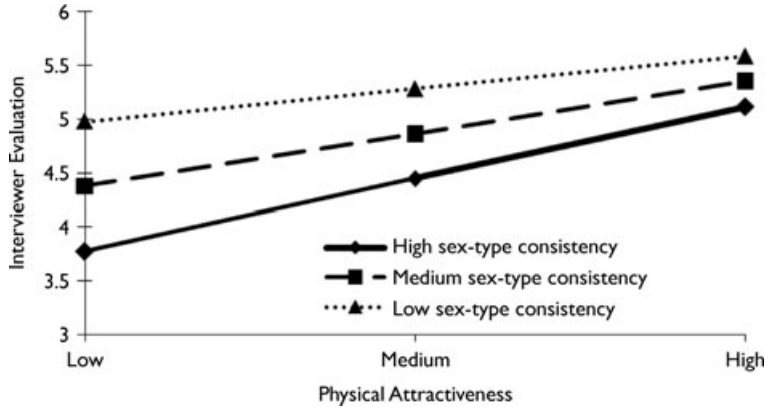

Figure 2. The moderating effect of sex-type consistency on the relationship between physical attractiveness and interviewer evaluation.

Theoretical implications

Scholars have long been interested in the effect of applicant non-verbal cues in job interviews. Individually, physical attractiveness and non-verbal behaviours have been found to have positive effects on interview outcomes (Barrick *et al*., 2009). In real job interviews, however, these non-verbal cues are delivered simultaneously along with applicants' verbal responses. The current study contributes to the literature by providing evidence on the incremental predictability of applicant physical attractiveness over applicant verbal content. Our results indicate that physical attractiveness is an important determinant of interview decisions. Interviewer evaluations are not only influenced by applicant verbal responses to interview questions, but also affected by applicant physical attractiveness. Hence, there are advantages to using both types of predictors jointly to increase our ability to predict interviewers' selection decisions.

Unexpectedly, no significant relationship was found between applicant non-verbal behaviours and interviewer evaluations.[5] On the one hand, our results corroborate those uncovered by Rasmussen (1984), who noted that non-verbal behaviour may have little effect on interview ratings when the quality of other information sources (e.g., résumé and verbal information) varies widely among the applicants (as in real job-interview contexts). On the other hand, our results differ from those obtained in a recent meta-analysis by Barrick *et al*. (2009), who found a positive relationship between applicant non-verbal behaviours and interviewer evaluations. Such a seemingly inconsistent finding may result from different research designs employed in the two studies. That is, owing to the paucity of studies reporting necessary data, Barrick *et al*. were unable to control for other applicant information when examining the effects of non-verbal behaviours. Thus, our results are not necessarily in contradiction with Barrick *et al*.'s. As Burgoon and Hoobler (2002) noted, non-verbal behaviours may sometimes be used to repeat or accentuate verbal information. The positive correlation between non-verbal behaviours and applicant verbal content shown in Table 1 lends some initial support to this speculation ($r = .53$, $p < .01$). Moreover, a *post hoc* analysis shows that the regression coefficient of non-verbal behaviours became significant ($\beta = .34$, $p < .01$) once applicant verbal content had been removed from the original Model 3. Hence, it seems that non-verbal behaviours may serve the primary function of facilitating the flow of verbal information in job interviews. If so, our findings suggest that it is important to control for multiple information sources when examining the effects of non-verbal behaviours in future research.

As expected, interviewers placed greater weight on physical attractiveness in forming their evaluations when the job required a relatively high level of interaction with customers. Likewise, the effect of applicant physical attractiveness became stronger when there was a high sex-type consistency perception. In Whetten's (1989) terms, such a study supplements the existing theory by pointing out 'when' or 'for whom' an effect of interest is most likely to be manifested. Our results suggest that job characteristics and demands such as, perceived job sex-type and customer contact-requirement may be important situational opportunities and constraints that affect the functional relationships between applicant physical attractiveness and interviewer evaluation. Research on physical attractiveness in the employment interview has come

[5] *We have also checked the non-linear relationship between non-verbal behaviours and interviewer evaluation. Neither the quadratic term ($\beta = -.06$, $p = .22$) nor the cubic term of non-verbal behaviours ($\beta = .01$, $p = .95$) was a significant predictor of interviewer evaluation, suggesting that the curvilinear relationship between non-verbal behaviours and interviewer evaluation was not applicable to our data.*

a long way. Further examination of how other situational constraints (e.g., requirements of telecommuting or the status/prestige of the job; see Jawahar and Mattsson, 2005) interact with physical attractiveness to influence interviewer evaluation may be a fruitful avenue in this area.

It should be noted that, people's evaluation of an individual is more susceptible to the ratee's physical attractiveness in the early stage of personal interaction than in latter stages (Riggio *et al*., 1991). It is possible that the positive effect of physical attractiveness may decrease when more information about the applicant becomes available. Consistent with this argument, two recent meta-analyses found that the effect of physical attractiveness was stronger in the context of employment interviews than in the context of performance appraisals (Barrick *et al*., 2009; Hosoda, Stone-Romero, & Coats, 2003). As supervisors typically have more information than interviewers have about the ratees, their evaluations are less influenced by the ratee's physical attractiveness. Since the present study involved only first-stage interviews, we encourage future researchers to collect data in the later stage of the selection process, in which interviewers would normally acquire more information about the applicant. This would help to clarify whether the positive effect of physical attractiveness differs across selection stages.

Limitations and directions for future research

Cautions are warranted in interpreting our research findings. First, asking interviewers to evaluate the sex-type of the job in advance of the interview may have made such information more salient to them. This might have affected the interviewers' behaviours and evaluations of applicants. It would be preferable for future researchers to ask these questions after the interviewer had completed all other measures to avoid the possible priming effect.

Second, the present study used a questionnaire as the primary data-collection method. As respondents were asked to recall information, this may raise concerns of data contamination. The accuracy of the retrospective measure of applicant verbal response, for example, may have been affected by the interviewer's evaluation of the applicant's physical attractiveness. This may as well explain the results of the confirmatory factory analyses that an alternative model (e.g., the first four-factor model in Table 2) produced fit indices fairly close to those produced by our five-factor solution. Although there was no strong evidence against the discriminant validity of the primary variables employed in the present study, it would be beneficial for future researchers to adopt different research designs. An alternative way to study our research questions is to videotape real employment interviews and ask several groups of independent raters to separately assess the visual and audio information (c.f. Burnett & Motowidlo, 1998). Although this approach might be useful in isolating the effects of various non-verbal and verbal cues on interviewer evaluations, it is not without problems. Some people may be more photogenic than others and hence would receive higher evaluations from independent raters than from interviewers (Feingold, 1982). In short, there seems to be no perfect measure of applicant non-verbal cues. We employed self-reported measures in this study following the proverb that beauty is in the eye of the beholder. However, future research adopting alternative operationalizations would certainly deepen our understanding of the relative contributions of applicant factors in affecting interviewer evaluations.

The present study found that the positive effect of applicant physical attractiveness is stronger when jobs require occupants to extensively interact with external customers. As service industries become increasingly important in the economy, the empirical

investigation of how interviewers make selection decisions for service-oriented positions becomes critical. However, it should be noted that although there are many jobs in which individuals do not interact directly with customers, many job occupants may have to interact with co-workers, supervisors, or subordinates. Given that physical attractiveness generally leads to favourable outcomes in social interactions, interviewers may as well have a preference for physically attractive applicants for jobs involving extensive interactions with internal customers. Future research may include more job vacancies and examine whether the high demands of general interpersonal interaction strengthen the relationship between applicant physical attractiveness and interviewer evaluations.[6]

One final issue worth discussing is that the data of the present study were collected in Taiwan and, thus, that cross-cultural generalizability of the results may be a concern. Nonetheless, research evidence suggests that there exist some shared criteria of physical attractiveness across cultures (e.g., large eyes and facial symmetry; Fitness, Fletcher, & Overall, 2003). Consistent with this assertion is the observation that the magnitude of the relationship between physical attractiveness and interviewer evaluation found in this study is generally consistent with two recent meta-analyses by Hosoda *et al*. (2003) and Barrick *et al*. (2009). Thus, results of this study are not likely to be culture-specific. Replications of this study in Western cultural settings are essential, however, to provide direct evidence of the generalizability of our findings.

Conclusion

Whereas applicant physical attractiveness predicted interviewer evaluations beyond the effect of applicant verbal content, the effect of applicant non-verbal behaviours in our current study was non-significant when we had controlled for applicant verbal content. Our results confirm the pervasive effect of physical attractiveness in human interactions, but they also raise questions as to the effectiveness of applicant non-verbal behaviours in job interviews. Physically attractive applicants are generally preferred over less attractive ones, especially when interacting with external customers is a major part of the job or when their gender is consistent with the perceived sex-type of the job. Incorporating additional moderators, such as the stage of selection process or demands to interact with internal customers, into the present model is likely to be a fruitful avenue for future research.

References

Abelson, R. F. (1976). Script processing in attitude formation and decision making. In J. S. Carroll & J. W. Payne (Eds.), *Cognition and social behavior* (pp. 33–45). Hillsdale, NJ: Lawrence Erlbaum.

Albright, L., Kenny, D. A., & Malloy, T. E. (1988). Consensus in personality judgments at zero acquaintance. *Journal of Personality and Social Psychology*, *55*, 387–395. doi:10.1037/0022-3514.55.3.387

[6] *We thank an anonymous reviewer for raising this issue. We have also added two additional items from the O ∗ NET database (i.e., 'Communicating with supervisors, peers, or subordinates' and 'Establishing and maintaining interpersonal relationships') to our customer-contact requirement scale (the Cronbach's alpha of the new 4-item scale = .64) to investigate the possible moderating effect of general interpersonal interaction requirement in the present study. Results indicate that replacing customer-contact requirement with general interpersonal interaction requirement produced virtually the same findings with these of our original analyses.*

Barrick, M. R., Shaffer, J. A., & DeGrassi, S. W. (2009). What you see may not be what you get: Relationships among self-presentation tactics and ratings of interview and job performance. *Journal of Applied Psychology*, *94*, 1394–1411. doi:10.1037/a0016532

Bayes, M. A. (1972). Behavioral cues of interpersonal warmth. *Journal of Consulting and Clinical Psychology*, *39*, 333–339. doi:10.1037/h0033367

Beehr, T. A., & Gilmore, D. C. (1982). Applicant attractiveness as a perceived job-relevant variable in selection of management trainees. *Academy of Management Journal*, *25*, 607–617. doi:10.2307/256084

Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137–164). Beverly Hills, CA: Sage.

Burgoon, J. K., & Hoobler, G. D. (2002). Nonverbal signals. In M. L. Knapp & J. Daly (Eds.), *Handbook of interpersonal communication* (pp. 240–299). Thousand Oaks, CA: Sage.

Burnett, J. R., & Motowidlo, S. J. (1998). Relations between different sources of information in the structured selection interview. *Journal of Applied Psychology*, *51*, 963–983.

Cash, T. F., Gillen, B., & Burns, D. S. (1977). Sexism and "Beautyism" in personnel consultant decision making. *Journal of Applied Psychology*, *62*, 301–310. doi:10.1037/0021-9010.62.3.301

Chapman, D. S., & Rowe, P. M. (2001). The impact of videoconference technology, interview structure, and interviewer gender on interviewer evaluations in the employment interview: A field experiment. *Journal of Occupational and Organizational Psychology*, *74*, 279–298. doi:10.1348/096317901167361

Conway, J. M., & Peneno, G. M. (1999). Comparing structured interview question types: Construct validity and applicant reactions. *Journal of Business and Psychology*, *13*, 485–506. doi:10.1023/A:1022914803347

Dansereau, F., Alutto, J. A., & Yammarino, F. J. (1984). *Theory testing in organization behavior: The variant approach*. Englewood Cliffs, NJ: Prentice-Hall.

DeGroot, T., & Gooty, J. (2009). Can nonverbal cues be used to make meaningful personality attributions in employment interviews? *Journal of Business and Psychology*, *24*, 179–192. doi:10.1007/s10869-009-9098-0

DeShields, O. W. Jr., Kara, A., & Kaynak, E. (1996). Source effects in purchase decisions: The impact of physical attractiveness and accent of salesperson. *International Journal of Research in Marketing*, *13*, 89–101. doi:10.1016/0167-8116(95)00036-4

Dipboye, R. L. (1982). Self-fulfilling prophecies in the selection recruitment interview. *Academy of Management Review*, *7*, 579–587. doi:10.2307/257224

Dipboye, R. L., Arvey, R. D., & Terpstra, D. E. (1977). Sex and physical attractiveness of raters and applicants as determinants of resumé evaluations. *Journal of Applied Psychology*, *62*, 288–294. doi:10.1037/0021-9010.62.3.288

Feingold, A. (1982). Physical attractiveness and intelligence. *Journal of Social Psychology*, *118*, 283–284. doi:10.1080/00224545.1982.9922810

Feingold, A. (1992). Good-looking people are not what we think. *Psychological Bulletin*, *111*, 304–341. doi:10.1037/0033-2909.111.2.304

Fitness, J., Fletcher, G. J. O., & Overall, N. (2003). Interpersonal attraction and intimate relationships. In M. Hogg & J. Cooper (Eds.), *Sage handbook of social psychology* (pp. 258–276). London: Sage.

Forbes, R. J., & Jackson, P. R. (1980). Nonverbal behaviour and the outcome of selection interviews. *Journal of Occupational Psychology*, *53*, 65–72.

Furnham, A., & Burbeck, E. (1989). Employment interview outcomes as a function of interviewers' experience. *Perceptual and Motor Skills*, *69*, 395–402.

Gardner, W. L. (1992). Lessons in organizational dramaturgy: The art of impression management. *Organizational Dynamics*, *21*, 33–46. doi:10.1016/0090-2616(92)90084-z

Gardner, W. L., & Avolio, B. J. (1998). The charismatic relationship: A dramaturgical perspective. *Academy of Management Review*, *23*, 32–58. doi:10.2307/259098

Gifford, R., Ng, C. F., & Wilkinson, M. (1985). Nonverbal cues in the employment interview: Links between applicant qualities and interviewer judgments. *Journal of Applied Psychology*, *70*, 729–736. doi:10.1037/0021-9010.70.4.729

Gillen, B., & Sherman, R. C. (1980). Physical attractiveness and sex as determinants of trait attributions. *Multivariate Behavioral Research*, *15*, 423–437. doi:10.1207/s15327906mbr1504_3

Goffman, E. (1959). *The presentation of self in everyday life*. New York: Double Day Anchor Books.

Grandey, A. A. (2003). When "the show must go on": Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, *46*, 86–96. doi:10.2307/30040678

Grove, S. J., & Fisk, R. P. (1989). Impression management in services marketing: A dramaturgical perspective. In R. A. Giacalone & P. Rosenfeld (Eds.), *Impression management in the organization* (pp. 427–438). Hillsdale, NJ: Earlbaum.

Hollandsworth, J. G., Jr., Kazelskis, R., Stevens, J., & Dressel, M. (1979). Relative contributions of verbal, articulative, and nonverbal communication to employment decisions in the job interview setting. *Personnel Psychology*, *32*, 359–367. doi:10.1111/j.1744-6570.1979.tb02140.x

Hosoda, M., Stone-Romero, E., & Coats, G. (2003). The effects of physical attractiveness on job-related outcomes: A meta-analysis of experimental studies. *Personnel Psychology*, *56*, 431–462. doi:10.1111/j.1744-6570.2003.tb00157.x

Howard, J. L., & Ferris, G. R. (1996). The employment interview context: Social and situational influences on interviewer decisions. *Journal of Applied Social Psychology*, *26*, 112–136. doi:10.1111/j.1559-1816.1996.tb01841.x

Jawahar, I. M., & Mattsson, J. (2005). Sexism and beautyism effects in selection as a function of self-monitoring level of decision maker. *Journal of Applied Psychology*, *90*, 563–573. doi:10.1037/0021-9010.90.3.663

Knapp, M. L., & Hall, J. A. (1992). *Nonverbal communication in human interaction*. Fort Worth, TX: Holt, Rinehart and Winston.

Massey, D. (2003). Uneven development: Social change and spatial divisions of labor. In T. J. Barnes, J. Peck, E. Sheppard, & A. Tickell (Eds.), *Reading economic geography* (pp. 111–124). Malden, MA: Wiley-Blackwell.

Mehrabian, A. (1969). Some referents and measures of nonverbal behavior. *Behavior Research Methods and Instrumentation*, *1*, 205–207.

Pugh, S. D. (2001). Service with a smile: Emotional contagion in the service encounter. *Academy of Management Journal*, *44*, 1018–1027. doi:10.2307/3069445

Rasmussen, K. G., Jr. (1984). Nonverbal behavior, verbal behavior, resumé credentials, and selection interview outcomes. *Journal of Applied Psychology*, *69*, 551–556. doi:10.1037/0021-9010.69.4.551

Reingen, P. H., & Kernan, J. B. (1993). Social perception and interpersonal influence: Some consequences of the physical attractiveness stereotype in a personal selling setting. *Journal of Consumer Psychology*, *2*, 25–38. doi:10.1016/S1057-7408(08)80073-3

Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. *Organizational Research Methods*, *12*, 762–800. doi:10.1177/1094428109332834

Riggio, R. E., Widaman, K. F., Tucker, J. S., & Salinas, C. (1991). Beauty is more than skin deep: Components of attractiveness. *Basic and Applied Social Psychology*, *12*, 423–439. doi:10.1207/s15324834basp1204_4

Stevens, C. K. (1998). Antecedents of interview interactions, interviewers' ratings, and applicants' reactions. *Personnel Psychology*, *51*, 55–85. doi:10.1111/j.1744-6570.1998.tb00716.x

Stevens, C. K., & Kristof, A. L. (1995). Making the right impression: A field study of applicant impression management during job interviews. *Journal of Applied Psychology*, *80*, 587–606. doi:10.1037/0021-9010.80.5.587

Sundaram, D. S., & Webster, C. (2000). The role of nonverbal communication in service encounters. *Journal of Services Marketing*, *14*, 378–391. doi:10.1108/08876040010341008

Sutton, R. I., & Rafaeli, A. (1988). Untangling the relationship between displayed emotions and organizational sales: The case of convenience stores. *Academy of Management Journal*, *31*, 461–487. doi:10.2307/256456

Taylor, P. J., & Small, B. (2002). Asking applicants what they would do versus what they did do: A meta-analytic comparison of situational and past behaviour employment interview questions. *Journal of Occupational and Organizational Psychology*, *75*, 277–294. doi:10.1348/096317902320369712

Tews, M. J., Stafford, K., & Zhu, J. (2009). Beauty revisited: The impact of attractiveness, ability, and personality in the assessment of employment suitability. *International Journal of Selection and Assessment*, *17*, 92–100. doi:10.1111/j.1468-2389.2009.00454.x

Tsai, W. C., Chen, C. C., & Chiu, S. F. (2005). Exploring boundaries of the effects of applicant impression management tactics in job interviews. *Journal of Management*, *31*, 108–125. doi:10.1177/0149206304271384

Tsai, W. C., & Huang, Y. M. (2002). Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology*, *87*, 1001–1008. doi:10.1037/0021-9010.87.5.1001

Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, *14*, 490–495. doi:10.2307/258554

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Appendix

Applicant qualification

I think the educational background of the applicant is appropriate for this position.
I have a positive overall impression of the applicant based on his/her written information.
I believe the applicant's educational background is suitable for the position.
After reviewing the application form, I feel the applicant is qualified for the position.
I think the applicant's previous work experience is unsatisfactory.*

Applicant verbal content

I am satisfied with the appropriateness of the applicant's verbal responses.
I consider the responses from this applicant to be germane and central to the issue.
During the interview, the applicant didn't get to the point when addressing the questions.*

Physical attractiveness

I think the applicant's face is attractive.
I think the applicant's body is well shaped.
I think the clothing of the applicant is attractive.
I think that this applicant's physical appearance is fairly attractive.

Non-verbal behaviours

The applicant used appropriate hand gestures to support his or her verbal message.
The applicant responded to my questions with head nodding.
The applicant smiled a lot during the interview.
The applicant displayed friendly non-verbal cues like smiling and nodding.

The applicant always maintained eye contact with me.
The applicant sat upright during the interview.

Interviewer evaluation

I consider this applicant suitable for hiring in this organization.
I am likely to invite the applicant to a second interview.
I would like this applicant to become a coworker or subordinate of mine.
I would recommend this applicant for further consideration.
I would not offer this applicant a job.*

*reverse-scored item.