

Initial Impression Formation during the Job interview:
Anchors that Drive Biased Decision-making Against Stigmatized Applicants

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Abstract

The job interview is still one of the most widely used personnel selection tools that might, however, be prone to bias especially when stigmatized applicants are being evaluated. In response to the growing concerns regarding labour market shortages and adverse impact in personnel selection, we conducted two experimental studies that investigated potentially biasing effects of initial impression formation, its origin and development over two interview stages (i.e., rapport building and interview). Building on theory of heuristics, we considered effects of facial stigma, which are rarely investigated as a source of bias despite their prevalence. Using eyetracking methodology, Study 1 shows that cognitive (i.e., attention to visual and verbal information) and motivational (i.e., Need For Cognitive Closure) processes in the rapport building stage drive anchoring in later decision-making, which led to lower hiring intentions of facially stigmatized versus equally qualified non-stigmatized applicants. Study 2 further investigates the partially-blind interview technique to isolate these processes and to extend findings in a face-to-face (structured) interview setting. In addition, Study 2 provides evidence that interview bias against facially stigmatized applicants results from a lack of adjustment in the interviewers' decision-making process. We conclude with a discussion of implications for both research and practice.

Keywords: Structured interview, discrimination, heuristics, decision-making

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Anchors that drive Biased Decision-making against Stigmatized Applicants

Job interviews are generally considered the most widely used selection method to assess applicants' job-relevant characteristics, including personality traits and job related competences (Huffcutt et al., 2001; Ployhart et al., 2017). However, despite its popularity, the interview is found vulnerable to discrimination and bias, especially against applicants of stigmatized groups (Arvey, 1979; Dipboye & Johnson, 2013; Madera & Hebl, 2012).

Implications for both stigmatized applicants (e.g., experienced injustice, extended unemployment), and organizations (e.g., lawsuits and damage to firm reputation; Gilliland, 1993; Truxillo, Steiner, & Gilliland, 2004) are considerable, especially in light of the war for talent and labour shortages. Indeed, to limit negative implications, and in order to reduce bias, a better understanding of the interviewer's decision-making process is needed (Macan & Merritt, 2011).

The present study adds to the literature on interview bias in three several ways. First, whereas initial impressions in interview settings have been investigated (Barrick et al., 2010; Schmid Mast et al., 2011; Swider et al., 2016), few considered initial impressions of the *stigmatized* applicant. For instance, Swider et al. (2016) investigated whether initial impressions in the structured job interview predicted final interview scores. Yet, they only investigated initial impressions of non-stigmatized applicants. Over the past two decades a critical line of research has identified a range of applicant stigma that might elicit bias in the outcome of personnel selection settings, including ethnic markers (like skin color and ethnic speech; Segrest Purkiss et al., 2006) and obesity (i.e., overweight; Agerström & Rooth, 2011). Recruiting outcomes also depend on type of stigma and the extent they elicit negativity in the perceiver (Fiske et al., 2002). The present study therefore considered interviewers' initial impressions of applicants with a port-wine stain (PWS), being a physical, visual malformation

that has been investigated less but might - due its very nature - elicit threat in perceivers (Madera, 2012). Hence, we selected this this type of stigma because it addresses a gap in the interview literature, extends the limited work on interviewers' evaluation of job applicants with visual stigma (Madera & Hebl, 2012), and may act as an exemplar of a whole range of uncontrolled, visual stigmata that applicants might suffer from (i.e., skin disorders like psoriasis, severe acne or abnormal pigmentation; vascular anomalies like extreme facial blushing; burn scars; congenital facial deformations, etc.). The underlying biasing mechanisms (e.g., heuristics) may equally apply to other uncontrolled visual stigma (like skin color; Derosus et al., 2016) and increase insights into ways to avert bias against similar stigmata (Fiske et al., 2002).

Secondly, to increase our general understanding of *how* stigma influence reactions towards stigmatized individuals, studies already investigated and showed that observing a stigmatized individual elicit negative emotional states in the perceiver (including discomfort, anxiety, fear, and personal danger, e.g., Blascovich et al., 2001; Bos et al., 2013; Major & O'Brien, 2005). Also within high-stakes settings such as the job interview, biased interview outcomes have been attributed to interviewers' affective reactions towards stigmatized applicants (e.g., Madera, 2012). However, besides *affective sources of bias*, also *cognitive-motivational sources of bias* need to be considered for a good of understanding of stigma effects (Amodio & Devine, 2006; Houston & Bull, 1994; Neumann & Strack, 2000; Pryor et al., 2004; Zajonc, 1980). Therefore, Derosus et al. (2016) recently presented a theoretical framework that applies *decision-making theory* to job-interview judgements and more specifically to interview bias against the stigmatized applicant. This framework focuses on the interviewer as information processor (Huffcutt et al., 2011; Madera & Hebl, 2012) and outlines how cognitive-motivational processes might steer discrimination against stigmatized applicants across different interview stages (see Buijsrogge et al., 2016, for a study on

interviewers' overconfidence). It has been suggested that 'anchoring and adjustment' heuristics might be a mechanism that affects recruiters/interviewers' processing of information as well as evaluation of job applicants and that this might be particularly the case when the applicant has a stigma (Derous et al., 2016). However, the number of studies that empirically investigated theoretical assumptions regarding recruiters' information processing (and anchoring and adjustment more in specific) in job interview settings remains limited. For instance, much like Swider et al. (2016), we investigate effects of initial impressions (i.e., formed during the rapport building stage) on final interview scores. However, extending the work of Swider et al. (2016) we consider whether initial judgments remain more strongly for stigmatized than for the non-stigmatized applicants due to anchoring effects. In sum, we empirically investigate 'anchoring and adjustment' as one heuristic that has been suggested to affect interviewers' judgments of stigmatized applicant (Derous et al., 2016) but remains under-researched till today (Buijsrogge et al., 2016).

Thirdly, whereas studies on interview bias typically consider interview judgements at the one point in time (i.e., typically at the end of the interview), it is advised by Swider and colleagues (2016) to follow perceivers' evaluation of job candidates at several interview stages. Addressing their call, we investigated interview outcomes at the end of two important interview stages, i.e., immediately after rapport-building and after the questioning (or interview) stage. In line with recent suggestions regarding the potentially evolving nature of bias (Barrick et al., 2010; Derous et al., 2016; Swider et al., 2016), we specifically considered whether anchoring-and-adjustment affects interview outcomes such that those of stigmatized applicants would remain relatively stable across both interview stages, whereas those of non-stigmatized applicants might deviate more from raters' initial applicant impressions. In doing so, we extend Swider et al., (2016) by conducting a controlled experiment (vs. survey) to

capture raters' attention to image-related content in both obtrusive and unobtrusive ways (i.e., through eye-tracking).

In sum, the main contribution is to apply extant research on decision-making - and specifically theory on heuristics - in the context of job interview bias against the facially stigmatized applicant. In two experimental studies, we directly build on parallels between interview decision-making (Barrick et al., 2010) and the anchoring-and-adjustment heuristic (Tversky & Kahneman, 1974), thereby addressing gaps in the interview literature regarding type of stigma investigated (i.e., PWS), cognitive-motivational sources of interview bias (i.e., anchoring-and-adjustment), and the evolving nature of interview bias (i.e., adhering to a more dynamic approach). Specifically, the first experimental study builds further on an earlier study by Madera and Hebl (2012) and uses eye-movement data to extract the mediation mechanisms behind anchoring-and-adjustment bias (i.e., Epley & Gilovich, 2006). The second experimental study extends findings in a face-to-face interview setting to show that interview bias against facially stigmatized applicants may be the result of anchoring (i.e., lack of adjustment) in the interviewers' decision-making process.

Below, we first consider literature on interview bias against stigmatized applicants (and port-wine stains in particular), followed by a discussion of cognitive-motivational processes and anchoring-and-adjustment effects in decision-making.

Interview Bias against Stigmatized Applicants

There is ample evidence that individuals from stigmatized groups (e.g., ethnic minorities, obese individuals, physically disabled, and facially stigmatized) experience bias in social interactions and evaluations, including common selection procedures as the job interview (Agerström & Rooth, 2011; Dovidio et al., 1997, 2002; Dovidio & Gaertner, 2000; King et al., 2006; Madera & Hebl, 2012).

Yet, some stigmatized groups might be perceived as more threatening than others (Fiske et al., 2002), such as physically unattractive applicants. Physical appearance is among the most salient characteristics in person judgments with the face being one of the most important visual cues. The basis for the negative reactions towards, and judgments of, facially stigmatized individuals is rooted in evolution, as uncontrolled physical deformations may signal a disease (Park et al., 2007; Ryan et al., 2012; Wolfe et al., 2007). This deviation from the socio-biological norm may attract one's attention (Langer et al., 1976; Madera & Hebl, 2012), and facilitate the speed with which such individuals are categorized and judged (Fiske & Neuberg, 1990).

Consistent with the negativity bias, facial unattractiveness and deformations have been associated with many negative attributes (Griffin & Langlois, 2006; Rozin & Royzman, 2001). Experimental evidence suggests that facial stigma may disrupt the interference of human related traits (Wilson et al., 2018). This particularly holds in employment situations that stress face-to-face contacts, like when applicants with a facial malformation apply for a customer service position. In this study, we specifically focus on port-wine stains (PWS) which are uncontrolled facial malformations (Madera & Hebl, 2012). Prevalence rates of PWS are about 0.30%-0.60% (Jacobs & Walton, 1976), although some studies even reported prevalence rates up till 10% (Valente, 2009), meaning that in between 0.30% - 10% of people in studied populations are diagnosed with a facial deformations like PWS.. Building on social-cognitive literature and previous findings of interview bias against applicants with a facial stigma, and a port-wine stain in particular (Madera & Hebl, 2012; Stevenage & McKay, 1999), we hypothesized:

Hypothesis 1: Raters will report lower intentions to hire an applicant with a facial stigma (i.e., with a PWS) compared to a non-stigmatized applicant (i.e., without a PWS).

How facial malformations, such as PWS, may steer biased decision-making during the job interview, however, has not been explored thoroughly. We discuss anchoring-and-adjustment heuristic as one possible explanation.

Anchoring-and-Adjustment during the Job interview

Job interviews typically start with a short rapport building stage during which interviewers and applicants engage in “small talk”, and then proceed to the interview stage during which job-relevant information is exchanged (Barrick et al., 2010; Chapman & Zweig, 2005; Dipboye & Johnson, 2013). Although research on job-interview decision-making has been focused on the interview stage, a study by Barrick et al. (2010) showed that interviewers’ initial impressions of applicants formed during the rapport building stage, are highly predictive of interview outcomes. They conclude that “fast and frugal” heuristic judgments made during the rapport building stage influence interviewer decision-making, raising concerns that bias might originate from initial impressions that are formed during rapport building (Levashina et al., 2014). In line with this, a recent meta-analysis shows that the length of the interview is unrelated to interview validity and reliability providing a different type of evidence that decisions may be made early in the interview process (Thorsteinson, 2018).

This pattern of influences on the interview judgment shows strong similarities to the anchoring-and-adjustment heuristic (Tversky & Kahneman, 1974). Tversky and Kahneman noted that - when making complicated assessments - one starts “from an initial value that is adjusted to yield the final answer” (p. 1128). The initial value, or *anchor*, can take various different forms such as impression, perspectives, or values (Epley & Gilovich, 2006). According to the anchoring-and-adjustment heuristic, irrelevant information which is cued first (i.e., the initial impression), may serve as an anchor to the final judgment (i.e., decision) by limiting the adjustment process following the exchange of new information (i.e., job-

relevant information during the interview stage). Building on this integrated theory (Derous et al., 2016) and expanding on previous research (Buijsrogge et al., 2016; Madera & Hebl, 2012) we propose that the applicant's stigma affects cognitive and motivational processes that mediate the formation of the initial impression (i.e., the anchor), and these effects affect the decision-making process by limiting adjustment of the initial impressions made early in the interview (i.e., anchoring).

Cognitive Process

So far, only one study has directly investigated the cognitive effects of stigma during employment interviews. In an experimental study, Madera and Hebl (2012) showed raters a picture of a job applicant with or without a facial stigma, and measured whether staring at the stigma influenced interview ratings and memory for the auditory information that was played simultaneously. They found an attention-grabbing effect of stigma with negative effects on memory for interview content and this process negatively influenced interview judgments resulting in bias. However, prior research has shown that reactions to facially stigmatized individuals follow a specific time-course (Pryor et al., 2004). Specifically, automatic behaviors in reaction to the stigma, such as staring at the stigma, are initially strong and decrease over time as individuals control or suppress these undesirable behavioral impulses (Langer et al., 1976). This specific time-course suggests that the effects of stigma should be stronger early in the interview (i.e., rapport building stage) compared to the effects during the subsequent interview stage. Specifically, the initial attention-grabbing effect of the stigma may affect the interviewer's ability to form and adjust their first impression of the applicant beyond stigmatizing information (Gilbert, 2002). Hence, we sought to replicate and extend the cognitive effects of stigma (i.e., attention-grabbing effect of facial stigma and impaired memory for verbal information; see Madera & Hebl, 2012), within the time course-specific predictions over the interview stages. Specifically, we expected that:

Hypothesis 2: Cognitive effects of stigma (i.e., attention-grabbing effect and negative effect on memory accuracy) will be strongest during the rapport building stage (Time 1; T1), but decrease in the subsequent interview stage (Time 2; T2).

Motivational Process

Studies have shown that people differ in the extent to which they use heuristics in perception and social judgments (de Dreu et al., 1999; Epley & Gilovich, 2006). Specific to this tendency to use heuristics, and in particular the anchoring-and-adjustment heuristic, is one's Need for Cognitive Closure (NFCC). NFCC captures the desire for different kinds of knowledge and motivation to engage in effortful thinking (Webster & Kruglanski, 1994). Individuals at the high end of the NFCC continuum are characterized by their tendency to leap to judgments based on the first available information (i.e., "seizing"). After seizing, individuals with high NFCC show a low motivation to gather additional information resulting in a decreased flexibility in their thinking (i.e., "freezing"). Conversely, individuals with low levels of NFCC are motivated to continue gathering information and delay their judgments (Kruglanski & Webster, 1996). Hence, NFCC – and in particular high NFCC - should affect cognitive processes early in the interview (i.e., rapport building stage). As individuals with a high NFCC seek to achieve closure by drawing on the first available information, this process is dependent on the serial order of information presentation. Moreover, interviewers draw on visuals and verbal information when forming impressions (DeGroot & Motowidlo, 1999; Motowidlo & Burnett, 1995). Visual information can be considered as an initial source of information as it is immediately observed and processed (Thorpe et al., 1996). When there is a strong visual cue, such as a PWS (Fiske & Neuberg, 1990), interviewers with a high NFCC are likely to seize on this information. Subsequent freezing then reduces their motivation to gather additional visual and verbal information. However, in the absence of a strong visual cue (i.e., no-stigma), interviewers with a high NFCC may perceive verbal information as an

initial source of information and “seize” on this information when forming an initial impression, increasing their motivation to attend to verbal information. Hence, we expected that:

Hypothesis 3: Raters’ NFCC will decrease attention to the stigma-area (i.e., processing of visual information) and memory accuracy (i.e., processing of verbal information) when the stigma is present compared to when the stigma is absent. This effect is expected to occur during the rapport building stage (T1) but not in the interview stage (T2).

Decision-Making

Ideally, interview judgments should be based on job-relevant information that is exchanged during the interview stage. This is the fundamental assumption driving interview validity, and research on interview structure (Campion, Palmer, & Campion, 1997; Dipboye, 2005; Swider et al., 2016). However, if raters focus more on stigma-related information (i.e., more fixations on stigma), then they may process less relevant information (i.e., negative effect on memory accuracy), which in turn might result in more negative judgments of stigmatized applicants. Moreover, when applicant stigma influences the formation of the initial impressions (i.e., the anchor), interview judgments about stigmatized applicants may be more resistant to later adjustments based on the job-relevant information that is exchanged during the interview stage (i.e., anchoring of initial impressions; Hogarth & Einhorn, 1992; Livi, Kruglanski, Pierro, Mannetti, & Kenny, 2015; Thompson et al., 2013). For non-stigmatized applicants, on the other hand, one can expect stronger effects of job-relevant information that is processed during the interview phase on interview judgments than from initial impressions that are created during the rapport building phase (adjustment of initial impression). Therefore, we posited that:

Hypothesis 4: For stigmatized applicants memory accuracy will mediate the relation of raters' visual attention to the stigma-area (i.e., proportional number of fixations) and interview outcomes (i.e., hiring intentions), particularly during the rapport building stage. However, for non-stigmatized applicants, we expect these mediation effects to be stronger during the interview stage.

Study 1

Method

Participants. Sixty master students in Industrial and Organizational Psychology (I-O; 46 females), participated in this study. The average age of the participants was 23.82 years ($SD = 3.54$), all were White/Caucasian, right handed and had normal or corrected-to-normal vision. To maximize accuracy, participants with an eye-tracking error higher than 0.5° ($n = 13$) were omitted from analyses that include visual attention¹.

Stimuli. In accordance with the stimulus sampling method (Webster & Kruglanski, 1994), six white male actors of similar attractiveness were recruited and trained to act as one of six applicants in the job interview. All actors followed one of six pre-determined and pilot-tested speech scripts², representing equally-attractive applicants and were interviewed with a stigma (i.e., PWS on the right cheek), and without a stigma (i.e., control), to avoid actor-specific confounds. Applicants directly faced the camera to create a first-person interview perspective for the participants. To identify the specific structure and content discussed in the interview, we built on a large body of research that discusses and defines interview stages (Deros et al., 2016). Specifically, interviews have been found to start with a rapport building stage (T1) which is typically described as a short, informal 'meet-and-greet' interaction before formal job-related questioning occurs and during which interviewers and applicants engage in small talk. The rapport building stage was followed by the actual interview stage (T2) during which job-relevant information was exchanged via interview questions (Barrick et al., 2010;

Chapman & Zweig, 2005; Dipboye & Johnson, 2013; Swider, Barrick, & Harris, 2016).

Questions were always asked by the same male off-camera interviewer, and followed a standard interview procedure, starting with rapport building (i.e., small talk; T1; $M = 55.58s$, $SD = 6.89s$), followed by the interview stage (i.e., discussion of educational history, work experience, competencies; T2; $M = 345.75s$, $SD = 34.61s$).

Design, measures, and experimental apparatus. Study 1 used a within-subject design with stigma (yes vs. no), and interview stage (rapport building vs. interview), as the independent variables. The dependent outcome measures consisted of raters' hiring intentions and two measures of cognitive performance, namely visual attention and interview memory accuracy. Hiring intentions was measured with three items adapted from Stevens and Kristof (1995), namely "Estimate the chance you would: (1) Accept the candidate, (2) Invite the candidate for a second interview, and (3) Reject the candidate (reverse scored). Items were scored on a 5-point Likert-type scale ($1 \leq 20\%$ chance; $5 \geq 80\%$ chance; $\alpha = .91$). We measured visual attention by means of number of fixations to the stigma location (eye movements were recorded every millisecond) using the SR Eyelink 1000 eye-tracker (see Table 1). Memory accuracy was measured with 19 multiple (i.e., five) choice items targeting factual information given by the applicant in the rapport building and interview stage ($\alpha = .71$). To account for differences in the length of the rapport building stage, and the subsequent interview stage, we calculated proportional scores by dividing the number of fixations (attention), or correct answers (memory), for each interview stage by its length. Need for Cognitive Closure (NFCC) was assessed with 15 items (Roets & Van Hiel, 2011) using a 6-point Likert-type scale ($\alpha = .86$). Finally, we measured demographics: participant sex (0 = male; 1 = female), age (open-ended question), and ethnic background (0 = White/Caucasian; 1 = other).

[Insert Table 1 about here]

Procedure. Four weeks prior to the experiment participants completed the informed consent, demographics, and the NFCC measure. At the start of the experiment, participants were instructed to select a candidate for the position of junior consultant based on pre-recorded interviews. After reading the job advertisement, two interviews were presented, one applicant with and one without a stigma (average length of the interviews 401.33 s.; $SD = 36.66$ s.). To control for pairing and order effects, the interviews were partially counterbalanced resulting in 12 unique candidate-pairs and the order of presentation was randomized³. After watching both interviews, raters completed the post-interview memory scale and completed hiring intentions for each candidates. The post-interview assessment order was also randomized to avoid order effects. Table 2 presents the means and correlations of the variables of Study 1.

[Insert Table 2 about here]

Results of Study 1

Hypothesis 1: Effects of stigma on hiring intentions. As expected the results showed significantly lower hiring intentions for stigmatized applicants ($M = 3.07$, $SD = 1.26$) than for non-stigmatized applicants ($M = 3.51$, $SD = 1.18$), $t(59) = 2.26$, $p = .028$, $M_{stigma} - M_{control} = 0.44$ (95% CI [0.05,0.83]), with moderate effect size ($d = .29$; Morris & DeShon, 2002), thereby replicating findings of interview bias against facially stigmatized applicants.

Hypotheses 2: Effects of stigma on cognitive processes (attention and memory). We conducted a Repeated Measures ANOVA, independent for visual attention to the stigma (i.e., fixations) and interviewer memory accuracy, with stigma (yes vs. no) and stage of the interview (rapport building or interview stage) as within-subject variables. Results provided evidence for the overall and considerable attention-grabbing effect of stigma when present, $F(1,46) = 62.21$, $p < .001$, $\eta_p^2 = .58$. Additionally, results corroborate the specific time-course predictions as visual attention to the stigma is found to be initially high ($M = .24$; $SD = .15$)

and significantly lower at the end ($M = .12$, $SD = .10$) of the interview stage, $F(1,46) = 52.38$, $p < .001$, $\eta_p^2 = .53$. Regarding interviewer memory accuracy, results indicated that the effects of stigma on memory are dependent on the stage of the interview, $F(1,59) = 6.56$, $p = .013$, $\eta_p^2 = .10$, with a significant moderate effect of stigma on memory accuracy at T1, $t(59) = 2.57$, $p = .013$, $M_{\text{control}} - M_{\text{stigma}} = .11$ (95% CI [-0.19,-0.02], $d = 0.34$, but not at T2, $t(59) = 0.89$, $p = .37$. (Figure 1)

[Insert Figure 1 about here]

Hypothesis 3: Moderating effects of motivational processes (NFCC). Regarding the effect of NFCC on visual information processing, results showed that NFCC decreases attention to the stigma-area when the stigma is present compared to when the stigma is absent, and this effect was found in the rapport building stage but not in the interview stage $F(1,45) = 6.12$, $p = .017$, $\eta_p^2 = .12$. Similarly, regarding the effect of NFCC on verbal information processing, showed that NFCC decreases memory accuracy for verbal information when the stigma is present compared to when the stigma is absent, and this effect was found in the rapport building stage but not in the interview stage, $F(1,58) = 6.79$, $p = .012$, $\eta_p^2 = .11$ (Figure 2).

[Insert Figure 2 about here]

Hypothesis 4: Decision-making. Hypothesis 4 predicted that interview judgments of stigmatized applicants would be based on initial impressions as formed during the rapport building stage, which might be resistant to change, regardless job-relevant information that is exchanged during the interview stage. For non-stigmatized applicants, Hypothesis 4 expected interview judgments to be less based on initial impressions formed during the rapport building stage but to depend rather on job-relevant information that is exchanged during the interview stage. To investigate this, we tested if accuracy of memory mediated the effects of visual attention to the stigma area on hiring intentions, distinguishing between stigma and interview

stage, using Model 4 of the PROCESS macro from Hayes (2013). Statistics are displayed in Figure 3 and the main findings are discussed below.

Results showed evidence that judgments of stigmatized applicants are influenced by the information processing of stigma-information during the rapport building stage (T1), and to a lesser extent by job-relevant information exchanged during the interview stage (T2). Specifically, visual attention to the stigma (i.e., proportional number of fixations) negatively affected raters' memory accuracy during the rapport building stage, whereas memory accuracy positively affected hiring intentions ($B = -.155$, 95% CI [-0.333, -0.031]). Memory accuracy during the interview stage did not significantly affect the hiring intentions of stigmatized applicants ($B = 0.008$, 95% CI [-0.114, 0.024]). Combined these results suggest that hiring intentions of stigmatized applicants are rooted in the initial impression formation process, and are not – or to a limited extent – adjusted at the end of the interview. Contrary, judgments of non-stigmatized applicants are not significantly affected by the information processed during the rapport building stage ($B = -.001$, 95% CI [-0.062, 0.034]), and results showed a small influence of memory accuracy during the interview stage on hiring intentions ($B = .042$, 95% CI [-0.011, 0.155]). This result suggests that initial impressions of non-stigmatized applicants tend to be adjusted based on verbal information exchanged during the interview stage. Because NFCC might decrease attention to the stigma-area and memory accuracy, we controlled for recruiters' NFCC in the above-mentioned analyses. Additional analyses in which we did not control for NFCC showed that the pattern of our findings remained the same in case the applicant had no visual stigma (both in the rapport building and interview stage). Similarly, when the applicant had a visual stigma, attention to the visual stigma (PWS) significantly decreased memory performances in the rapport building stage. However, when NFCC was no longer controlled for, no significant relation between memory

and hiring intentions was found which precludes a mediation effect of memory (see Appendix for detailed results of the additional analyses).

In sum, findings suggest that hiring intentions of stigmatized applicants are rooted in the initial impression formation process and are not adjusted in the interview stage, whereas initial impressions of non-stigmatized applicants can be adjusted based on verbal information exchanged during the interview stage, particularly so -however- when recruiters' NFCC is taken into consideration.

[Insert Figure 3 about here]

Discussion of Study 1

Besides replicating findings of interview bias against facially stigmatized applicants (Madera & Hebl, 2012; Stevenage & McKay, 1999), this study shows that this bias depends on cognitive and motivational processes that drive anchoring in the decision-making process (Epley & Gilovich, 2006).

Specifically, when job applicants had a facial stigma, raters attended that facial area considerably more than when equally qualified job applicants had no facial stigma, and this effect was stronger in the rapport building stage than in the interview stage. Moreover, applicants' facial stigma negatively impacted raters' memory of verbal information that was exchanged during the rapport building and the interview stage. The latter, however, was stronger in the rapport building stage than in interview stage. Hence, the fixation on stigma information (or the attention-grabbing effect of stigma) during the rapport building stage negatively affected the interviewer's ability to attend to and cognitively process other information about the candidate (like job-related information), and in doing so negatively affected interview outcomes. Indeed, distraction of visual attention constitutes a task-switching situation that affects memory (Olivers et al., 2006). The fact that this process occurs during the rapport building and impacts the final decision is in line with research that already

indicated that initial cues (such as a handshake) can have an effect on the first impression and the final assessment of job applicants (Barrick et al., 2010).

Need for Cognitive Closure further influenced the reliance on immediately available strong visual cues, such as the port-wine stain (i.e., seizing), which affected further visual and verbal information processing tendencies during the rapport building stage (i.e., freezing). Judgments of stigmatized applicants were strongly influenced by the rater's cognitive processes during the rapport building stage, and not by job-relevant information that was exchanged later during the interview. This suggests that - contrary to judgments of non-stigmatized applicants - interviewers did not adjust their initial impressions of stigmatized applicants (i.e., anchoring).

The main strength of Study 1 was the demonstration of some cognitive/motivational processes driving anchoring-and-adjustment in judgments of stigmatized applicants. Additionally, the use of dynamic stimuli (i.e., videotaped interviews) better mimics the dynamic real-life environment compared to static stimuli used in prior research (e.g., pictures; Madera & Hebl, 2012). Nonetheless the interviews in Study 1 were relatively short, there was no direct interaction between raters and applicants, raters were I-O psychology master students, and there was no opportunity to take notes in the eye tracker. These limitations are addressed in Study 2.

Study 2

To further investigate whether the anchoring-and-adjustment heuristic drives interview bias against facially stigmatized applicants, Study 2 applied an interactional face-to-face interview setting with interviews conducted by professional recruiters. To assess anchoring in judgments, we assessed job suitability as a measure of initial impression (T1) following the rapport building stage, and as an interview outcome measure (T2) following the interview stage (Barrick et al., 2010; Stevens & Kristof, 1995). One critical assumption driving

interview validity is that interview judgments are influenced by job-relevant information exchanged during the interview stage. As more job-relevant topics are discussed during the interview stage, the impression of the applicant is expected to evolve over time (T1 → T2). Study 1 findings indicated that such adjustments – based on job-relevant information – were made in the judgment process of non-stigmatized applicants, whereas impressions of stigmatized applicants were not adjusted at the end of the interview. If the cognitive and motivational processes in reaction to the stigma during the rapport building stage indeed anchor the interviewer's decision-making process, then eliminating this interference should mitigate the anchoring effect. To test this, we introduced the 'partially-blind interview' technique in which applicants and interviewers are visually separated during the rapport building stage, and visibility is restored at the beginning of the interview stage. Because blind rapport building prevents the stigma from affecting the initial impression, we expected this procedure to mitigate the anchoring effect of stigma in the decision-making process. Specifically, we expected type of interview (traditional vs. partially-blind) to interact with stigma and interview stage such that:

Hypothesis 5: In traditional interviews, only impressions (i.e., job suitability) of non-stigmatized applicants will be positively adjusted (i.e., higher) at T2 (interview stage) compared to T1 (rapport building) whereas impressions of stigmatized applicants will remain the same (no adjustment of job suitability ratings from T1 → T2). In partially-blind interviews, impressions (i.e., job suitability) of both stigmatized and non-stigmatized applicants will be positively adjusted (i.e., higher) at T2 (interview stage) compared to T1 (rapport building).

[Insert Figure 4 about here]

Method

Participants. We recruited 193 experienced interviewers (78.8% females, M age = 26.64, SD age = 6.87; 100% White/Caucasian) through various professional channels and networks.

Design and measures. Study 2 applied a mixed-factorial design with facial stigma (yes vs. no) and interview procedure (traditional vs. partially-blind) as between-subject factors, and interview stage (T1 vs. T2) as the within-subjects factor. Job suitability ratings were measured with five items adapted from Barrick et al. (2010; 1 = *low*; 5 = *high*). Similarly, initial impressions were recorded following the rapport building stage (T1; α = .76), and final judgments following the behavioral interview stage (T2; α = .90). Need for Cognitive Closure (NFCC; α = .89) was controlled for (see Study 1 for a detailed description).

Applicant background and stigma manipulation. One 24-year old Caucasian male actor role-played the applicant in all interviews. The actor was unaware of the research hypotheses and goals of this study, and received extensive training to standardize verbal and non-verbal behavior between interviews. His résumé was carefully constructed, in collaboration with a subject matter expert, to represent a recent college graduate with appropriate experience for an entry level job opening as consultant. For the manipulation of the stigma, a temporary tattoo, simulating a red port-wine stain (PWS), was created by a specialized company, and was applied to the right hand side of his face.

Procedure. Interviewers were randomly assigned to one of the four study conditions prior to their arrival. After giving consent, they received instructions to conduct a structured interview (i.e., behavioral description interview; Janz, 1982), using a maximum of 5 minutes for rapport building, and a maximum of 20 minutes for assessing job-relevant competencies (i.e., interview stage). Specifically to the instructions of the rapport building stage, interviewers were instructed that the goal of the rapport building stage was to establish rapport with the applicant (Chapman & Zweig, 2005; Rynes, 1989). In the partially-blind

interview procedure interviewers were told that "...as applicants can be nervous for interviews, the rapport building stage and the curtain were there in order to facilitate the reduction of the applicant's nerves prior to starting the behavioral interview", whereas in the traditional-interview procedure interviewers were told that "...as applicants can be nervous for interviews, the rapport building stage was there to facilitate the reduction of the applicant's nerves prior to starting the behavioral interview". After verbal acknowledgment from the interviewers that these instructions were well understood the interviewers received an overview with interview prompts to guide the interviewing procedure including suggested questions and follow-up prompts. Subsequently, interviewers read the applicants' résumé and the job description that specified the required competencies and received time to prepare for the interview while the experiment leader fetched the applicant. Interviewers conducted the interviews as instructed, starting with rapport building prior to the interview stage. To structure the maximum length of the different interview stages, interviewers received an auditory signal indicating they were approaching the maximum allotted time for that specific interview stage. Interviewers rated the applicant's job suitability following each stage of the interview, and in a final step completed a manipulation check, demographics and an open-ended probe to assess any suspicion regarding the study purpose⁴. NFCC was assessed four weeks later, as part of a survey on an unrelated topic. Table 3 presents the means, standard deviations, and correlations of the independent and dependent variables of Study 2.

[Insert Table 3 about here]

Results of Study 2

Preliminary analysis: Effects of stigma on interview outcome. A t-test with stigma (yes vs. no) as independent variable and job suitability ratings as dependent variable showed a significant and moderate effect of applicant stigma on final ratings in traditional interviews, $t(94) = 2.927, p = .004, M_{no\ stigma} - M_{stigma} = 0.33, d = 0.62$. This finding replicates Study 1

findings of interview bias against facially stigmatized applicants in the traditional interview. Interestingly, no significant effect of stigma was found in the partially-blind interviews, $t(95) = .79, p = .94, M_{no\ stigma} - M_{stigma} = 0.01, d = 0.01$.

Hypotheses 5: Anchoring-and-adjustment driving interview bias. To assess Hypothesis 5 we conducted a Repeated Measures ANOVA, with stage of the interview (T1 vs. T2) measured within-subjects, and applicant stigma (yes vs. no) and interview procedure (traditional vs. partially-blind) as the between-subject factors. Results showed that interview stage did not interact significantly with applicant stigma and interview procedure, $F(1,188) = 3.78, p = .053, \eta_p^2 = .02$. Interview stage, however, interacted significantly with stigma, $F(1, 188) = 4.21, p = .041, \eta_p^2 = .02$ (Table 4). Post-hoc analyses (i.e., contrasts) further indicated that in traditional interviews impressions of non-stigmatized applicants were positively adjusted based on job-relevant information exchanged during the interview stage, $F(1,37) = 29.17, p < .001, M_{T2} - M_{T1} = 0.43, d = .83$, whereas no adjustments occurred in the impressions of facially stigmatized applicants, $F(1,57) = 2.16, p = .15, M_{T2} - M_{T1} = 0.11, d = .18$. However, in the partially-blind procedure, impressions of stigmatized applicants $F(1,57) = 18.21, p < .001, M_{T2} - M_{T1} = 0.30, d = .65$, and non-stigmatized applicants, $F(1,38) = 10.96, p = .002, M_{T2} - M_{T1} = 0.31, d = .70$, were adjusted based on the information exchanged during the interview stage. Indeed, interview stage and procedure only interacted significantly when applicants were stigmatized, $F(1, 113) = 4.13, p = .044, \eta_p^2 = .04$, but not so when they were not stigmatized, $F(1, 74) = 0.49, p = .488$ (Figure 4).

[Insert Table 4 and Figure 4 about here]

Discussion of Study 2

Study 2 findings show that the hypothesized three-way interaction between stigma condition, interview stage, and procedure was above the generally accepted threshold for significance ($p = .053$; Fisher, 1958). Post-hoc analyses, however, revealed interesting

patterns that point into the direction of Study 1 findings. Specifically, in the traditional interviews, effects of applicant stigma during rapport building anchor the interviewer's decision-making process, and by doing so result in bias. Professional recruiters' job suitability ratings of the facially stigmatized applicant changed only slightly from T1 to T2 ($d = .18$). However, by preventing stigmatizing information to influence the initial impression formation process (i.e., in partially-blind interviews), impressions of the facially stigmatized applicant were adjusted considerably from T1 to T2 ($d = .65$) and the anchoring effect of stigma was reduced. In this way, partially-blind interviews may result in less biased interview outcomes for stigmatized applicants.

General Discussion

This study aimed to apply extant research on decision-making and theory on heuristics more in specific (Tversky & Kahneman, 1974) in the context of job interview, thereby addressing literature gaps and recent calls to investigate cognitive-motivational sources of interview bias as well as the evolving nature of interview bias against equally qualified applicants with and without a clearly visible stigma (i.e., port-wine stain).

Key findings

Two complementary studies provide empirical evidence for the anchoring-and-adjustment heuristic as one explanation why stigmatized applicants (compared to equally qualified, non-stigmatized applicants) receive lower interview judgments. Cognitive and motivational processes related to anchoring-and-adjustment may change the dynamics of the interviewers' decision-making process resulting in a biased judgement with stigmatized applicants having a lower probability to be selected for a job. Our empirical findings provide further insight into the previously voiced concerns regarding the potentially biasing effects of "fast and frugal" judgments made during rapport building (Barrick et al., 2010; Levashina et al., 2014). Study 1 presented a mediation model, focusing on cognitive and motivational

processes in reaction to the stigma during the rapport building stage, that explains *how* and *why* anchoring occurs in the judgment process of stigmatized applicants. Study 2 examines effects in a more complex, face-to-face interview setting with interviews conducted by professional recruiters. Findings further indicate that interview bias against facially stigmatized applicants in traditional interviews may be the result of anchoring (i.e., lack of adjustment) in the interviewers' decision-making process. Although the non-significant three-way interaction ($p = .053$) should be acknowledged, post-hoc analyses showed for the facially stigmatized applicant non-significant and limited adjustment of interview ratings in the traditional interview condition ($p = .15$; $d = .18$), but significant and medium-sized adjustment of interview ratings in the partially-blind interview condition ($p < .001$; $d = .65$). The finding that in partially-blind interviews this anchoring effect was reduced for the facially stigmatized applicant provides further evidence that bias against stigmatized applicants, in traditional interviews, may originate early in the interview and may negatively affect hiring outcomes due to insufficient adjustment at later interview stages. For the non-stigmatized applicant, adjustments of interview ratings occurred, regardless of interview type (i.e., traditional vs. partially blind) (Figure 4).

Theoretical Contributions

Theoretically, study results highlight the need to further investigate interview bias as a *dynamic process* in decision-making rather than regarding interview bias as a static outcome. Hence, interview literature could incorporate a more dynamic approach of bias (Dipboye, 2005), by considering temporal patterns in decision-making. Furthermore, despite that the interview is based on human decision-making, the *use of heuristics* such as anchoring-and-adjustment, has largely been overlooked in hiring discrimination literature. Research may benefit from approaching interview bias from a decision-making perspective incorporating predictions from several other heuristics in decision-making (Derous et al., 2016; Evans,

2006; Kahneman, 2003) and from a social interaction perspective including the specific temporal patterns in behavioral reactions towards stigmatized applicants (Pryor et al., 2004; Swider et al., 2016). More in general, hiring discrimination literature could benefit from theoretical insights (e.g., heuristics) and research methods (e.g., eye-tracking) from other fields of psychology than I-O psychology to increase our understanding of bias. Moreover, investigating underlying cognitive and motivational processes of biased selection decisions against *stigmatized vs. non-stigmatized applicants* may lead to more generalizable and fundamental insights in hiring discrimination that could be applied to many different marginalized groups in many different contexts (Deros, Buijsrogge, & Ryan, 2013). Finally, literature on interview validity and bias typically considers characteristics of the applicant (e.g., Segrest Purkiss, Perrewé, Gillespie, Mayes, & Ferris, 2006) and the tool (e.g., interview structure; Levashina et al., 2014; Thorsteinson, 2018) Although recently more attention goes to interviewer characteristics (Florea et al., 2019; Frieder et al., 2016), much to our surprise, one of the latest comprehensive reviews that incorporated interviewer characteristics has been published already some time ago (Posthuma et al., 2002). We suggest hiring discrimination literature to incorporate recruiter characteristics and decision-making theory in a more systematic way to increase our understanding of interview bias (Buijsrogge et al., 2016; Florea et al., 2019), and bias in other recruitment tools that are based on human decision-making (e.g., resume-screening; Deros & Ryan, 2019).

Limitations and Research Opportunities

The current studies focused on anchoring as a cognitive or ‘sensation-based’ source of bias that - to the best of our knowledge - had not been tested before in the context of the evaluation of visually stigmatized applicants in job interview settings (Tversky & Kahneman, 1974; Madera & Hebl, 2012). We proceeded in this way given that previous studies considered *other cognitive sources of bias*, like overconfidence (e.g., Buijsrogge et al., 2016)

or *affective sources of bias* (like negative affect; see Madera, 2012) in the context of the evaluation of stigmatized applicants. However, studying one source of bias at a time might limit the ecological validity and may not provide enough insight into the relative importance of different sources of bias. For instance, it could have been that attention to the stigma in T1 negatively affected interviewers' emotions (Madera, 2012) or made interviewers overconfident (Buijsrogge et al., 2016) at T2. Indeed, given the complex and multifactorial nature of interview bias, we suggest further research to design studies that incorporate diverse sources of biases to test their relative weights in stigmatized applicants' interview scores.

Additionally, concerns may be voiced regarding social desirability or demand characteristics driving study results. However, participants are generally motivated to appear unbiased (as it is socially undesirable to appear biased) which may have restricted instead of enlarged the observed effects (Colella & Varma, 2001). Nevertheless, future research might administer social desirability scales to control for. Another potential limitation is that interviews were conducted for front-office positions; future studies may investigate the amount of external client contact as a boundary condition as well as investigate bias in an actual, top-down hiring setting (i.e., high-stakes selection). A final remark relates to the type of interview investigated (i.e., structured vs. unstructured). Specifically, we only investigated anchoring-and-adjustment effects in structured interviews. In line with Levashina et al. (2014), we found that structured interviews can be prone to biased decision-making, particularly if candidates have a facial stigma. From a theoretical point of view, one can expect even less adjustment of initial candidate impressions when the interview stage is rather unstructured. Structuring the interview stage following rapport building might aid interviewers to engage in more conscious, rule-based processing of information (i.e., Type 2 processes; Kahneman & Frederick, 2002), which may limit heuristics to filter incoming candidate information (i.e., Type 1 processing) (Deros et al., 2016). However and to the best

or our knowledge, the influence of (lack of) interview structure on adjustment processes has not yet been empirically investigated and may be an interesting avenue for further research.

Practical Implications

Practically, the need to reform the selection interview has already been argued from a legal (Cohen, 1987) and validity (Levashina et al., 2014) standpoint. One intervention may be to eliminate rapport building in favor of interview validity (Swider et al., 2016). However and despite of being trained not to do so, interviewers might still engage in rapport building (Chapman & Zweig, 2005; Frieder et al., 2016). As it might not be entirely realistic to eliminate the rapport building stage we suggest structuring rapport building procedures in a way that limits the availability of visibly stigmatizing information to the interviewer. Indeed, Study 2 results showed the bias-reducing effects of removing stigmatizing visual information during rapport building. As verbal and visual information show overlap with regards to their influence on forming impressions (Motowidlo & Burnett, 1995), such intervention should not affect the interviewer's ability to form an initial impression of the applicant. We understand, however, that a physical barrier, even as simple as the one applied in Study 2 (i.e, a curtain or fence), may not be feasible in practice. Hence, future studies may design and test technology-mediated interventions such as rapport building via telephone or online chat or let robots (not humans) do the job interviewing, which may be less prone to biased decision-making (Naim et al., 2018). Alternatively, interventions may also seek to trigger the interviewer's motivation to engage in effortful thinking prior to the interview stage, for example through reflection (Ellis et al., 2014) or imagined intergroup contact (Merritt et al., 2018).

Conclusion

In his autobiography, Daniel Kahneman (2003) notes that his Nobel Prize winning research on heuristics is rooted in his experiences as an interviewer in the Israeli army. Our studies are among the first that empirically show *how* and *why* interview judgments of

stigmatized applicants are biased by drawing on fundamental research on heuristics in human decision-making. Anchoring and adjustment, and associated motivational mechanisms, seem to drive bias against stigmatized applicants in interview decisions. Contrary to the decision-process of non-stigmatized applicants, initial impressions of stigmatized applicants were hardly adjusted at the end of the interview stage, despite the exchange of job-relevant information during that stage. Partially blind interviewing (i.e., restricting the availability of visibly stigmatizing information), seemed a fruitful intervention to avert hiring interview bias. These findings provide a new perspective on the decision-making processes leading to bias against stigmatized applicants in job interviews, and may stimulate future research and practitioners to avert interview bias.

Notes

- 1 Removing the participants from analysis did not influence the direction or level of significance of the analyses that include visual attention to the stigma.
- 2 More detailed information regarding the procedure including materials, pilot test results, and measures can be obtained from the first author upon request.
- 3 Each of the six actors were interviewed in both stigma conditions resulting in 12 interviews divided over two conditions. Interview pairs consisted of one stigmatized and one non-stigmatized applicant. Each applicant appeared twice with, and twice without the stigma, and was paired each time with a different applicant to avoid pairing-effects. For example, the interview of a non-stigmatized applicant A was paired with the interviews of a stigmatized applicant B (Pair 1) and stigmatized applicant C (Pair 2). Then the interview of a non-stigmatized applicant B was not paired with stigmatized applicant A, as this would not be the same as Pair 1, and thus not be unique candidate-pair, but paired with the interviews of a stigmatized applicants C (Pair 3), and D (Pair 4). The order in which the stigma/no-stigma interviews were presented within one pair was randomized.
- 4 Following the approach of Barrick et al. (2010), Study 2 aimed to test effects of visual stigma on job suitability ratings. Because this study was part of a larger study project, we also included a measure of hiring intentions (same as in Study 1) which allowed to validate a similar level of bias against visually stigmatized applicants in Study 2 as reflected in lower hiring intentions (stigmatized applicants: $M = 3.32$, $SD = .63$; non-stigmatized applicants: $M = 3.55$, $SD = .64$, $F(1, 191) = 5.99$, $p = .015$, $M_{no\ stigma} - M_{stigma} = 0.23$, $d = 0.36$).

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Table 1

Description and performance estimates of EyeLink 1000 Tower Mount

Measure	EL1000 Tower Mount performance estimates	Tower Diagram ¹
Sampling Rate	2000 Hz (Monocular)	
Tracking principle	Pupil with Corneal Reflection	
Accuracy	0.25° – 0.5°	
Resolution	0.02° RMS, micro-saccade resolution of 0.05°	
Sample Delay	$M < 1.3$ msec, $SD < .4$ msec	
Real-Time data	1.4 msec ($SD < 0.4$ msec) @ 2000 Hz	

Note. ¹ Diagram obtained from manufacturers’ website at: http://www.sr-research.com/mount_tower.html

Table 2*Descriptives and Correlations of Study Variables (Control and Stigma Conditions)*

	No Stigma			Stigma		1	2	3	4	5	6	7	8
	(Control)			(PWS)									
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>								
1. Sex ^a	60	--	--	--	--	--	-.29*	.16	.2	.20	.01	.21	.15
2. Age	60	23.82	3.54	23.82	3.54	-.29*	--	-.45**	-.06	-.17	-.15	-.02	-.06
3. Hiring intentions	60	3.51	1.18	3.07	1.26	.08	.02	--	.33*	.14	-.03	.00	.15
4. Memory (T1) ^b	60	.58	.29	.47	.28	.21	-.07	.00	--	.48**	-.34*	-.02	.04
5. Memory (T2) ^b	60	.48	.21	.50	.23	.04	-.18	.05	.07	--	-.36*	-.14	.28*
6. Fixations (T1) ^b	47 ^c	.06	.07	.24	.15	.15	-.15	.00	-.05	.13	--	.70**	-.35*
7. Fixations (T2) ^b	47 ^c	.06	.07	.12	.10	.04	-.08	-.07	-.10	.14	.64**	--	-.23
8. NFCC ^d	60	3.79	.72	3.79	.72	.15	-.06	-.04	.42**	.20	-.06	-.16	--

Note. Correlations for the stigma condition are above the diagonal; correlations for the no-stigma conditions are below the diagonal. ^a Sex (0 = *Male*; 1 = *Female*); ^b Memory and Fixation scores are proportional to the length of the rapport building (T1) and interview (T2) stages; ^c Participants with low eye-tracking accuracy (i.e., higher error than 0.5°) were omitted from eye-tracking data analysis ($n = 13$). Reasons for low accuracy include subjects' thick rimmed glasses, hard contact lenses, and dark eyelashes. ^d NFCC = Need for Cognitive Closure. * $p < .05$; ** $p < .01$.

Table 3

Means, Standard Deviations, and Correlations of Independent and Dependent Variables in Study 2

	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Sex ^a	193	-	--	--							
2. Age	193	26.76	6.94	-.05	--						
3. Stigma Condition	193	--	--	.02	.26**	--					
4. Interview Procedure ^b	193	--	--	.07	-.07	-.01	--				
5. Suitability T1	193	3.62	.41	.01	-.15*	-.01	-.06	.76			
6. Suitability T2	193	3.89	.59	.04	-.14	-.14*	.02	.45**	.90		
7. Hiring Intentions	193	3.86	.88	.11	-.13	-.14	.04	.42**	.82**	.91	
8. NFCC ^c	193	3.60	.68	.25**	-.11	.02	.09	.07	-.11	-.05	.86

Note. ^aSex (0 = Male; 1 = Female); Stigma Condition (1 = No Stigma; 2 = Stigma); ^bInterview Procedure (1 = Traditional Interview; 2 = Partially-Blind Interview). ^cNFCC = Need for Cognitive Closure. Scale reliabilities (Cronbach’s alpha) are on the diagonal * $p < .05$, ** $p < .01$.

Table 4*Effects of Interview Stage, Stigma, and Procedure on Job Suitability*

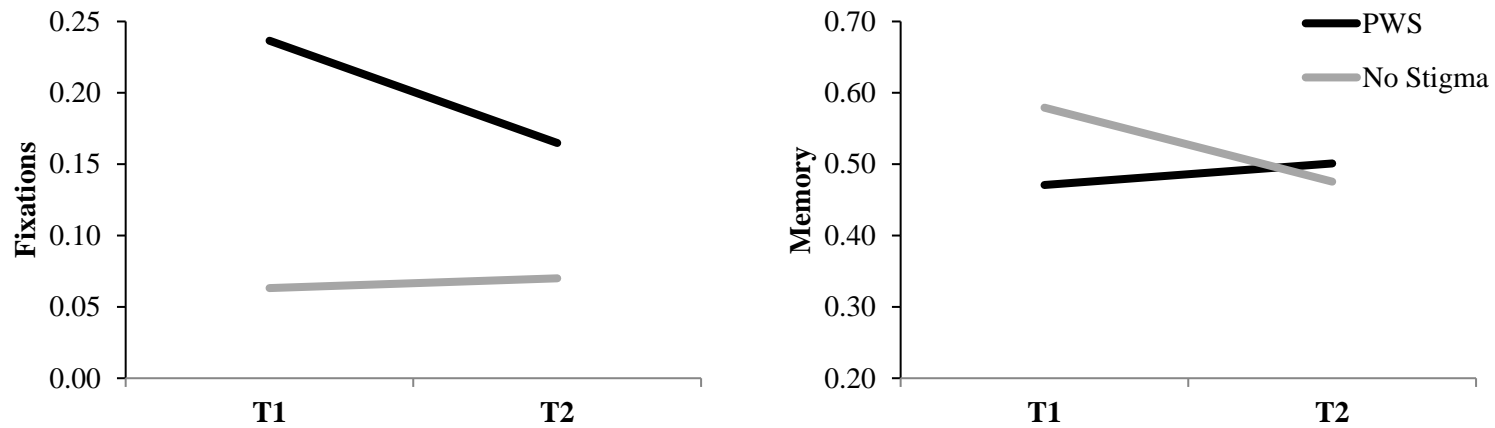
	df	<i>F</i> ratio	<i>p</i>	η_p^2
Time	1	14.63	.000	.07
Time * NFCC	1	6.20	.014	.03
Time * Stigma	1	4.21	.041	.02
Time * Procedure	1	0.52	.473	.00
Time * Stigma * Procedure	1	3.78	.053	.02
Error	188			

Note. The analysis includes Need for Cognitive Closure (NFCC) as a covariate.

Time refers to the rapport building (i.e., T1) versus interview stage (i.e., T2).

Figure 1

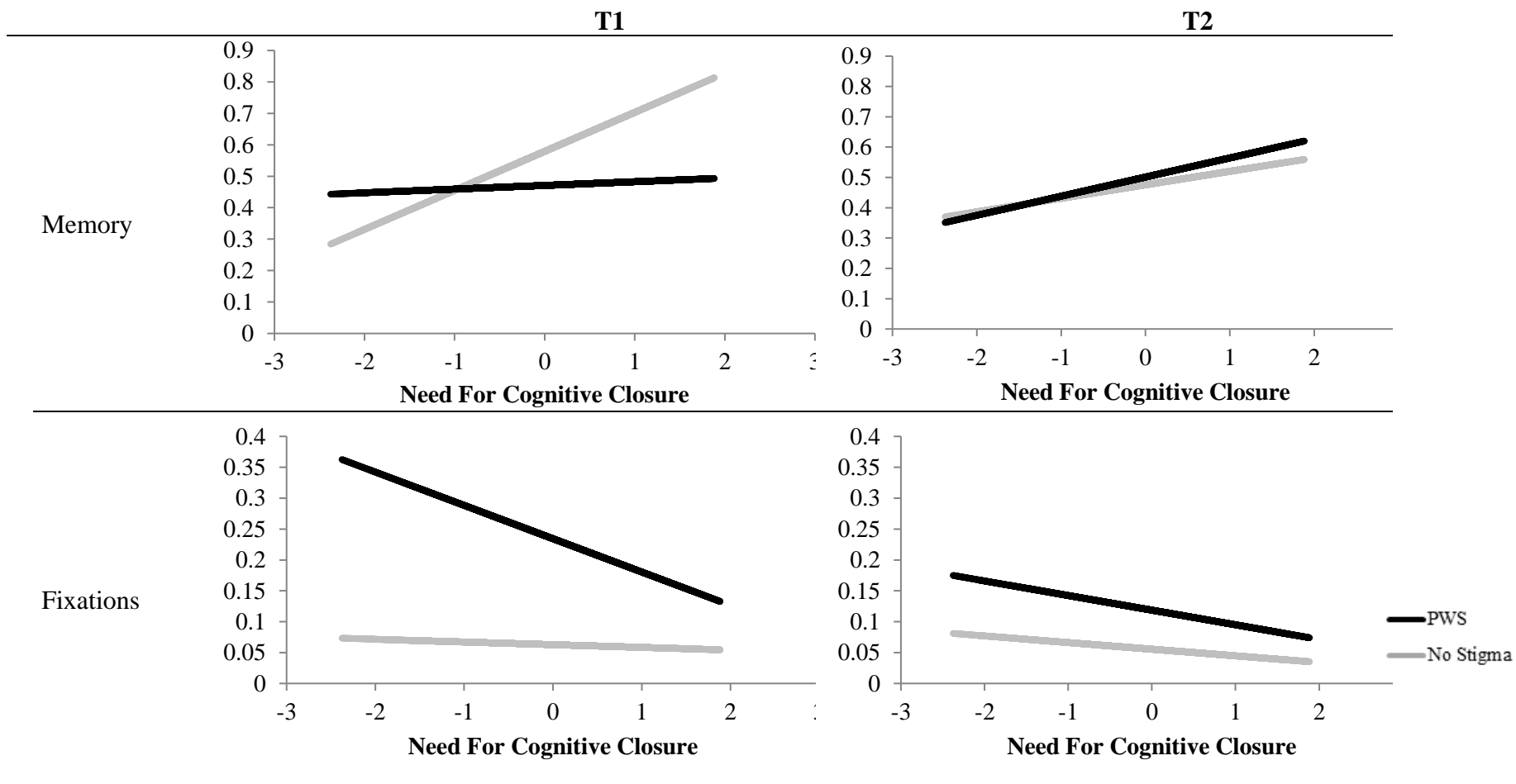
Effects of stigma on attention (fixations) and memory at the rapport building (T1) and interview stage (T2).



Note. Within the figure, the lines printed in bold represent the condition of the applicant with the port-wine stain (PWS), whereas the lines lightly printed represent the condition of the non-stigmatized applicant (no stigma). Fixations and memory are proportional to the length of the rapport building (T1) and interview (T2) stages to account for differences in length of the rapport building and interview stages.

Figure 2

Effect of Need For Cognitive Closure (standardized) on memory and fixations at the rapport building stage (T1) and the interview stage (T2)

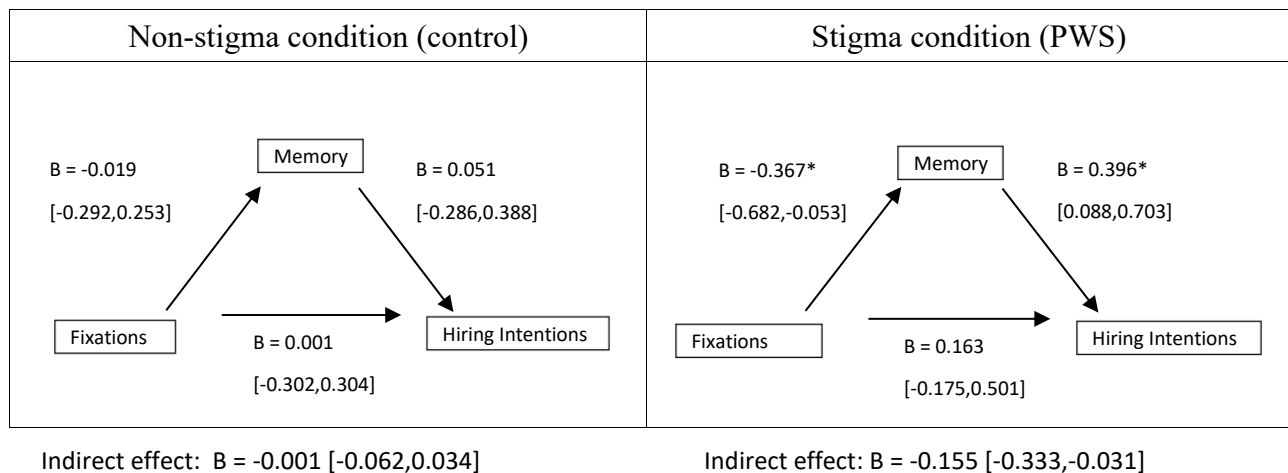


Note. Within the figure, the lines printed in bold represent the condition of the applicant with the port-wine stain (PWS), whereas the lines lightly printed represent the condition of the non-stigmatized applicant (no stigma). Fixations and memory are proportional to the length of the rapport building (T1) and interview (T2) stages to account for differences in length of the rapport building and interview stages.

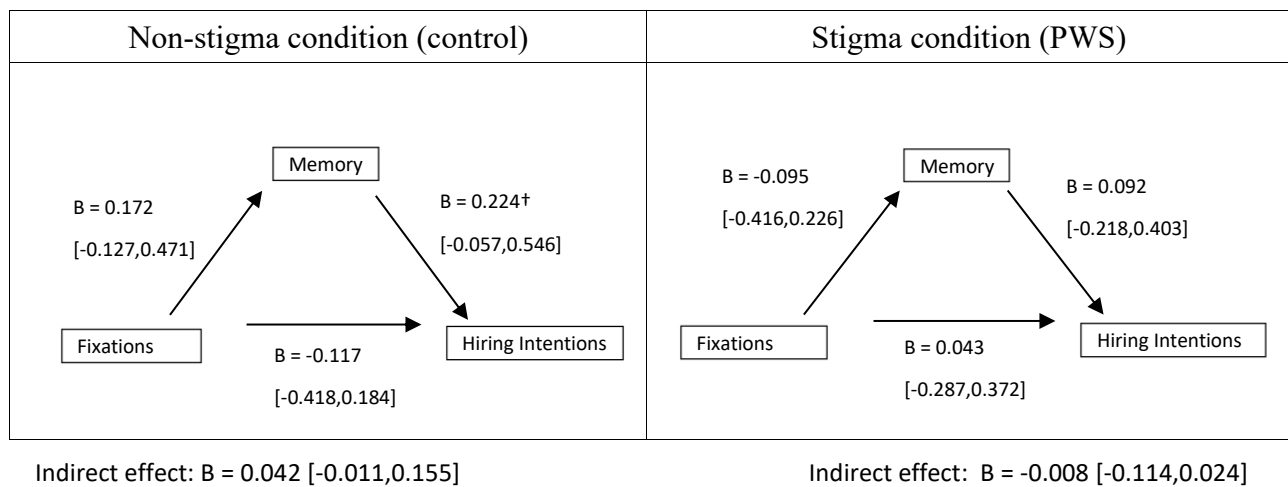
Figure 3

Mediating effect of memory per stigma condition and interview stage.

Rapport Building (T1)



Interview Stage (T2)



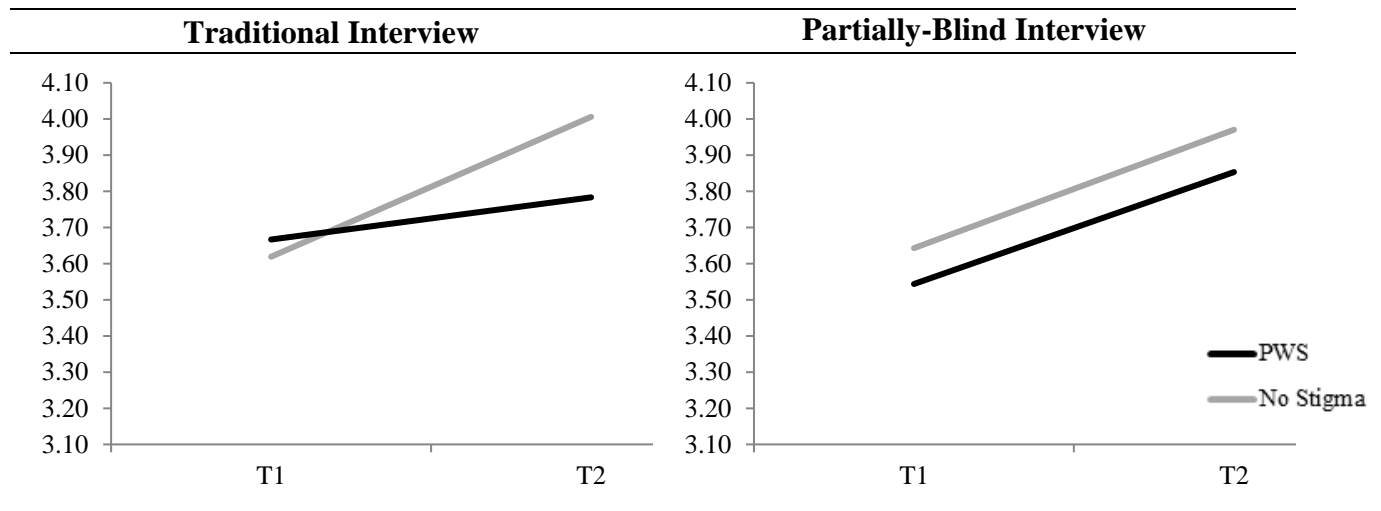
Note. N = 60. Participants (n = 13) with a low eye-tracking accuracy (i.e., higher error) than 0.5° were omitted from the analysis.

Standardized variables were used in this analysis. PWS = port-wine stain. All models contain Need for Cognitive Closure (NFCC) as covariate.

† $p \leq .10$, * $p \leq .05$.

Figure 4

Effects of interview procedure on job suitability ratings (Y-axis) of the (non) stigmatized applicant at the rapport building stage (T1) and the interview stage (T2; X-axis) in the traditional and partially-blind interview.



Note. Within the figure, the lines printed in bold represent the condition of the applicant with the port-wine stain (PWS), whereas the lines lightly printed represent the condition of the non-stigmatized applicant (no stigma).