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Often biased but rarely in doubt: How initial reactions to stigmatized applicants affect interviewer confidence

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ABSTRACT

Building on a metacognitive framework of heuristic judgments, we investigate the effect of applicant stigma on interviewers' overconfidence in their (biased) judgments. There were 193 experienced interviewers conducting a face-to-face interview with an applicant who was facially stigmatized or not, and who was visible (traditional interview) or not (partially blind interview), to the interviewer during the rapport-building stage. In traditional interviews, interview judgments of stigmatized applicants were negatively biased, and interviewers reported overconfidence in these judgments. This effect was partially mediated by the interviewer's professional performance during rapport building. Interview procedure moderated both the direct and indirect effect (through professional performance) of applicant stigma on interviewer confidence. Results show that interviewer (over)confidence in biased judgments is driven by the initial effects of, and reactions to, the stigmatized applicant.

Confidence plays an important role in many important decision-making situations. Take, for instance, an eyewitness of a crime who needs to identify the offender from a lineup. There will be likely inquiries with regards to the eyewitnesses' confidence, either by the police officer or judge, as an external indicator of accuracy. However, one recurring finding in the literature is that confidence and accuracy of judgments are not as strongly related and one can be confident about an incorrect or biased judgment (Busey, Tunnicliff, Loftus, & Loftus, 2000; Koriati, 2012). It is interesting that people have a general tendency to be overconfident in their judgments, a finding that has been corroborated in different domains including eyewitness testimony (Wells & Olson, 2003), financial investments (Barber & Odean, 2001), and social judgments (Dunlosky & Metcalfe, 2009).

In the present article we consider confidence in the context of biased decision making. We focus on the job interview as a social setting that is shown to be vulnerable to biased decision making, particularly when encountering stigmatized applicants (Macan & Merritt, 2011; Madera & Hebl, 2012). Dipboye and Jackson (1999) were among the first to show that interviewers are overconfident about their own ability to evaluate job applicants, and we seek to expand this line of research by investigating interviewer confidence in the context of biased decisions.

The goal of the present article is twofold. First, building on the premise that interviewer judgments are negatively affected by the applicant's stigma (Madera & Hebl, 2012), we further investigated whether interviewing stigmatized applicants trigger *overconfidence* in interviewers. In doing so, we focus on applicants with a facial stigma (i.e., port-wine stain [PWS]; see Madera & Hebl, 2012). Second, building on the framework of heuristic judgments (Tversky & Kahneman, 1974), we investigated the role of the interviewer's *initial impressions* of the (stigmatized) applicant,

and impressions of their *professional performance* during the rapport-building stage, as factors driving overconfidence in biased interview decisions. In the following paragraph, we take a closer look at the decision-making processes in the job interview before we discuss the role of confidence in (biased) interview judgments of stigmatized applicants.

Job interview and bias

The job interview has become such a fundamental tool in selection that it is applied in nearly all selection procedures (Huffcutt, Culbertson, & Weyhrauch, 2013), sometimes it is the only tool that is used, and often it is the tool for making the ultimate hiring decision (Levashina, Hartwell, Morgeson, & Campion, 2013). The interview is generally structured around two successive stages (Dipboye, 2005; Dipboye & Johnson, 2013). The first stage is the *rapport-building* stage that covers the first few minutes of the job interview during which the interviewer aims to establish rapport with the applicant. Rapport building is considered as chitchat about superficial topics (e.g., hobbies) to reduce applicant nervousness and to build a temporary relationship (Chapman & Zweig, 2005). The second stage is the *actual interview*, during which interviewers gather job-relevant information about the applicant's knowledge, skills, abilities, and other characteristics that are needed to perform a specific job. Finally, the last stage is the *postinterview* stage, in which interviewers make their final judgments of the applicant.

Researchers have introduced interview structure as a way to improve the psychometric properties of the interview by making the interview function more like a well-constructed psychological test (Levashina et al., 2013). However, structured interviews appear not to be immune to bias (Macan & Merritt, 2011), and despite these advancements the interview has remained under much scrutiny for its proneness to bias and discrimination of applicants based on stigmatizing factors such as race (Roth, Van Iddekinge, Huffcutt, Eidson Jr, & Bobko, 2002), obesity (Puhl & Heuer, 2009), and facial stigma (Madera & Hebl, 2012).

In this study, we investigated interview bias against one specific group of applicants with an uncontrolled facial stigma, namely, a PWS. Estimates are that around 10% of the world population has a PWS on various regions of the body (Valente, 2009). Interview bias can be considered as a systematic distortion that is contingent on one's group membership and that results from limitations in cognitive processing, from individual motivation, or from a combination of both motivational and cognitive factors (Fiske & Taylor, 1991). According to impression formation theories (Brewer & Feinstein, 1999; Fiske & Neuberg, 1990), interviewers will tend to simplify the excessive amount of new information they encounter when meeting others (e.g., when interviewing a person for the first time) by categorizing others on the basis of the most salient person characteristics and/or features (Dipboye, 2005). Physical appearance (and one's face in particular) seems to play a prominent role in categorization, as appearance is one of the first and most salient features people notice that is processed immediately (i.e., "strong cue"; see Fiske & Neuberg, 1990). Indeed, in a recent study Madera and Hebl (2012) showed that facially stigmatized applicants are subject to interview bias in traditional structured interviews, and this bias was driven by the effects of stigma on cognitive processes.

Impression formation theories further posit that interviewers might reconsider their initial categorization and recategorize when more personalized information becomes available about a person (Fiske, Lin & Neuberg, 1999). However, with regards to the job interview context, for long scholars have suggested that impressions formed during the first few minutes of the interview might affect interviewers' level of attention, the amount of information they recall, and how information is evaluated and interpreted (Dipboye & Johnson, 2013; Dipboye & Macan, 1988; Macan & Dipboye, 1990). Although this notion has received criticism (Buckley & Eder, 1988), recent findings by Barrick, Swider, and Stewart (2010) showed that initial impressions of the applicant formed during the rapport-building stage are a strong predictor of the interview outcome. This finding has raised concerns about the possible contaminating nature of rapport building and initial impressions on interviewer decision making (Levashina et al., 2013; McCarthy, Van Iddekinge, & Campion, 2010).

In other words, interview bias may be a result of the contaminating effects of the applicant's stigma during the rapport-building stage. In a similar way, such stigma effects during the rapport-building stage may affect the interviewers' confidence and may lead to overconfidence in biased judgment, which is discussed next.

Confidence and (biased) interview judgments of stigmatized applicants

One of the first researchers to consider confidence in judgmental bias was Daniel Kahneman, who founded his heuristics and biases research on his experiences as an interviewer in the Israeli army. He was intrigued by his own perceived ability to foretell the performance of each candidate and the powerful conviction, or confidence, in his judgments even though he was aware that the validity or accuracy of his judgments was negligible (Kahneman, 2003a; Kahneman & Klein, 2009). Hence, from experience Daniel Kahneman described the human tendency to have confidence in erroneous or biased judgments. Although the origin of heuristics lies in Daniel Kahneman's experiences as a job interviewer, it is rarely applied to account for interview judgments and the confidence related to these judgments. For instance, we know of just one study that showed interviewers' overconfidence in interview judgments (Dipboye & Jackson, 1999). Tversky and Kahneman (1974) introduced heuristics in psychology, and they defined heuristics as simple procedures, or judgmental rules, that are automatically executed and offer often imperfect but quick and satisfactory reactions to certain situations or problems (Evans & Stanovich, 2013; Kahneman & Frederick, 2002). The execution of heuristics results in an automated response or intuition that can take different forms including urges, behaviors, thoughts, emotions, and impressions.

Indeed, research has shown the human ability to quickly form initial impressions, and the speed with which these are formed suggests that initial impressions are intuitive rather than content driven and thoughtful (Bar, Neta, & Linz, 2006; Willis & Todorov, 2006). Kahneman (2003b) proposed that intuitive heuristic responses like impressions are derived from physical properties such as the observer's impressions of attributes of the stimulus and abstract properties such as similarity, surprisingness, and affective valence of the stimulus. Hence when forming an initial impression of the applicant, physical properties of the applicant, such as a PWS, are expected to facilitate categorization (Fiske & Neuberg, 1990).

According to impression formation models, when first observing an applicant (i.e., target), the interviewer (i.e., observer) attends to cues that are immediately observable such as appearance. Strong cues, such as a PWS, trigger fast social categorization (i.e., heuristic response) and activate affective and cognitive responses including fear, disgust, and stereotypical thinking (Pryor, Reeder, Yeadon, & Hesson-McInnis, 2004). If such strong cues are absent, the interviewer will require additional information (e.g., verbal information) before the applicant can be categorized in a meaningful social category. Hence, compared to the categorization process of stigmatized individuals, the absence of a strong visual cue (like a PWS), and the subsequent need for additional information, is indicative of a slower initial impression formation process when the applicant is nonstigmatized.

The facilitating effect of applicant stigma on the initial impression formation may also influence the interviewer's confidence. Metacognitive theory on judgment and decision making suggests that each heuristic response, such as an initial impression, is accompanied by a *Feeling Of Rightness* (FOR) regarding the response (Thompson, 2009; Thompson et al., 2013). This FOR (for an excellent review, see Thompson, 2009) is not related to an objective reality or assessment of actual accuracy, but it is based on the fluency with which the heuristic responses are produced (Thompson et al., 2013). When heuristic responses are produced relatively quickly, they are associated with a high confidence that the heuristic answer is correct (i.e., strong FOR). Contrary, when heuristic responses are produced relatively slowly, the heuristic outcomes are associated with a low confidence in the heuristic answer (i.e., low FOR).

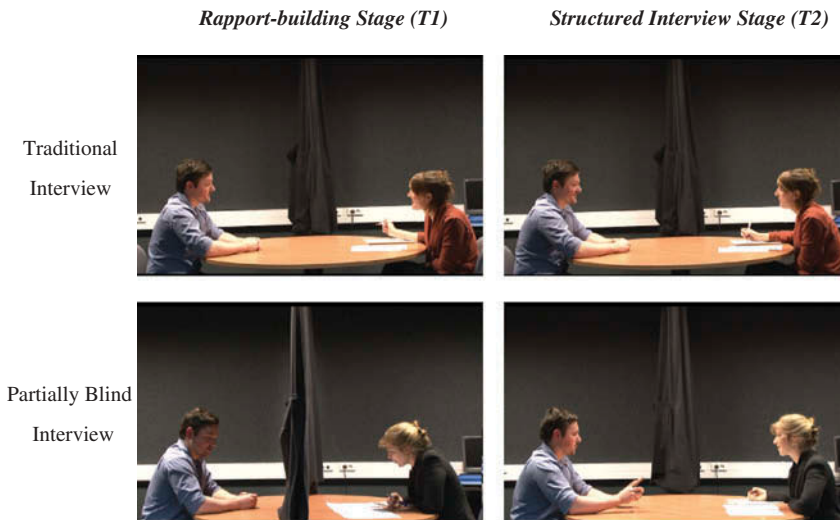


Figure 1. Illustration of interview procedure: traditional interview (top) and partially blind interview (bottom).

When applying this theory to the initial impressions of applicants that are formed during the rapport-building stage, the fluent classification of the stigmatized applicant may induce a strong FOR and the slow classification of nonstigmatized applicants may induce a weak FOR. When retrieving these initial impressions from memory during the decision-making stage, both the actual impression and the metacognitive experience are retrieved. Hence, compared to nonstigmatized applicants, the fluency with which stigmatized applicants are categorized, and the accompanying strong FOR, is expected to result in higher levels of confidence (i.e., overconfidence) interviewers have in their own performance and judgments, even despite the negative stereotypical content of the memory (Busey et al., 2000; Thompson, 2009).

Put differently, we propose that interviewer confidence is rooted in the effects of stigma during the initial impression formation process. To test this, we introduce partially blind interviews as an alternative for the traditional interview procedure. Compared to the traditional, structured interview procedure, partially blind interviewing has a similar structure except that in the partially blind procedure, interviewer and interviewee are visually separated during the rapport-building stage (see Figure 1). This manipulation ensures that interviewers are unaware of the applicant's physical characteristics (e.g., PWS or no PWS) during initial impression formation, resulting in a similar fluency with which impressions are formed. Moreover, as fluency of the initial impression formation is dependent on the observation of a strong cue, such as a PWS, the inability to observe this cue during impression formation should reduce the fluency with which the initial impression is formed. Hence, we predict that interview procedure moderates the effects of the PWS on the interviewer's postinterview confidence:

H1: Applicant stigma has a strong positive effect on interviewer confidence in traditional, structured interviews, but not in partially blind interviews.

Confidence and quality of the rapport-building stage

Interviewers have been found to evaluate the degree to which an interview was successful on the quality of the rapport-building stage (Chapman & Zweig, 2005). This quality is deducted from the extent to which the interviewers consider themselves successful in establishing a superficial relationship with the applicant. Research has indicated that interviewers succeed at establishing this relationship when they present themselves—and are perceived by the

applicant—as warm and friendly as well as knowledgeable and professional (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005; Derous, 2007; Dipboye & Johnson, 2013).

Whereas such self-presentation for interviewers is considered as an automated process in routine situations (Tice, Butler, Muraven, & Stillwell, 1995), the applicant's stigma may interfere with this automated process. Moreover, direct observation of the applicant's stigma can affect the perceived social situation for the interviewer and trigger the need to increase the efforts to make a positive impression on the applicant (Bozeman & Kacmar, 1997). This positive adjustment is motivated by the interviewers' awareness of legal consequences of discrimination (Myors et al., 2008) and their goal not to be perceived as discriminatory (Dovidio, Kawakami, & Gaertner, 2002). However, when interviewers are unaware of the applicant's stigma during partially blind interviewing, the applicant's stigma is expected to have no effect on the interviewer's self-presentation. As the interviewer's goal is to establish a temporary relationship with the applicant, we assess their success in achieving this goal through applicant judgments of the interviewers' professional performance during rapport building. We hypothesize the following for visually stigmatized applicants (i.e., with a PWS):

H2: Interviewers' professional performance during rapport building will be evaluated more positively when establishing rapport with the stigmatized—compared to the nonstigmatized—applicant in traditional, structured interviews, but not in partially blind interviews.

This process of building rapport with the applicant, and the perceived successfulness of this process by the interviewer, can affect the interviewers' confidence (Chapman & Zweig, 2005). Because observing the applicant's stigma may influence the efforts and successfulness of the interviewer during the rapport-building stage, and this may in turn influence the interviewer's confidence, we expect that the interviewers' professional performance during rapport building may mediate the effect of applicant stigma on the confidence associated with their judgments. However, similar to the direct effect of applicant stigma on interviewer confidence, this mediation effect is expected to occur only when the interviewer is aware of the applicant's stigma during the rapport-building stage (i.e., traditional, structured interviews) but not when the interviewer is unaware of the stigma (i.e., partially blind interviews). Hence, in line with a recent framework for assessing moderated mediation (Edwards & Lambert, 2007), we propose and investigate a direct effect and first-stage moderation mediation model that is shown in Figure 2. We hypothesize the following:

H3: Applicant stigma (i.e., PWS) will have a direct and indirect (mediated through interviewer professional performance) effect on interviewer confidence, and interview procedure (i.e., traditional vs. partially blind) will moderate both the direct and indirect effects.

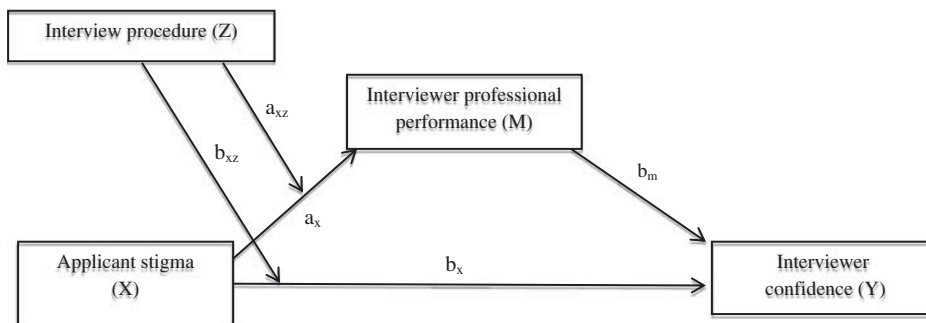


Figure 2. Hypothesized moderated mediation model.

Method

Ethics statement

The university Institutional Review Board considered ethical aspects and approved the study. Participants provided written informed consent prior to participation and received a written debriefing after all the data were collected.

Participants

The sample consisted of 193 professional interviewers who all had conducted interviews in the 12 months preceding their study participation. The mean age of our sample was 26.62 years ($SD = 6.87$), 78.8% were female, and 100% White-Caucasians. None of the interviewers was visually stigmatized, and all were naive for the purpose of the experiment. In three of the 193 interviews the professional performance judgments were missing due to technical errors of the registration system. These missing values were replaced with the mean professional performance rating of the entire sample.

Applicant background and stigma manipulation

For this study we recruited one White, 24-year-old male confederate actor, with a master's degree in Business Administration and Economics, to act as the applicant. The confederate received training to standardize verbal and nonverbal behavior across interviews. The confederate applicant memorized applicant background information, which was designed to present a candidate who was suitable for an entry-level consultancy position. The applicant's profile depicted a recently graduated master's student with a degree in business administration and economics, with above-average grades, and work experience that has been obtained through summer jobs, internships, and freelance consultancy. The PWS was applied by means of a temporary tattoo, created for this study by a specialized firm. The PWS was applied to the left-hand side of the confederates' face at the height of his eye socket. Prior to the interview, the confederate waited in a separate room to avoid any contact with the interviewers preceding the interview.

Design and measures

This study applied a 2 (facial stigma: no stigma vs. port-wine stain) \times 2 (interview procedure: traditional vs. partially blind) between-subject design. Following the rapport building, the applicant rated the interviewer's professional performance to assess the successfulness of the interviewer in establishing rapport. Six Likert-type scale items, from 1 (*absolutely disagree*) to 5 (*absolutely agree*), assessed the interviewers' professional performance ($\alpha = .89$; "The interviewer appeared self-confident," "The interview so far went smoothly," "The interviewer made me feel at ease," "The interviewer was attentive to my answers," "The interviewer made me feel uncomfortable" (R), and "I enjoyed the interview so far").

Following the complete interview (i.e., rapport building and behavioral interview), interviewers rated the applicant's job suitability. Previous research on interview judgments has successfully applied this measure to assess interview outcomes (Barrick et al., 2010; Cable & Judge, 1997; Higgins & Judge, 2004; Stevens & Kristof, 1995). Five items, scored on a 6-point Likert-type scale, from 1 (*low*) to 6 (*high*), assessed perceived job suitability ($\alpha = .90$; "How qualified is this applicant for the job," "How attractive is this applicant as a potential employee of your organization," "How highly do you regard this applicant," "How well did this applicant do in the interview," and "How likely are you to offer this applicant the job").

Finally, interviewers' confidence was assessed through task-specific self-assessment of confidence ($\alpha = .81$; "I believe that I successfully conducted the interview," "I'm confident of the judgments I

have made,” “I acted professionally in my role as interviewer,” “The way I handled the interview satisfies me”), using a 5-point Likert-type scale from 1 (*absolutely disagree*) to 5 (*absolutely agree*). This confidence measure was adapted from task-specific measures assessing self-efficacy, a concept that is closely related to confidence (Gist, Schwoerer, & Rosen, 1989; Rooney & Osipow, 1992). We designed four items to address different levels of handling a specific task (i.e., the interview) rather than using just one item, based on recommendations to avoid using single item measures and assess multiple performance levels when assessing confidence (Lee & Bobko, 1994). Table 1 represents the means, standard deviations, and correlations of independent and dependent variables.

Procedure

Recruitment of participants

Participants (i.e., interviewers) were contacted through HR mailing lists and professional channels such as a national HR magazine. We used a cover story suggesting that we were studying the differential effects of interview styles in a behavioral description interview (Janz, 1982) versus situational interviewing (Latham, Saari, Pursell, & Campion, 1980), on applicant reactions and feedback. Those who agreed to participate in this study were invited by the experimenter to come to the university to conduct the interview.

Instructions

Upon arrival, the experiment leader took the participants to the interview room. Prior to conducting the interview the participants received instructions about the interview procedure. First, participants had to select an envelope with a card indicating the kind of interview technique they were going to use. Although they were under the impression that two (out of four) envelopes would contain situational interview instructions (see cover story), all four envelopes contained instructions to apply the behavioral description interviewing technique. Second, participants were instructed to start the job interview with 5 min of rapport building, in which light topics (e.g., hobbies) were to be discussed. Participants were also informed that the rapport-building stage would be followed by a short break and that after that break the behavioral interview would start. Third, participants were instructed to focus on job-relevant competencies that were specified in the job description. Finally, participants were presented with the applicant’s resume and the job description (entry-level consultant). They were instructed to carefully read the resume and job description, and they were requested to prepare for the interview. To provide structure, participants received a list with sample questions for each of the job-relevant competencies (i.e., ability to work in team and independently, customer focus, problem solving) following the behavioral interviewing style. Participants (i.e., interviewers) were instructed to take notes when desired. They were all asked to prepare for an interview that would last 20 min.

Interview stage and ratings

After the participants (i.e., interviewers) had received all instructions and participants had prepared themselves for the interview, the experimenter indicated that the applicant had arrived in a separate room and that she or he was going to fetch the applicant. Note that in the partially blind interview condition, the interviewer was seated behind a curtain in order to visually separate him or her from

Table 1. Descriptive statistics and correlations of dependent and independent variables.

	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	<i>M</i>	<i>SD</i>	<i>N</i>
1. Stigma	96	.21	.98	—	-.09	-.04	.04	.20	.99	97
2. Job suitability	96	3.87	.67	-.19 [†]	—	.18 [†]	.32**	3.89	.53	97
3. Professional performance	96	3.25	.66	.24*	.21*	—	.32**	3.25	.58	97
4. Interviewer confidence	96	3.51	.49	.35**	.37**	.4**	—	3.44	.47	97

Note. Stigma (0 = no stigma; 1 = port-wine stain). Means and correlations for the partially blind interview procedure are above the diagonal; means and correlations for the traditional interview procedure are below the diagonal.

[†] $p < .10$. * $p < .05$. ** $p < .01$ (two-tailed).

the applicant. More specifically, we draw a curtain across the interview table, a manipulation that was inspired by the long-standing tradition of blind auditions in the music industry (Goldin & Rouse, 2000). When the experimenter and applicant entered the interview room, the applicant was seated on the chair opposite to the interviewer (either visible to the interviewer or nonvisible due to the curtain in between the applicant and the interviewer). The interviewer started with the rapport building. After 5 min, the experimenter signaled to the interviewer to terminate the rapport-building stage. During the short break after the rapport-building stage, and prior to the behavioral interview stage, the applicant rated the interviewer's professional performance during rapport building. After having made the required ratings, visual contact between the interviewer and the applicant was restored for those in the partially blind condition, to continue with the behavioral description interview. Following the interview, the applicant left the room. The interviewer then rated the applicant's job suitability, reported his or her confidence, and filled out a manipulation check concerning the observation and correct identification of the applicant's stigma¹.

Validity check of applicant behavior

Because the involvement of an actor/confederate (i.e., the applicant) might affect the confederate's behavior in social settings such as the interview (Kleck & Strentra, 1980), a validity check was performed on the applicant's behavior. Two observers, who were totally blind to the study goal, independently evaluated the confederate's verbal and paraverbal behavior in 20 randomly selected interviews. Based on Peeters and Lievens (2006), observers rated incidents of verbal impression management (e.g., entitlements, overcoming obstacles, opinion-conformity) and paraverbal aspects of behavior (e.g., friendly, calm impression, "to the point") on a 5-point Likert-type scale from 1 (*not at all/never*) to 5 (*very much/a lot*). Before observers rated the applicant, we provided them a "frame-of-reference" training regarding impression management behaviors. Finally, observers also rated the applicant's overall interview performance, from 1 (*not good at all /very bad*) to 5 (*excellent/very good*). Results are discussed next.

Results

Preliminary analyses

A validity check on the applicant's behavior showed no significant differences between stigma conditions or interview procedures in the confederate's verbal IM, $F(3, 76) = 1.86, p = .14$; paraverbal behavior (friendly impression, $F(3, 76) = .278, p = .84$; calm impression, $F(3, 76) = 1.60, p = .19$; "to-the-point," $F(3, 76) = 1.68, p = .17$; and overall interview performance, $F(3, 76) = 1.41, p = .2$.

As we aimed to investigate if biased interview judgments are associated with overconfidence, and the processes that drive this effect, we first sought to replicate findings by Madera and Hebl (2012) in order to establish if interviewer judgments were indeed biased against facially stigmatized applicants in traditional interviews. To this end, we tested the effects of stigma on job suitability judgments following traditional interviews. Results showed a significant effect of applicant stigma on job suitability ratings, $t(94) = 2.04, p = .04, M_{no\ stigma} - M_{stigma} = 0.26, d = .41$, thereby replicating previous findings of interview bias against facially stigmatized applicants (e.g., Madera & Hebl, 2012). Of interest, no significant effect of stigma on job suitability judgments was found in the partially blind interviews, $t(94) = .78, p = .44$. These results indicate that the applicant's facial stigma negatively biases interviewer judgments and that this negative effect is due to the effects of stigma during the rapport-building stage.

¹Analysis of the manipulation check showed that the stigma was observed, and correctly identified as a PWS, by 98.3% of the interviewers who had interviewed a stigmatized applicant. In addition, none of the interviewers who had interviewed a nonstigmatized reported observing a PWS.

Hypothesis testing

H1 predicted that interviewers would report higher levels of confidence after interviewing a stigmatized applicant (vs. nonstigmatized applicants), and that this effect was dependent on interview procedure (traditional vs. partially blind). As the decision has been found to affect judgments of confidence (Koriat, 2012), we took job suitability judgments by the interviewer of the applicant into account. Starting with the higher order interaction, our results indicated a significant interaction effect between applicant stigma and interview procedure on interviewer confidence, $F(1, 189) = 9.1$, $p = .003$, 95% CI $[-0.81, -0.17]$, $\eta^2 = .05$. As can be seen in **Figure 3**, in the traditional interview procedure the interviewers reported higher levels of confidence after interviewing a stigmatized applicant ($M = 3.44$, $SD = .6$) than after interviewing a nonstigmatized applicant ($M = 2.96$, $SD = .65$), $F(1, 93) = 24.73$, $p < .001$, $M_{\text{no stigma}} - M_{\text{stigma}} = -0.47$, 95% CI $[-0.81, -0.35]$, $d = .75$. However, partially blind interviews did not result in a difference in interviewer confidence between interviews with a stigmatized applicant ($M = 3.31$, $SD = .48$) and those with a nonstigmatized applicant ($M = 3.15$, $SD = .77$), $F(1, 94) = 0.45$, $p = .51$, $M_{\text{no stigma}} - M_{\text{stigma}} = -0.16$, 95% CI $[-0.3, 0.15]$, $d = .25$. Overall, these findings provide support for H1.

H2 predicted an interaction effect between applicant stigma and interview procedure on the interviewer's professional performance during rapport building. Results showed an interaction effect as hypothesized, $F(1, 189) = 4.0$, $p = .05$, 95% CI $[-0.56, -0.01]$, $\eta^2 = .02$. Specifically, interviewers displayed higher levels of professional performance in traditional interviews when building rapport with a stigmatized applicant ($M = 3.6$, $SD = .27$) compared to when building rapport with a nonstigmatized applicant ($M = 3.36$, $SD = .69$), $F(1, 94) = 5.91$, $p = .02$, $M_{\text{no stigma}} - M_{\text{stigma}} = -0.24$, 95% CI $[0.05, 0.44]$, $d = .46$. However, partially blind interviews did not result in difference in ratings of professional performance following rapport building with the stigmatized applicant ($M = 3.43$, $SD = .4$) and the nonstigmatized applicant ($M = 3.46$, $SD = .55$), $F(1, 94) = 0.15$, $p = .7$, $M_{\text{no stigma}} - M_{\text{stigma}} = 0.03$, 95% CI $[-0.23, 0.15]$, $d = .06$. These results provide support for our hypothesis that interviewer's professional performance is dependent on the presence and visibility of the applicant's PWS.

Finally, H3 investigated the direct effect of applicant stigma on interviewer confidence, and the indirect path mediated by interviewer professional performance, moderated by interview procedure. We again controlled for job suitability ratings in all analyses (Koriat, 2012). To test moderated mediation, we used the PROCESS macro described in Hayes (2013) for testing a direct effect and a first-stage moderation model. We used bootstrapping to test the difference between direct and indirect effects at the different levels of the moderator (i.e., interview procedure). Mean centered scores of all continuous variables were used in the analysis. Results of the analysis are reported in **Table 2**. The upper part of the table reports the results of the first step in the analysis in which the

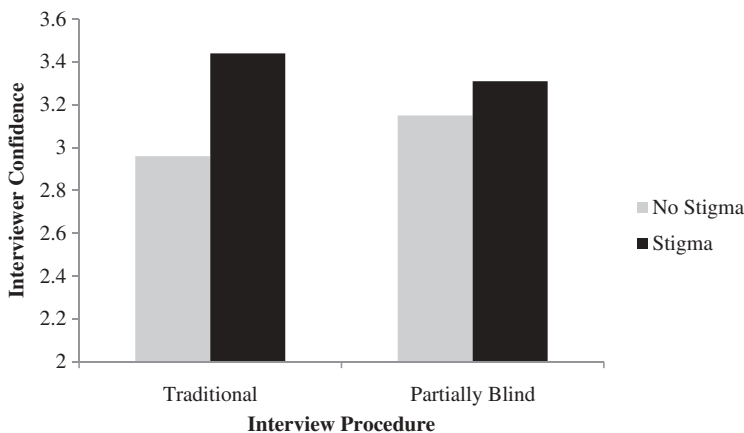


Figure 3. Effect of applicant stigma on interviewer confidence in traditional and partially blind interview procedure.

Table 2. Effect of applicant stigma on interviewer confidence, mediated by professional performance and moderated by interview procedure.

Model	<i>B</i>	<i>SE</i>	<i>t</i>	<i>R</i> ²
Mediator variable model: Interviewer professional performance				.08**
Constant	−1.48	.46	−3.19**	
Stigma (<i>a_x</i>)	.14	.07	1.93	
Procedure (<i>a_z</i>)	−.04	.07	−.51	
Stigma × Procedure (<i>a_{xz}</i>)	−.16	.07	−2.25*	
Suitability rating (control)	.37	.12	3.18**	
Dependent variable model: interviewer confidence				.28***
Constant	−2.24	.42	−5.31***	
Professional performance	.25	.06	3.84***	
Stigma (<i>b_x</i>)	.23	.06	3.56***	
Procedure (<i>b_z</i>)	.04	.06	.7	
Stigma × Procedure (<i>b_{xz}</i>)	−.16	.06	−2.46*	
Suitability rating (control)	.57	.11	5.28***	
Direct effects of stigma on interviewer confidence				
(−1) Traditional interview	.39	.09	4.18***	
(+1) Partially blind interview	.07	.09	.8	
Indirect effects				
	Bootstrap Indirect Effect	Bootstrap SE	Bootstrap LLCI	Bootstrap ULCI
(−1) Traditional interview	.07	.03	.02	.16
(+1) Partially blind interview	−.005	.03	−.06	.05

Note. *N* = 193. Bootstrap sample size = 5,000. Unstandardized coefficients are presented. Stigma is coded −1 = nonstigmatized, 1 = stigmatized applicant; Procedure is coded −1 = traditional interviewing, 1 = partially blind interviewing. LLCI = Lower Level Confidence Interval; ULCI = Upper Level Confidence Interval.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

mediator (interviewer professional performance) is regressed on the main and interaction effects of stigma and interview procedure. The next step, reported in the second part of Table 2, is to regress the dependent variable (interviewer confidence) on the main and interaction effects of stigma and interview procedure. As can be seen, there was a direct effect of stigma, and an interaction effect of stigma and procedure, on interviewers' confidence. In addition, results show a significant interaction effect of stigma and procedure on the interviewer professional performance, and interviewer professional performance significantly predicted interviewer confidence. Overall these results provide support for the proposed direct and first-stage moderation model.²

Discussion

From his involvement as a job interviewer, Nobel Prize Laureate Daniel Kahneman coined the term "illusion of validity" to describe the (unjustified) sense of confidence interviewers have in their own ability to foretell how well an applicant will perform in a job (Kahneman & Klein, 2009). In a context such as the job interview confidence may be pivotal because, as aptly noted by Klayman et al. (1999), "In a world in which competence is hard to measure, confidence often wins the day" (p. 243).

Dipboye and Jackson (1999) also showed that interviewers' may be overconfident about their ability to evaluate applicants. The present study adds to this literature, as well as to the work of Madera and Hebl (2012), by further investigating factors in both the interviewer (i.e., professional performance) and the interview (i.e., visibility of the applicant's stigma during the rapport-building stage) that drive overconfidence in evaluations of facially stigmatized applicants. Specifically, we investigated whether interviewers' increased efforts and subsequent success in establishing rapport with the applicant mediated this relationship. Further, through an adapted interview procedure we

²Findings did not change if we created one variable that tapped more into confidence in judgment (one item: "I'm confident of the judgments I have made") and another variable that tapped more into confidence in behavior/professional acting (the remaining three items; see Method section).

investigated whether the interviewer's overconfidence was rooted in the effects of stigma during the rapport-building stage. In doing so, we built on a metacognitive framework of initial heuristic judgments and instant categorization of stigmatized applicants.

At its core, the findings present an intriguing paradox: Interviewers rate stigmatized applicants lower compared to a nonstigmatized applicant but do so with greater confidence. The traditional interview procedure has for long received the critique that job irrelevant applicant factors, such as facial stigma, negatively bias interview outcome (Arvey, 1979; Madera & Hebl, 2012). Indeed we show that bias against facially stigmatized occurred following the traditional interview. However, our goal was to extend previous research on interview judgments (Barrick et al., 2010) by investigating whether initial effects of the applicant's stigma, occurring during the rapport-building stage, also affected interviewer confidence. Following traditional interviews, interviewers were significantly more confident when evaluating stigmatized applicants compared to nonstigmatized applicants. However, when delaying the observation of the applicant until after rapport building in the partially blind interview, this overconfidence-effect disappeared. This finding is in line with the metacognitive framework of judgment and decision making proposing that direct exposure to the stigma results in a fast categorization process, triggering a strong FOR, eventually resulting in overconfidence.

In addition, we considered and found that the effect of applicant stigma on interviewer confidence was mediated by the interviewer's professional performance during the rapport-building stage. Specifically, results show that when the applicant's stigma was present and visible to the interviewer, this resulted in a more positive professional performance during the rapport-building stage, which positively affected postinterview confidence. This finding suggests that immediate observation of the applicant's stigma initiates behavioral adjustments by the interviewer that result in more positive perceptions by the applicant.

At first sight, this finding might seem to challenge previous findings on negative behavioral reactions to stigmatized individuals (Houston & Bull, 1994) and job seekers (e.g., Hebl, Foster, Mannix, & Dovidio, 2002). However, situational differences between the studies may account for these contrasting effects. Situational factors are key in determining one's desired social and professional identity (Pratt, Rockmann, & Kaufmann, 2006). Previous studies on reactions to stigmatized individuals have been done in more general contexts (e.g., a subway), or application settings (e.g., interaction with store manager), that do not motivate the observer to consider their own reputation (Wheeler & Petty, 2001), nor are there any legal consequences for their negative and avoidant behavior. In the current study, however, trained interviewers conducted face-to-face job interviews with an actual applicant. In this face-to-face interview setting, the experienced interviewers are knowledgeable on the professional standards, aware of the legal consequences of discrimination, and thus likely concerned about the impressions made on the stigmatized applicants.

Strengths and limitations

One of the main strengths of the current study is that experienced interviewers conducted a face-to-face interview rather than evaluating videotaped interviews, enhancing the ecological validity of study findings. In addition, we investigated perceptions and judgments from multiple sources (i.e., interviewer and applicant), and these judgments were related as expected (e.g., professional performance during the rapport-building stage and interviewer confidence).

One limitation is the use of only one male research confederate and the possibility of confederate effects. For example, Kleck and Strenta (1980) showed that individuals who had a scar placed on their face overinterpreted the amount of discrimination that they received. However, we found that the stigmatized applicant only in the traditional interview procedure rated the interviewer higher on professional performance. Thus, contrary to overinterpretation of negative behaviors by the stigmatized applicant (Kleck & Strenta, 1980) we find more positive judgments by the stigmatized applicant but *only so* in the traditional interview procedure. Furthermore, post hoc analyses of variance of the research confederate's behavior by two independent observers who were blind for the study purpose

showed no significant differences in the confederate's interview performance (i.e., verbal impression management; paraverbal behavior and overall quality of interview performance) across experimental conditions. Both findings indicate that the mere presence of the stigma did not influence the applicant's behavior. However, we suggest further research—if feasible—to replicate findings with multiple (ideally: two male and female) research confederates.

Another potential limitation is the preponderance of women in our sample.³ Interviewer characteristics (in general; see Guion, 2011) and “gender-of-interviewer” effects (in specific) warrant further attention in future studies (Padfield & Procter, 1996). For instance, the interviewers' gender may play a part when sensitive, gendered topics are questioned (Kane & Macaulay, 1993) but might also depend on the interviewer's sexism (Good & Rudman, 2010), job characteristics (feminine vs. masculine sex-typed jobs; Johnson, Sitzmann, & Nguyen, 2014), and degree of interview structure (McCarthy et al., 2010).

Further, overconfidence may also depend on the type of judgment that is made, and is most likely to occur in confidence-range judgments (e.g., judgment of a single applicant) but is less prominent in two-choice judgments (e.g., choosing between two alternatives; Klayman et al., 1999). We used a between subject-design that only allow interviewers to observe one single applicant (confidence-range judgments) and does not allow for a comparison between applicants. Future research might consider other designs (like within-subject designs) to provide additional insights on overconfidence in biased interview judgments.

Following-up on Klayman et al.'s (1999) suggestions, one could expect overconfidence also to depend on type of stimuli (e.g., type of visual stigma; level of interview structure; type of interview questions) as well as individual differences in interviewers (Dipboye, 2005). That is, stigma effects might depend on interviewers' proneness to overconfidence as well as motivational factors (such as implicit/explicit prejudice against people with a facial stigma; Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002) and any interactions of motivational and cognitive factors on candidate evaluations (Fiske & Taylor, 1984). Future research, therefore, could consider how confidence interacts with other potential cognitive and motivational determinants of interview bias (like prejudice). This is in line with Dipboye's (2005) model on the selection interview, in which interviewer individual differences (e.g., expectations, beliefs, motives) are considered core processes of the interview process.

Theoretical and practical implications

The present article adds to the interview literature and interview models (e.g., Dipboye, 2005) by investigating both social (i.e., professionalism) and cognitive (i.e., heuristics, like FOR) core components of the interview process, as well as their interrelationship. Our study findings may have implications for both research and practice.

First, consistent with recent findings (Barrick et al., 2012; Barrick et al., 2010), our study shows that fast and frugal processes, which are triggered by applicant factors such as a PWS and occur during the rapport-building stage of the interview, have a pervasive effect on interview outcome and interviewer confidence. This underscores the importance of considering cognitive and behavioral processes occurring during the rapport-building stage in more detail by applying a two-stage decision framework that acknowledges the importance of judgments that are formed during the rapport-building stage of the interview (Dipboye, 2005). For instance, future research could more closely examine the effects of cognitive and behavioral processes during the rapport-building stage on a broad range of interview outcomes like initial impression formation, interviewer's behavior including information gathering, and interviewer decision making. A fruitful research design to investigate these processes would assess the perceived job-suitability of the applicant following the different stages of the job interview (i.e., the rapport-building stage and at the end of the experiment).

Second, we apply the metacognitive framework of feelings of rightness to account for overconfidence in biased judgments. However this framework may have implications for interviewer

³There was an equal distribution of men and women across experimental groups.

information processing and decision making. Specifically, studies may apply this framework to advance the understanding of the initial effects of applicant stigma (i.e., during the rapport-building stage) on the interviewer's need and ability to elaborate on initial impressions (e.g., individuation; Claypool & Bernstein, 2014), possible effects on the interviewer's information gathering or interpretation style (Dipboye, 2005), and the interviewer's decision-making process (e.g., belief updating; Hogarth & Einhorn, 1992; Thompson, 2009).

In addition, behavioral adaptation during the rapport-building stage, in reaction to the stigma, also warrants further scrutiny. For example, research has shown that interviewer's "selling orientation" (i.e., promoting the organization) negatively affects interview validity (Marr & Cable, 2014). In a similar way, interviewers' motivation to adjust their behavior when interacting with stigmatized applicants, even during the rapport-building stage, may also affect interview outcomes. Future studies may approach interviewing stigmatized applicants, and more specifically rapport building with stigmatized applicants, as a situation in which interviewers are motivated to manage their presentation toward the stigmatized applicant (Baumeister, 1982). In a formal setting such as the interview, interviewers are likely motivated to present themselves more positively toward stigmatized applicants in order to avoid potential losses, such as legal consequences or being perceived as unfair and biased (Bolino, Kacmar, Turnley, & Gilstrap, 2008; Dipboye & Johnson, 2013).

However, interviewers' motivation to adjust their behavior (i.e., more positive treatment of stigmatized interviewee), also draws on the interviewers' cognitive resources (Vohs, Baumeister, & Ciarocco, 2005), which—paradoxically—could negatively affect information gathering, processing, and decision making (Dipboye & Johnson, 2013; Madera & Hebl, 2012). Therefore, training interventions for interviewers might be useful (Conway, Jako, & Goodman, 1995) to raise awareness of cognitive and motivational mechanisms of judgment making and to train interviewers how to approach or evaluate stigmatized applicants in an objective and fair way. For instance, via frame-of-reference training, interviewers might learn to more accurately observe and judge applicants (Melchers, Lienhardt, Von Aarburg, & Kleinmann, 2011). Also, awareness training, building further on systematic reflection (Ellis, Carette, Anseel, & Lievens, 2013), may make interviewers mindful about impression formation processes and might teach them how to control intuitive reactions (i.e., first impressions) and counter stereotypical thoughts.

A final implication of our findings is that interviewer overconfidence may signal the pervasive and possible self-sustaining nature of interview bias against stigmatized applicants. Moreover, overconfidence following biased decisions may be predictive of future judgments (Koriat, 2012) and refine current (negative) attitudes that shape future behavior (Glasman & Albarracín, 2006). In addition, high levels of confidence may reinforce the interviewer's self-perceived objectivity (Uhlmann & Cohen, 2006) that reduces interviewer motivation to learn from this experience. Future research should investigate if high levels of confidence are indeed related to future decisions and behavior and seek to design and implement interventions that attenuate this process, such as reflection or counterfactual thinking (Ellis et al., 2013).

Conclusion

Overall, we found that in job interview decisions, bias, and confidence are strongly related. Building on a metacognitive framework of heuristics, we showed that interviewers' confidence is driven by the effects of applicant stigma during the initial rapport-building stage. In addition, the interviewer's level of professional performance partially mediated this process. Hence, study findings showed that applicants' stigma affects not only the interview outcome but also the interviewer. As suggested (Guion, 2011), research on the interview and interview bias would greatly benefit from an interviewer-oriented approach that focuses on the interviewer as decision maker, and such a research agenda could provide a better understanding of the mechanisms underlying interview bias.

References

- Arvey, R. D. (1979). Unfair discrimination in the employment interview—Legal and psychological aspects. *Psychological Bulletin*, 86(4), 736–765. doi:[10.1037/0033-2909.86.4.736](https://doi.org/10.1037/0033-2909.86.4.736)
- Bar, M., Neta, M., & Linz, H. (2006). Very first impressions. *Emotion*, 6, 269–278. doi:[10.1037/1528-3542.6.2.269](https://doi.org/10.1037/1528-3542.6.2.269)
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, 116, 261–292. doi:[10.1162/003355301556400](https://doi.org/10.1162/003355301556400)
- Barrick, M. R., Dustin, S. L., Giluk, T. L., Stewart, G. L., Shaffer, J. A., & Swider, B. W. (2012). Candidate characteristics driving initial impressions during rapport building: Implications for employment interview validity. *Journal of Occupational and Organizational Psychology*, 85(2), 330–352. doi:[10.1111/j.2044-8325.2011.02036.x](https://doi.org/10.1111/j.2044-8325.2011.02036.x)
- Barrick, M. R., Swider, B. W., & Stewart, G. L. (2010). Initial evaluations in the interview: Relationships with subsequent interviewer evaluations and employment offers. *Journal of Applied Psychology*, 95, 1163–1172. doi:[10.1037/a0019918](https://doi.org/10.1037/a0019918)
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, 91, 3–26. doi:[10.1037/0033-2909.91.1.3](https://doi.org/10.1037/0033-2909.91.1.3)
- Bolino, M. C., Kacmar, K. M., Turnley, W. H., & Gilstrap, J. B. (2008). A multi-level review of impression management motives and behaviors. *Journal of Management*, 34, 1080–1109. doi:[10.1177/0149206308324325](https://doi.org/10.1177/0149206308324325)
- Bozeman, D. P., & Kacmar, K. M. (1997). A cybernetic model of impression management processes in organizations. *Organizational Behavior and Human Decision Processes*, 69, 9–30. doi:[10.1006/obhd.1996.2669Document1](https://doi.org/10.1006/obhd.1996.2669Document1)
- Brewer, M. B., & Feinstein, A. S. H. (1999). Dual processes in the cognitive representation of persons and social categories. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in socialpsychology* (pp. 255–270). New York: Guilford.
- Buckley, M. R., & Eder, R. (1988). B. M. Springbett and the notion of “snap decision” in the interview. *Journal of Management*, 14, 59–67. doi:[10.1177/014920638801400106](https://doi.org/10.1177/014920638801400106)
- Busey, T. A., Tunnicliff, J., Loftus, G. R., & Loftus, E. F. (2000). Accounts of the confidence-accuracy relation in recognition memory. *Psychonomic Bulletin & Review*, 7, 26–48. doi:[10.3758/bf03210724](https://doi.org/10.3758/bf03210724)
- Cable, D. M., & Judge, T. A. (1997). Interviewers’ perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4), 546–561. doi:[10.1037/0021-9010.82.4.546](https://doi.org/10.1037/0021-9010.82.4.546)
- Chapman, D. S., Uggerslev, K. L., Carroll, S. A., Piasentin, K. A., & Jones, D. A. (2005). Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes. *Journal of Applied Psychology*, 90, 928–944. doi:[10.1037/0021-9010.90.5.928](https://doi.org/10.1037/0021-9010.90.5.928)
- Chapman, D. S., & Zweig, D. I. (2005). Developing a nomological network for interview structure: Antecedents and consequences of the structured selection interview. *Personnel Psychology*, 58, 673–702. doi:[10.1111/j.1744-6570.2005.00516.x](https://doi.org/10.1111/j.1744-6570.2005.00516.x)
- Claypool, H. M., & Bernstein, M. J. (2014). Social exclusion and stereotyping: Why and when exclusion fosters individuation of others. *Journal of Personality and Social Psychology*, 106(4), 571–589. doi:[10.1037/a0035621](https://doi.org/10.1037/a0035621)
- Conway, J. M., Jako, R. A., & Goodman, D. F. (1995). A meta-analysis of interrater and internal consistency reliability of selection interviews. *Journal of Applied Psychology*, 80, 565–579. doi:[10.1037/0021-9010.80.5.565](https://doi.org/10.1037/0021-9010.80.5.565)
- Deroos, E. (2007). Investigating personnel selection from a counseling perspective: Do applicants’ and recruiters’ perceptions correspond? *Journal of Employment Counseling*, 44, 60–72. doi:[10.1002/j.2161-1920.2007.tb00025.x](https://doi.org/10.1002/j.2161-1920.2007.tb00025.x)
- Devine, P. G., Plant, E. A., Amodio, D. M., Harmon-Jones, E., & Vance, S. L. (2002). The regulation of explicit and implicit race bias: The role of motivations to respond without prejudice. *Journal of Personality & Social Psychology*, 82(5), 835–848. doi:[10.1037/0022-3514.82.5.835](https://doi.org/10.1037/0022-3514.82.5.835)
- Dipboye, R. L. (2005). The selection/recruitment interview: Core processes and contexts. In A. Evers, N. R. Anderson, & O. Voskuijl (Eds.), *The Blackwell handbook of personnel selection* (pp. 121–142). Oxford, England: Blackwell.
- Dipboye, R. L., & Jackson, S. L. (1999). Interview experience and expertise effects. In R. W. Eder & M. M. Harris (Eds.), *The employment interview handbook* (pp. 259–278). Thousand Oaks, CA: Sage.
- Dipboye, R. L., & Johnson, S. K. (2013). Understanding and improving employee selection interviews. In K. F. Geisinger, B. A. Bracken, J. F. Carlson, J. I. C. Hansen, N. R. Kuncel, S. P. Reise, & M. C. Rodriguez (Eds.), *APA handbook of testing and assessment in psychology; Vol. 1: Test theory and testing and assessment in industrial and organizational psychology* (pp. 479–499). Washington, DC: American Psychological Association.
- Dipboye, R., & Macan, T. (1988). A process view of the selection/recruitment interview. In R. Schuler, S. Youngblood, & V. Huber (Eds.), *Readings in personnel and human resource management* (pp. 217–232). St Paul, MN: West.
- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology*, 82(1), 62–68. doi:[10.1037/0022-3514.82.1.62](https://doi.org/10.1037/0022-3514.82.1.62)
- Dunlosky, J., & Metcalfe, J. (2009). *Metacognition*. Thousand Oaks, CA: Sage.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12(1), 1–22. doi:[10.1037/1082-989X.12.1.1](https://doi.org/10.1037/1082-989X.12.1.1)
- Ellis, S., Carrette, B., Anseel, F., & Lievens, F. (2013). Systematic reflection: Implications for learning from failures and successes. *Current Directions in Psychological Science*, 23, 67–72. doi:[10.1177/0963721413504106](https://doi.org/10.1177/0963721413504106)

- Evans, J. S. B. T., & Stanovich, K. E. (2013). Dual-process theories of higher cognition: Advancing the debate. *Perspectives on Psychological Science*, 8, 223–241. doi:[10.1177/1745691612460685](https://doi.org/10.1177/1745691612460685)
- Fiske, S. T., Lin, M., & Neuberg, S. L. (1999). The continuum model: Ten years later. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology*. New York, NY: The Guilford Press.
- Fiske, S. T., & Neuberg, S. L. (1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attentions and interpretation. *Advances in Experimental Social Psychology*, 23, 1–69.
- Fiske, S. T., & Taylor, S. E. (1984). *Social cognition*. Reading, MA: Addison-Wesley.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York, England: McGraw-Hill Book Company.
- Gist, M. E., Schwoerer, C., & Rosen, B. (1989). Effects of alternative training methods on self-efficacy and performance in computer software training. *Journal of Applied Psychology*, 74(6), 884–891. doi:[10.1037/0021-9010.74.6.884](https://doi.org/10.1037/0021-9010.74.6.884)
- Glasman, L. R., & Albarracín, D. (2006). Forming attitudes that predict future behavior: A meta-analysis of the attitude-behavior relation. *Psychological Bulletin*, 132, 778–822. doi:[10.1037/0033-2909.132.5.778](https://doi.org/10.1037/0033-2909.132.5.778)
- Goldin, C., & Rouse, C. (2000). Orchestrating impartiality: The impact of “blind” auditions on female musicians. *American Economic Review*, 90, 715–741. doi:[10.1257/aer.90.4.715](https://doi.org/10.1257/aer.90.4.715)
- Good, J. J., & Rudman, L. A. (2010). When female applicants meet sexist interviewers: The costs of being a target of benevolent sexism. *Sex Roles*, 62, 481–493. doi:[10.1007/s11199-009-9685-6](https://doi.org/10.1007/s11199-009-9685-6)
- Guion, R. M. (2011). *Assessment, measurement, and prediction for personnel decisions*. New York, NY: Routledge.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hebl, M. R., Foster, J. B., Mannix, L. M., & Dovidio, J. F. (2002). Formal and interpersonal discrimination: A field study of bias toward homosexual applicants. *Personality and Social Psychology Bulletin*, 28, 815–825. doi:[10.1177/0146167202289010](https://doi.org/10.1177/0146167202289010)
- Higgins, C. A., & Judge, T. A. (2004). The effect of applicant influence tactics on recruiter perceptions of fit and hiring recommendations: A field study. *Journal of Applied Psychology*, 89(4), 622–632. doi:[10.1037/0021-9010.89.4.622](https://doi.org/10.1037/0021-9010.89.4.622)
- Hogarth, R. M., & Einhorn, H. J. (1992). Order effects in belief updating: The belief-adjustment model. *Cognitive Psychology*, 24(1), 1–55. doi:[10.1016/0010-0285\(92\)90002-J](https://doi.org/10.1016/0010-0285(92)90002-J)
- Houston, V., & Bull, R. (1994). Do people avoid sitting next to someone who is facially disfigured? *European Journal of Social Psychology*, 24, 279–284. doi:[10.1002/ejsp.2420240205](https://doi.org/10.1002/ejsp.2420240205)
- Huffcutt, A. I., Culbertson, S. S., & Weyhrauch, W. S. (2013). Employment interview reliability: New meta-analytic estimates by structure and format. *International Journal of Selection and Assessment*, 21, 264–276. doi:[10.1111/ijssa.12036](https://doi.org/10.1111/ijssa.12036)
- Janz, T. (1982). Initial comparisons of patterned behavior description interviews versus unstructured interviews. *Journal of Applied Psychology*, 67(5), 577–580. doi:[10.1037/0021-9010.67.5.577](https://doi.org/10.1037/0021-9010.67.5.577)
- Johnson, S. J., Sitzmann, T., & Nguyen, A. T. (2014). Don’t hate me because I’m beautiful: Acknowledging appearance mitigates the “beauty is beastly” effect. *Organizational Behavior and Human Decision Processes*, 125, 184–192. doi:[10.1016/j.obhdp.2014.09.006](https://doi.org/10.1016/j.obhdp.2014.09.006)
- Kahneman, D. (2003a). Autobiography. In T. Frangmyr (Ed.), *Les Prix Nobel. The Nobel Prizes 2002*. Stockholm, Sweden: Almqvist & Wiksell International.
- Kahneman, D. (2003b). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, 58, 697–720. doi:[10.1037/0003-066x.58.9.697](https://doi.org/10.1037/0003-066x.58.9.697)
- Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases* (pp. 49–81). New York, NY: Cambridge University Press.
- Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist*, 64, 515–526. doi:[10.1037/a0016755](https://doi.org/10.1037/a0016755)
- Kane, E. W., & Macaulay, L. J. (1993). Interviewer gender and gender attitudes. *The Public Opinion Quarterly*, 57, 1–28. Retrieved from <http://www.jstor.org/stable/2749435>
- Klayman, J., Soll, J. B., González-Vallejo, C., & Barlas, S. (1999). Overconfidence: It depends on how, what, and whom you ask. *Organizational Behavior and Human Decision Processes*, 79, 216–247. doi:[10.1006/obhd.1999.2847](https://doi.org/10.1006/obhd.1999.2847)
- Kleck, R. E., & Strenta, A. (1980). Perceptions of the impact of negatively valued physical characteristics on social interaction. *Journal of Personality and Social Psychology*, 39, 861–873. doi:[10.1037/0022-3514.39.5.861](https://doi.org/10.1037/0022-3514.39.5.861)
- Koriat, A. (2012). The self-consistency model of subjective confidence. *Psychological Review*, 119, 80–113. doi:[10.1037/a0025648](https://doi.org/10.1037/a0025648)
- Latham, G. P., Saari, L. M., Pursell, E. D., & Campion, M. A. (1980). The situational interview. *Journal of Applied Psychology*, 65(4), 422–427. doi:[10.1037/0021-9010.65.4.422](https://doi.org/10.1037/0021-9010.65.4.422)
- Lee, C., & Bobko, P. (1994). Self-efficacy beliefs: Comparison of five measures. *Journal of Applied Psychology*, 79(3), 364–369. doi:[10.1037/0021-9010.79.3.364](https://doi.org/10.1037/0021-9010.79.3.364)
- Levashina, J., Hartwell, C. J., Morgeson, F. P., & Campion, M. A. (2013). The structured employment interview: Narrative and quantitative review of the research literature. *Personnel Psychology*, 1–53. doi:[10.1111/peps.12052](https://doi.org/10.1111/peps.12052)

- Macan, T., & Dipboye, R. L. (1990). The relationship of interviewers' preinterview impressions to selection and recruitment outcomes. *Personnel Psychology*, 43, 745–768. doi:[10.1111/j.1744-6570.1990.tb00681.x](https://doi.org/10.1111/j.1744-6570.1990.tb00681.x)
- Macan, T., & Merritt, S. (2011). Actions speak too: Uncovering possible implicit and explicit discrimination in the employment interview process. In G. P. Hodgkinson & J. K. Ford (Eds.), *International review of industrial and organizational psychology* (Vol. 26, pp. 293–337). Chichester: Wiley-Blackwell.
- Madera, J. M., & Hebl, M. R. (2012). Discrimination against facially stigmatized applicants in interviews: An eye-tracking and face-to-face investigation. *Journal of Applied Psychology*, 97, 317–330. doi:[10.1037/a0025799](https://doi.org/10.1037/a0025799)
- Marr, J. C., & Cable, D. M. (2014). Do interviewers sell themselves short? The effects of selling orientation on interviewers' judgments. *Academy of Management Journal*, 57(3), 624–651. doi:[10.5465/amj.2011.0504](https://doi.org/10.5465/amj.2011.0504)
- McCarthy, J. M., Van Iddekinge, C. H., & Campion, M. A. (2010). Are highly structured job interviews resistant to demographic similarity effects? *Personnel Psychology*, 63(2), 325–359. doi:[10.1111/j.1744-6570.2010.01172.x](https://doi.org/10.1111/j.1744-6570.2010.01172.x)
- Melchers, K. G., Lienhardt, N., Von Aarburg, M., & Kleinmann, M. (2011). Is more structure always better? An evaluation of the effects of rater training and descriptively anchored rating scales on rating accuracy in a structured interview. *Personnel Psychology*, 64, 53–87. doi:[10.1111/j.1744-6570.2010.01202.x](https://doi.org/10.1111/j.1744-6570.2010.01202.x)
- Myors, B., Lievens, F., Schollaert, E., Van Hove, G., Cronshaw, S. F., Mladinic, A., & Sackett, P. R. (2008). International perspectives on the legal environment for selection. *Industrial and Organizational Psychology*, 1, 206–246. doi:[10.1111/j.1754-9434.2008.00040.x](https://doi.org/10.1111/j.1754-9434.2008.00040.x)
- Padfield, M., & Procter, I. (1996). The effect of interviewer's gender on the interviewing process: A comparative enquiry. *Sociology*, 30(2), 355–366. doi:[10.1177/0038038596030002009](https://doi.org/10.1177/0038038596030002009)
- Peeters, H., & Lievens, F. (2006). Verbal and nonverbal impression management tactics in behavior description and situational interviews. *International Journal of Selection and Assessment*, 14, 206–222. doi:[10.1111/j.1468-2389.2006.00348.x](https://doi.org/10.1111/j.1468-2389.2006.00348.x)
- Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. *The Academy of Management Journal*, 49, 235–262. doi:[10.5465/AMJ.2006.20786060](https://doi.org/10.5465/AMJ.2006.20786060)
- Pryor, J. B., Reeder, G. D., Yeadon, C., & Hesson-McInnis, M. (2004). A dual-process model of reactions to perceived stigma. *Journal of Personality and Social Psychology*, 87, 436–452. doi:[10.1037/0022-3514.87.4.436](https://doi.org/10.1037/0022-3514.87.4.436)
- Puhl, R. M., & Heuer, C. A. (2009). The stigma of obesity: A review and update. *Obesity*, 17, 941–964. doi:[10.1038/oby.2008.636](https://doi.org/10.1038/oby.2008.636)
- Rooney, R. A., & Osipow, S. H. (1992). Task-specific occupational self-efficacy scale: The development and validation of a prototype. *Journal of Vocational Behavior*, 40(1), 14–32. doi:[10.1016/0001-8791\(92\)90044-Z](https://doi.org/10.1016/0001-8791(92)90044-Z)
- Roth, P. L., Van Iddekinge, C. H., Huffcutt, A. I., Eidson, J. C. E., & Bobko, P. (2002). Corrections for range restriction in structured interview ethnic group differences: The values may be larger than researchers thought. *Journal of Applied Psychology*, 87, 369–376. doi:[10.1037/0021-9010.87.2.369](https://doi.org/10.1037/0021-9010.87.2.369)
- Stevens, C. K., & Kristof, A. L. (1995). Making the Right Impression - A Field-Studie of Applicant Impression Management During Job Interviews. *Journal of Applied Psychology*, 80(5), 587–606. doi:[10.1037/0021-9010.80.5.587](https://doi.org/10.1037/0021-9010.80.5.587)
- Thompson, V. A. (2009). Dual-process theories: A metacognitive perspective. In J. S. B. T. Evans & K. Frankish (Eds.), *In two minds: Dual processes and beyond* (pp. 171–195). New York, NY: Oxford University Press.
- Thompson, V. A., Turner, J. A. P., Pennycook, G., Ball, L. J., Brack, H., Ophir, Y., & Ackerman, R. (2013). The role of answer fluency and perceptual fluency as metacognitive cues for initiating analytic thinking. *Cognition*, 128, 237–251. doi:[10.1016/j.cognition.2012.09.012](https://doi.org/10.1016/j.cognition.2012.09.012)
- Tice, D. M., Butler, J. L., Muraven, M. B., & Stillwell, A. M. (1995). When modesty prevails: Differential favorability of self-presentation to friends and strangers. *Journal of Personality and Social Psychology*, 69, 1120–1138. doi:[10.1037/0022-3514.69.6.1120](https://doi.org/10.1037/0022-3514.69.6.1120)
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124–1131. doi:[10.1126/science.185.4157.1124](https://doi.org/10.1126/science.185.4157.1124)
- Uhlmann, E. L., & Cohen, G. L. (2006). "I think it, therefore it's true": Effects of self-perceived objectivity on hiring discrimination. *Organizational Behavior and Human Decision Processes*, 104, 207–223. doi:[10.1016/j.obhdp.2007.07.001](https://doi.org/10.1016/j.obhdp.2007.07.001)
- Valente, S. M. (2009). Visual disfigurement and depression. *Plastic Surgical Nursing*, 29, 10–16. doi:[10.1097/01.PSN.0000347718.75285.23](https://doi.org/10.1097/01.PSN.0000347718.75285.23)
- Vohs, K. D., Baumeister, R. F., & Ciarocco, N. J. (2005). Self-regulation and self-presentation: Regulatory resource depletion impairs impression management and effortful self-presentation depletes regulatory resources. *Journal of Personality and Social Psychology*, 88, 632–657. doi:[10.1037/0022-3514.88.4.632](https://doi.org/10.1037/0022-3514.88.4.632)
- Wells, G. L., & Olson, E. A. (2003). Eyewitness testimony. *Annual Review of Psychology*, 54, 277–295. doi:[10.1146/annurev.psych.54.101601.145028](https://doi.org/10.1146/annurev.psych.54.101601.145028)
- Wheeler, S. C., & Petty, R. E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin*, 127, 797–826. doi:[10.1037/0033-2909.127.6.797](https://doi.org/10.1037/0033-2909.127.6.797)
- Willis, J., & Todorov, A. (2006). First impressions. *Psychological Science*, 17, 592–598. doi:[10.1111/j.1467-9280.2006.01750.x](https://doi.org/10.1111/j.1467-9280.2006.01750.x)