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**Article — Published Version**

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International Journal of Selection and Assessment

**Provided in Cooperation with:**

John Wiley & Sons

*Suggested Citation:* Schudlik, Kevin; Reinhard, Marc-André; Müller, Patrick (2020) : Prepared to fake? The relationship between applicants' job interview preparation and faking, International Journal of Selection and Assessment, ISSN 1468-2389, Wiley, Hoboken, NJ, Vol. 29, Iss. 1, pp. 29-54, <https://doi.org/10.1111/ijsa.12317>

This Version is available at:

<https://hdl.handle.net/10419/233748>

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# Prepared to fake? The relationship between applicants' job interview preparation and faking

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## Abstract

Multiple frameworks and models postulate an effect of job interview preparation on faking. Two studies were conducted to examine if applicants' interview preparation is correlated with higher faking. Besides analyzing the general extent of preparation, we also distinguished between different preparation categories. In Study 1 ( $N = 237$ ), a presented preparation video led to higher intentions on image protection but did not increase overall faking intentions. Study 2 ( $N = 206$ ) focused on past preparation and impression management (IM). The total time spent on preparation was positively correlated with faking. Applicants' preparation via online videos and professional interview preparation was correlated with higher deceptive and honest IM. Preparation via online videos was additionally correlated with a higher perceived interview difficulty.

## KEYWORDS

faking, impression management, interview preparation, job interview, online videos

## 1 | INTRODUCTION

The job interview is the most common selection tool (Macan, 2009) organizations use for hiring new employees and the one applicants most readily accept (Hausknecht et al., 2004; Nikolaou & Georgiou, 2018). The popularity of the interview as a selection method led to a rich body of scientific work on understanding the interview process and its inherent limitations (e.g., Levashina et al., 2014; McDaniel et al., 1994; Salgado & Moscoso, 2002). Naturally, the job interview constitutes a high-stakes setting in which applicants are eager to present themselves as fitting employees with substantial potential (Rosenfeld, 1997). Moreover, applicants perceive the job interview as a method that incorporates a strategic element, and thus is influenceable by self-presentation (Sackett & Wanek, 1996). This kind of behavior has been termed impression management (IM). IM is defined as a broad class of behaviors that

individuals use to create and influence the impressions they make on others (Leary & Kowalski, 1990).

Besides the honest ways one self-promotes during an interview, applicants also use deceptive ways of IM to create a desired impression. The deceptive part of IM is also known as faking. In job interviews, faking is defined as "conscious distortions of answers to the interview questions in order to obtain a better score on the interview and/or otherwise create favorable perceptions" (Levashina & Campion, 2007, p. 1,639). Multiple studies have found a high prevalence of both honest and deceptive IM in job interviews in the field (Ellis et al., 2002; Stevens & Kristof, 1995; Weiss & Feldman, 2006), as well as in experimental settings (Law et al., 2016). A meta-analysis by Barrick et al. (2009) found a positive association between self-presentation tactics and job performance ratings; furthermore, research has shown that ingratiation, self-promotion, and the interviewer's perception of IM can have a significant effect on interview ratings (Amaral et al., 2019;

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Barrick et al., 2009; Higgins et al., 2003) and thus possibly pose a threat to the quality of assessment (Levashina & Campion, 2007; Roulin et al., 2015; Van Iddekinge et al., 2005). This is aggravated by the fact that interviewers are unable to discriminate satisfactorily between honest and deceptive IM (Roulin et al., 2015), which is congruent to research showing poor lie detection rates (Hartwig & Bond, 2011; Reinhard et al., 2013; Reinhard et al., 2013). Moreover, Roulin and Krings (2019) have found that applicants strategically use IM in order to present themselves as a better match for specific job requirements or to better fit into an organizational culture.

## 1.1 | Job interview preparation

Given the importance a job interview can have for one's career and eventually for one's life, interviewees should be highly motivated to prepare for it as well as they can. Many applicants participate in interview trainings or "interview prep" sessions in the hope of increasing their self-presentation skills (Bourdage et al., 2018; Kristof-Brown et al., 2002). The effectiveness of interview training on different interview performance outcomes has been documented (Barbee & Keil, 1973; Maurer et al., 1998, 2001; Tross & Maurer, 2008). In recent decades, many companies have emerged to specialize in preparing clients for specific selection procedures (Hermes et al., 2019), and given their popularity (Macan, 2009), job interviews earn special attention from both applicants and these preparation companies. Newer methods of interview preparation, for instance career coaching (Ebner & Kauffeld, 2018) or training applications for mobile devices (Yu et al., 2018), also play an increasingly important role. Another method rising in relevance for modern-day interview preparation is the use of online services (e.g., videos on YouTube) and social media. There are, for example, a vast number of videos aiming to prepare a viewer for the job interview and to educate about how best to present oneself in such a setting (Ho, 2019).

Despite this wide array of preparation possibilities, the impact of interview preparation on applicant IM has received little scientific attention and remains unclear. Kristof-Brown et al. (2002) found previous interview training to be positively correlated to the usage of self-promotion behavior in a subsequent interview. In a more recent study, Bourdage et al. (2018) hypothesized that participants with previous interview training would report higher honest but not deceptive IM. Although higher honest IM was found, the trained subjects also reported higher image protection (deceptive defensive IM), indicating that the relation between IM and preparation (in this particular case interview training) might be more complex than Bourdage et al. (2018) initially anticipated.

## 1.2 | Methodological challenges

Two methodological limitations of studies examining preparation and IM should be noted. First, Kristof-Brown et al. (2002) operationalized IM using scales that have been criticized (Bourdage et al., 2018)

because of their ambiguity regarding whether honest or deceptive IM is addressed. Therefore, the present study uses specific honest and deceptive IM scales. Second, the operationalization of preparation in the aforementioned studies has either been broad, using a single universal item (Kristof-Brown et al., 2002), or specific, by including just one category of preparation (e.g., coaching in Maurer et al., 1998). Consequently, these approaches do not allow inferences to be drawn about how different categories of preparation compare. Overall, little empirical or theoretical work has systematically examined different kinds of interview preparation (Maurer et al., 2001). Interviewee coaching has received more scientific attention than have other forms of interview preparation; for instance, Tross and Maurer (2008) have distinguished three progressive types of coaching.

One of the rare attempts to distinguish different forms of preparation on a broader level has been presented by Messick (1981) who, in the context of testing, proposed a continuum that differentiates between the influence of practice and the influence of coaching. While practice describes self-learning (e.g., self-reflection), coaching is characterized by directed external intervention (Marggraf-Micheel et al., 2006). We used Messick's (1981) work as our starting point and added another distinction by differentiating between interview preparation by oneself using external (e.g., reading a guide) or internal sources (e.g., thinking about the last interview), interactive preparation with non-professionals (e.g., interview simulation), and interview preparation by a (semi-) professional third-party (e.g., one-on-one coaching). Since thus far what is regarded as professional preparation has not been scientifically defined, an operational definition is required. For the present study, professional preparation is defined as a) having attended a third-party event (e.g., offered by university career centers or specialized commercial companies); b) having used a third-party service (e.g., coaching) to prepare for a specific selection procedure; or, c) having received individualized, long-term career advice (e.g., career coaching or vocational guidance).

## 1.3 | Preparation categories

The above makes clear that there exist numerous ways in which applicants prepare for job interviews and that each method needs to be categorized. In fact, Kristof-Brown et al. (2002) also pointed out that there is a need to consider different types of interview preparation, but so far, no systematic taxonomy of applicants' interview preparation has been developed. To address this gap, we developed a category system to obtain an overview of the type of preparation used. The identification of the categories was driven by multiple sources. First, studies including preparation and training (e.g., Alliger & Dwight, 2000; Ebner & Kauffeld, 2018; Kristof-Brown et al., 2002) were reviewed, to include previously researched categories; for instance, Palmer et al. (1999) argued that many applicants used how-to books to prepare for an interview.

Second, internet research was conducted to specifically identify modern and common ways of preparation. For this purpose, online forums, blogs, online videos, and the websites of commercial preparation providers were surveyed. Further information on the dimensions used to deduce the categories, including an application example, can be found in online Supporting Information S1. Seven categories have been deduced: (a) *information research* about the specific employer or job-details; (b) reading *guides* (including books) and website content on application procedures in general; (c) watching *online videos* (e.g., YouTube) that offer advice for successful interviews; (d) having *conversations* with friends, family, colleagues, etc.; (e) conducting *practice* (e.g., interview simulation) with friends, family, colleagues, etc.; (f) seeking *professional interview preparation* via training or a seminar (mostly offered by a commercial provider; and, (g) obtaining *professional career advice and coaching*. The last two categories are considered as *professional preparation*. It is noteworthy to point out that *online videos* are unique compared to the other preparation categories; although they count as preparation by oneself, they are still categorized as external and do not offer directed but rather undirected information (e.g., no personal feedback).

## 1.4 | Theoretical background of IM

Several models and frameworks exist, aiming to explain IM (e.g., Bolino et al., 2008; Marcus, 2009) and faking processes (Griffith et al., 2011; Levashina & Campion, 2006; Roulin et al., 2016; Salgado, 2016; Snell et al., 1999). As the body of research on faking and IM has grown consistently over the years, multiple taxonomies have been proposed (e.g., Griffith et al., 2011; Leary & Kowalski, 1990; Levin & Zickar, 2002). One of the most influential works on faking in the last decade was the development of the Interview Faking Behavior Scale (IFB) by Levashina and Campion (2007). Four major factors and 11 sub factors constituting interview faking have been found.

In a recent study, Bourdage et al. (2018) developed a scale for honest IM in the interview in addition to the deceptive part covered by the IFB. This relatively novel discrimination between honest and deceptive IM was identified as one of the most important objectives for future faking research (Bolino et al., 2016). Honest IM in contrast to the faking definition by Levashina and Campion (2007) includes IM behavior like self-promotion that is in accordance with the skills and experiences applicants actually do possess (Bourdage et al., 2018). This distinction might also help clarify the impact of preparation on IM, since honest parts of IM do not necessarily pose a threat to interview validity but might just be an indicator of motivation, social skills, situationally appropriate behavior, or even preparation itself (Rosenfeld, 1997). Despite this distinction, there is an essential overlap between the two forms of IM in that both behaviors aim to create positive impressions of oneself (Bourdage et al., 2018). Similarly, Levashina and Campion (2007) have postulated that applicants may start with honest descriptions but then

add on untruthful information. Therefore, differences as well as aligned effects of preparation on IM are expected.

## 1.5 | Frameworks and models

Multiple frameworks and models have also formulated postulates in regard to applicant interview preparation, although in each model, interview preparation is labeled differently (e.g., interview coaching, interview training, or interview "prep-sessions"). For the sake of structure, we subsume these categories under job interview preparation. We first consider IM on a broader level by compiling applicable theoretical frameworks then move to a more in-depth level. Levashina and Campion (2006), in their model of faking likelihood, differentiate among three unique variables that influence faking. They postulate that faking is a function of the interviewee's capacity to fake, willingness to fake, and opportunity to fake. Through interview coaching sessions, applicants might be able to better recognize opportunities to fake because they have an improved understanding of what interviewers are looking for when they pose various questions. Applicants' capacity to fake might also increase because they learn specific answers to certain questions. Moreover, Levashina and Campion (2006) state that "with this knowledge the willingness to distort may increase as well" (p. 306). Next, Roulin et al. (2016) describe preparation in their dynamic model of applicant faking as one factor that can possibly increase applicants' ability to mind-read organizations in order to identify relevant selection criteria. This knowledge is subsequently deployed to adapt their behavior during the selection process to increase the chances of getting hired.

Applicant behavior is also the center of an argument by Marcus (2009). In his theory of self-presentation in personnel selection settings, Marcus (2009) hypothesized that practice and coaching are positively associated with the behavioral skills of an applicant in maximum performance procedures. These behavioral skills are, in turn, needed to perform self-presentation in interactive selection procedures. This argument could include both deceptive and honest IM. When given the correct motivational and situational circumstances, the increased behavioral self-presentation skill set should then increase the interview performance. Moreover, Roulin et al. (2016) discussed that the perceived risk to fake moderates if the motivation to fake translates into actual faking behavior. Therefore, a high importance assigned to the job interview could keep applicants from faking because they do not want to take the high risk associated with doing so. For honest IM, this would not be the case.

There exist several IM frameworks and models (e.g., Griffith et al., 2011; McFarland & Ryan, 2000, 2006) that do not explicitly take preparation effects into account but allow for integration. For instance, Gino and Pierce (2009, 2010) applied equity theory to dishonest behavior and found that people discount the wrongness of crossing ethical boundaries when the action restores equity. Applied to possible effects of *professional preparation*, applicants might be willing to use more faking behaviors because they either paid for the preparation and/or invested time and effort. Therefore, a more

substantial investment is made, in comparison to their unprepared peers, so that they might now be able to justify their faking because a job offer would establish equity. Lastly, and specifically in regard to honest IM, Bourdage et al. (2018) noted that honest IM is associated with trained (i.e., specific interview training) individuals. We extract two broad hypotheses based on the aforementioned rationales; each will receive additional support in the course of the theoretical synopsis.

**Hypothesis 1a** *The extent to which a person has participated in job interview preparation is associated with higher deceptive IM.*

**Hypothesis 1b** *The extent to which a person has participated in job interview preparation is associated with higher honest IM.*

## 1.6 | ATIC and the capacity to fake

Both Roulin et al. (2016) and Levashina and Campion (2006) postulate that faking behavior depends on the applicants' capacity to fake, their motivation or willingness to fake, and the opportunity to fake, so we also examined the relationship between applicant preparation and the aforementioned constructs. Both models also mention either the knowledge of the construct being measured (Levashina & Campion, 2006) or the ability to identify selection criteria (Roulin et al., 2016) to be of importance when explaining faking. The ability to identify selection criteria (ATIC) describes the ability to identify criteria that are used to evaluate the performance (König et al., 2007). Melchers et al. (2004) found interviewees' ATIC to be positively related to their performance in structured interviews. Therefore, correctly interpreting the cues of the environment (e.g., the interviewer) and subsequently using those cues (e.g., incorporating mention of requested qualifications in the answers) contribute to a positive interview performance. Thus, applied to the setting of job interviews, the selection criteria are the performance dimensions that different interview questions target (Kleinmann et al., 2011). Buehl et al. (2018) found a positive association between faking and the ability to identify criteria (ATIC). Kleinmann et al. (2011) pointed out that ATIC could potentially be trained.

Specifically, for preparation by semi-professional external sources (e.g., *online videos*), it remains questionable whether the trainability refers to the actual selection criteria at hand or the vast number of alleged criteria presented in *online videos* or *professional seminars*. Thus, applicants could potentially apply the suggested criteria without due consideration of their specific situation, therefore using more IM behavior. This might be driven in part by the fact that objectively correct identification of criteria increases the interview performance (Melchers et al., 2004), but a false sense of ATIC might also increase deceptive and honest IM. Lastly, if individuals identify selection criteria but themselves lack the respective criteria, they might feel forced to use deceptive IM. Roulin et al. (2016) postulated a link between ATIC and the capacity to fake due to enabling

individuals to mind-read the organization. Thus, we extract the following hypothesis:

**Hypothesis 2** *The extent to which a person has participated in job interview preparation is associated with a higher subjective ATIC.*

## 1.7 | Perceived interview difficulty and the willingness to fake

Another variable impacting applicant faking is the perceived interview difficulty. The theoretical frameworks by Roulin et al. (2016) and Tett and Simonet (2011) indicate that candidates may be more willing to use deceptive IM when they perceive the interview to be difficult. In line with this assumption, Bourdage et al. (2018) found higher faking and lower honest IM when the interview was subjectively perceived as more difficult. Two perspectives on preparation and its relation to interview difficulty can be posed. An argument could be made that preparation reduces the perceived difficulty of an interview due to helpful advice and information. Multiple frameworks and models (Bourdage et al., 2018; Levashina & Campion, 2006; Roulin et al., 2016) would then predict less faking to occur because the applicants perceive the interview as less difficult. That is, they do not need to fake. This thought implicitly assumes that the preparation at hand really provides useful advice as well as correct information versus misleading criteria or other false information. While this reasoning is most likely applicable to certain methods of preparation (e.g., *information research*), other methods (e.g., *online videos*) might not provide helpful or accurate information. Thus, a larger extent of preparation could potentially prove detrimental. First, it is important to point out that subjective but not objective difficulty is addressed. Second, regardless of its actual difficulty, an interview can be perceived as difficult and consequently lead to a worse performance or to higher anxiety in applicants. This is backed by findings that tasks subjectively perceived as difficult lead to lower objective performances (Wright & Ayton, 1988).

In their two-component model of impression management, Leary and Kowalski (1990) describe the use of impression management as a way of constructing one's public identity and making it consistent with one's ideal self. Furthermore, if applicants perceive a discrepancy between the desired (potential) social image and their (subjective) current image (i.e., how they think they are currently regarded by others), a higher motivation to engage in impression management is expected. This subjective view can be influenced by preparation, for instance, by suggesting that the mention of one single job-related weakness leads to an undesired image of an unfitting candidate. Levashina and Campion (2006) noted as well that applicants might show higher willingness to fake if they perceive a lack of fit between their perceived qualities and the employer's requirements. In order to achieve the desired image, an applicant could either use honest IM (as was suggested by the findings of Bourdage et al., 2018) or engage in deceptive IM if honest IM wouldn't achieve a sufficient image. With this in

mind, an interviewee might not perceive an interview as easier but instead more difficult due to the induced expectations. We posit the following hypotheses based on the above reasoning:

**Hypothesis 3** *The extent to which a person has participated in job interview preparation is associated with a higher willingness to fake.*

**Hypothesis 4** *The extent to which a person has participated in job interview preparation is associated with a higher perceived interview difficulty.*

## 1.8 | Overview of the studies

To investigate our hypotheses, we conducted two studies. In Study 1, we implemented a field experiment manipulating the preparation using an ecologically valid (online) preparation video. We focused on faking intentions and the broad relationship between preparation and IM as postulated in Hypotheses 1a and 1b. In Study 2, we further investigated the relationship between preparation and IM but shifted our focus to IM and interview preparation in the participants' past. We also included further variables (willingness, opportunity, and capacity to fake, as well as ATIC and perceived interview difficulty) to allow for more in-depth analyses of the effects of preparation on IM as postulated in Hypotheses 2, 3, and 4.

## 2 | STUDY 1

In this study, we implemented a field experiment investigating IM intentions. Participants either watched an online preparation video or were assigned to a control group (see details below). As postulated above, the willingness to fake is theoretically expected to be influenced by interview preparation. The willingness to fake does not equal but is conceptually closely related to faking intentions (Ellingson & McFarland, 2011). Whether a faking intention manifests itself in actual faking behavior is also explained by the theoretical models and, as explained above, depends on additional aspects, such as personality, organizational or situational factors, previous experiences, and a fitting opportunity (McFarland & Ryan, 2000; Roulin et al., 2016).

### 2.1 | Method

#### 2.1.1 | Design and participants

In order to test Hypotheses 1a, 1b, and 2, we implemented a one factorial design with a preparation condition in which participants watch a job interview preparation online video. The preparation condition was tested versus a no-treatment control condition. The study lasted approximately 15 min, and each participant was compensated

1.80€ for his or her participation. The required sample size for comparing two groups for a medium effect size  $f$  of .25 was calculated using G\*Power (Faul et al., 2007). A necessary sample size of  $N = 210$  was computed. A total of  $N = 237$  participants were recruited using Prolific Academic, an online recruiting platform specializing in providing samples for scientific research (Palan & Schitter, 2018). The participants' ages ranged from 18 to 66 years with a mean of 29.3 ( $SD = 9.28$ ). The sample consisted of 96 females (40.5% of the total sample) and 141 males (59.5%) reporting an average of 7.59 ( $SD = 8.1$ ) years of work experience. Due to outliers distorting the data ( $\gamma = 1.75$ ), we transformed the variable work experience by its natural logarithm ( $M = 1.6$ ,  $SD = 1.0$  after the transformation). Seventy-nine participants (33.3%) declared to be students, while the remaining 158 participants (66.7%) claimed to either work as employees, to be self-employed, or to be retired. On average, the participants' last interview was 27.1 months ago ( $SD = 44.9$ ,  $\gamma = 3.3$ ). Due to extreme outliers, we transformed the variable by its natural logarithm as well ( $M = 2.2$ ,  $SD = 1.5$  after the transformation).

#### 2.1.2 | Procedure and stimulus material

The study was carried out using the online survey software Unipark (QuestBack, Cologne, Germany). The participants were randomly assigned to either the preparation group ( $n = 120$ ) or control group ( $n = 117$ ). Participants in the preparation condition were assigned to first answer demographic questions (e.g., preparation for last interview and interview experience) and they subsequently watched a 6-min YouTube video (Wehrle, 2017) of a German career coach. The video is titled "Job interview questions and answers: the 10 most frequent questions and how to answer perfectly" and it features ten interview questions covering an array of topics (i.e., from weaknesses to salary negotiations), each of which the coach answers in an instructive way. An authentic online preparation video was targeted to ensure the ecological validity of this study, and this specific clip was picked because it is popular (436.206 views as of April 2020) and it shows up as one of the first search results when looking for tips for the job interview in German. Since the preparation video featured exclusively German content, the subjects were required to fluently speak German. The video clip showed the coach presenting ten popular interview question (e.g., "What are your biggest strengths and weaknesses?" or "What was your biggest mistake?") and explained what an interviewer attempts to in fact find out by asking the according question. Advice and tips (e.g., "Don't state a job-related weakness but a general and unimportant one instead") were given for each question, toward supposedly delivering the perfect answers. An overview of the ten questions, the corresponding core advice, and the, respectively, targeted IM dimensions can be found in Appendix A. The control group, moreover, was not assigned the video activity. Afterwards, all participants were asked to imagine they had received an invitation to interview for an attractive job. Next, the following measures were assessed.

Linking the content of the video back to the initial hypotheses, we expected to find an effect of the manipulation on faking intentions. In particular, since 6 out of 10 statements of the video focus on image protection (defensive deceptive IM; see measures), an effect on image protection would be expected. As image protection is considered as severe faking (Hogue et al., 2012), a spill-over effect on other forms of faking might be possible. Based on the video, it remains unclear how an applicant is supposed to proceed if an actual weakness was omitted in order to deliver the optimal answer. The latter could be another actual weakness but could also be, as the video suggests, the construction of a weakness that is non-critical to the specific job profile. Overall, the video mainly addressed deceptive forms of IM or at least left room for interpretation (see Appendix A).

## 2.2 | Measures

### 2.2.1 | Faking intentions

Faking intentions were operationalized using the Interview Faking Behavior scale (IFB) by Levashina and Campion (2007). The IFB involves 54 items. Responses were made on a 5-point Likert scale from 1 (to no extent) to 5 (to a very great extent). The IFB measures four factors of interview faking: slight image creation (SIC), extensive image creation (EIC), image protection (IP), and deceptive ingratiation (IN). In addition, the IFB also allows further differentiation between 11 sub factors of faking. SIC describes mild forms of faking and can be seen as stretching the truth in the desired direction (e.g., "During the interview, I distorted my answers based on the comments or reactions of the interviewer"). SIC consists of the sub factors embellishing, tailoring, and fit enhancing. EIC means inventing information (e.g., "I made up stories about my work experiences that were well developed and logical"). EIC consists of the sub factors constructing, inventing, and borrowing. IP has a defensive character and includes omitting adverse job-relevant information (e.g., "I tried to suppress my connection to negative events in my work history"). IP consists of the sub factors omitting, masking, and distancing. IN describes using ingratiation in order to make the interviewer like the applicant and consequently receive better interview ratings regardless of actual performance (e.g., "I tried to express the same opinions and attitudes as the interviewer"). IN consists of the sub factors opinion conforming and interviewer or organization enhancing. An overall faking value can be obtained by calculating the mean of the entire scale.

Since the IFB is designed to operationalize past faking behavior and not intentions, the items were rephrased in such a way as to achieve future tense (i.e., "I would" instead of "I have"). This procedure of assessing faking intentions was based on the operationalization previously used by McFarland and Ryan (2006) and specifically by Hogue et al. (2012). Regarding instructions, participants were supposed to imagine that they had been invited for a future job interview. Thus, faking intentions were obtained. A German translation of the IFB, implemented by Buehl and Melchers (2017), was used. In

the present study, satisfactory reliability was achieved. Cronbach's  $\alpha$  values of .88 for SIC, .92 for EIC, .81 for IP, and .86 for IN have been found. The Cronbach's  $\alpha$  of the entire scale was .96.

### 2.2.2 | Honest IM intentions

Honest IM intentions were assessed with the short version of the honest interview impression management scale (HIIM-S) developed by Bourdage et al. (2018). This self-report measure comprises a total of 12 items. Honest IM consists of the three factors self-promotion (e.g., "I let the interviewer know how my qualifications were well-suited for the position"), honest ingratiation (e.g., "I found out about values and goals that I shared with the organization and made sure to emphasize them"), and defensive IM (e.g., "I gave reasons why I felt I benefited positively from a negative event I was responsible for"), measured with four items each. The HIIM-S has been included to allow for a broad discrimination between honest IM and faking and constitutes a control variable. Analogous to the IFB, responses were made on a 5-point Likert scale from 1 (to no extent) to 5 (to a very great extent). The German HIIM-S translation developed for the present study is provided in Appendix B. Cronbach's alpha was .78 for the entire scale, .75 for self-promotion, .64 for honest ingratiation, and .63 for defensive IM.

### 2.2.3 | Self-reported interview preparation

In order to measure different kinds of preparation, subjects were asked how they prepared for their last interview. We used the system comprised of seven different preparation categories as explained above. Each category was coded binary. For each category, the time (hours) spent using it was also compiled. To prevent missing an important category, an "other" category was implemented so subjects could report preparation via a method not covered by abovementioned categories. Only four subjects stated additional methods of preparation using the "other" category. After reviewing the qualitative data, no additional category was required. In order to test our hypothesis, the overall extent of the past interview preparation by each participant was calculated in two ways. First, a variable containing the number of different preparation categories used was computed by adding up how many preparation categories a participant declared to have used; this variable will hereafter be termed as different preparation categories used. Second, a variable containing the overall time spent on interview preparation was computed. The extent of preparation can be determined by considering both the time spent on preparation as well as the number of different categories used.

### 2.2.4 | Additional variables

In addition, subjects were asked to count how many interviews they had participated in as an applicant across the course of their

**TABLE 1** Means, standard deviations, and correlations among the major variables of Study 1

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Faking intentions	2.42	.67	-																				
2. SIC	2.55	.67	.93**	-																			
3. EIC	2.03	.75	.91**	.82**	-																		
4. IP	2.56	.66	.83**	.72**	.66**	-																	
5. IN	2.71	.73	.86**	.78**	.67**	.66**	-																
6. Honest IM intentions	3.69	.57	.14*	.16*	-.03	.12	-.34*	-															
7. Self-promotion	4.20	.75	-.04	-.00	-.22**	.01	.13*	.80**	-														
8. Honest Ingratiation	3.50	.75	.29**	.28**	.11	.22**	.47**	.76**	.46**	-													
9. Defensive	3.37	.75	.09	.11	.03	.03	.17**	.73**	.38**	.30**	-												
10. Total number of categories	3.02	1.34	.07	.07	.04	.01	.12.	.03	.01	.04	.02	-											
11. Total preparation time <sup>b</sup>	1.77	.98	.53	.07	.05	.01	.03	.02	-.02	.06	.02	.56**	-										
12. Guides <sup>a</sup>	.44	.49	-.02	.00	-.06	.00	.01	.05	.11	.02	-.01	.58**	.30**	-									
13. Online Videos <sup>a</sup>	.43	.49	.19**	.17**	.18**	.15*	.18**	-.10	-.15*	.03	-.11	.52**	.33**	.10	-								
14. Conversations <sup>a</sup>	.70	.45	-.07	-.05	-.07	-.09	-.03	.03	.01	-.02	.08	.46**	.30**	.13*	-.00	-							
15. Practicing <sup>a</sup>	.34	.47	.00	.00	-.00	-.05	.05	.03	.01	.02	.04	.62**	.29**	.17**	.13*	.19**	-						
16. Professional <sup>a</sup>	.18	.38	.16*	.12*	.17**	.07	.17**	.03	-.01	.05	.05	.52**	.28**	.15*	.20**	.02	.26**	-					
17. Last interview (month)	2.25	1.52	-.03	-.03	-.01	-.02	-.06	-.01	.09	-.01	-.10	-.05	.06	-.02	-.22**	.06	.04	.00	-				
18. Work experience <sup>b</sup>	1.60	1.03	-.06	-.03	-.02	-.13	-.05	-.01	.01	.06	-.12	.10	.09	.04	-.10	.11	.16*	.09	.36**	-			
19. Number of interviews <sup>b</sup>	1.59	.90	-.05	-.02	-.04	-.03	-.08	-.00	.01	.01	-.04	.17**	.14*	.14*	.05	.05	.12	.02	-.10	.37**	-		
20. Subjective interview experience	2.34	.77	.19**	.21**	.20**	.13*	.10	.07	.04	.15*	-.01	.13*	.12	.04	-.01	0.05	.18**	.13*	.00	.32**	.44**	-	
21. Age	29.3	9.2	-.14*	-.11	-.11	-.14*	-.13*	.05	.13*	.08	-.09	.09	.10	.13*	-.12	.06	.08	.07	.38**	.80**	.37**	.29**	-
22. Gender <sup>c</sup>	.59	.49	.20**	.18**	.19**	.19**	.14*	-.06	-.11	-.04	.00	-.05	.01	-.04	.04	-.08	-.04	-.01	.04	-.18**	-.08	-.04	.15*

Note: N = 237.

<sup>a</sup>1 = used, 0 = not used.

<sup>b</sup>The logarithmized variables were used to calculate the correlations.

<sup>c</sup>1 = male, 0 = female.

\*p < .05; \*\*p < .01.



professional lives. The participants also reported when their last interview took place (number of months). In order to include a subjective account of the interview experience, subjects were asked, "How experienced do you consider yourself in regards to job interviews?" Participants answered on a 4-point scale from 1 (not experienced at all) to 4 (very experienced). Participants also answered the question, "How important is preparation for a job interview to you?" and responses were assessed on a 4-point scale from 1 (not important at all) to 4 (very important). Lastly, participants stated how many years of work experience they possess.

### 3 | RESULTS

For overall faking intentions, a mean of 2.42 ( $SD = 0.63$ ) with a range from 1.07 to 4.67 was reported. The descriptive properties as well as the correlations between the study variables are available in Table 1.

#### 3.1 | Preparation video conditions

First, we analyzed the effect of the two conditions: video group (preparation) versus no-treatment control group. We expected a significantly higher mean in the preparation condition; for that purpose, a one-way ANOVA was computed. In contrast to our Hypothesis 1a, no significant effect of the condition on overall faking intentions was found ( $M_{\text{Video}} = 2.47$ ,  $SD_{\text{Video}} = 0.63$  vs.  $M_{\text{Control}} = 2.38$ ,  $SD_{\text{Control}} = 0.64$ ),  $F(1, 235) = 1.31$ ,  $p = .252$ . As has been consistently reported across previous faking research (e.g., Bourdage et al., 2018), a higher faking prevalence for male compared to female participants is typical, so gender was included as a predictor variable in the abovementioned ANOVA on overall faking. In the present study, we also found significantly higher faking intentions for male participants ( $M_{\text{Female}} = 2.27$ ,  $SD_{\text{Female}} = 0.56$  vs.  $M_{\text{Male}} = 2.53$ ,  $SD_{\text{Male}} = 0.66$ ),  $F(1, 233) = 9.47$ ,  $p = .002$ ,  $\eta_p^2 = .039$ . Furthermore, we controlled for the subjective and objective (logarithmized number of interviews) interview experience because participants with more experience or confidence could be less susceptible to advice and preparation in general which would potentially subvert our theoretical reasoning. The participants reported a mean of 8.03 previous interviews ( $SD = 13.38$ ,  $\gamma = 5.89$ ). Due to outliers, we again transformed the variable by its natural logarithm to reduce skewness ( $M = 1.59$ ,  $SD = 0.90$ ,  $\gamma = 0.58$  after transformation). We also controlled for age in an effort to reduce sample-specific effects since the age range was wider than in student samples. Bourdage et al. (2018) found that older and more experienced applicants engaged in different forms of IM compared to their younger counterparts. For Study 1, we repeatedly used the same control variables in the following analyses.

No significant interaction between gender and condition on overall faking was found,  $F(1, 226) = 1.39$ ,  $p = .239$ . The effect of condition on overall faking also remained non-significant,  $F(1, 226)$

$= 2.02$ ,  $p = .157$ . However, age had a significant negative effect on faking intentions,  $F(1, 226) = 6.47$ ,  $p = .012$ ,  $\eta_p^2 = .028$ . The specific correlations are reported in Table 1. Moreover, higher subjective interview experience was significantly associated with higher faking intentions,  $F(1, 226) = 15.33$ ,  $p < .001$ . The number of previous interviews<sup>1</sup> had no significant effect on overall faking,  $F(1, 226) = 1.56$ ,  $p = .212$ . In order to test if the condition instead impacted honest IM (Hypothesis 1b), we calculated the same ANOVA, with honest IM as the dependent variable. No significant effect of the condition on honest IM was found,  $F(1, 235) = 0.003$ ,  $p = .955$ . After including the same control variables, the result remained the same and none of the control variables showed a significant effect.

#### 3.2 | IM factors

To examine in more detail the reported faking intentions, we calculated ANOVAs for each IM factor individually, with condition as the predictor. In line with our hypothesis, a significant effect of condition on the factor image protection was found,  $F(1, 235) = 4.27$ ,  $p = .040$ ,  $\eta_p^2 = .018$ . A significantly higher IP mean for the video condition ( $M_{\text{Video}} = 2.65$ ,  $SD_{\text{Video}} = 0.65$  vs.  $M_{\text{Control}} = 2.47$ ,  $SD_{\text{Control}} = 0.67$ ) was found. The ANOVA results for the three remaining factors yielded no significant effects; those results are available in Table 2. Adding the control variables did not change the results: condition still showed a positive effect on IP,  $F(1, 227) = 4.38$ ,  $p = .037$ ,  $\eta_p^2 = .019$ . Lastly, we computed the same analyses for the factors of honest IM, Wilks' Lambda = .999,  $F(3, 233) = 0.11$ ,  $p = .954$ . As expected, no significant differences on the three factors of honest IM were found (see Table 2). The results remained unchanged when the control variables were added.

#### 3.3 | Self-reported interview preparation

To further test our hypothesis, we analyzed the effect of self-reported past interview preparation on the self-reported faking intentions. Overall, participants reported a mean usage of 3.10 ( $SD = 1.49$ ,  $\gamma = 0.78$ ) preparation categories with a range from 0 to 7. Of 237 participants, just two (0.8%) reported not using any of the seven preparation categories in the past. Twenty-seven participants (11.4%) reported having used one category; 54 participants (23.2%) reported having used two categories. Seventy-six participants (32.1%) reported having used three categories, while 46 participants (19.4%) reported having used four categories. Twelve participants (5.1%) reported having used five categories. Seven participants (3.0%) reported having used six categories, and lastly, 12 (5.1%) participants reported having used all categories. The mean overall time spent on interview preparation was 10.16 hr ( $SD = 15.56$ ,  $\gamma = 4.87$ ). For subsequent analyses, the time spent was transformed by its natural logarithm due to outliers ( $\gamma = 0.30$  after transformation).

### 3.4 | Extent of preparation

To test our hypotheses, we correlated the number of different preparation categories used with overall faking intentions, the IFB factors, and overall honest IM intentions as well as the honest IM factors. In contrast to our hypothesis, we found no significant correlation of the number of different preparation categories used with the aforementioned variables. The correlation values are reported in Table 1. Additionally, we calculated the same correlations as above with the logarithmized total time spent on preparation ( $M = 8.07$ ,  $SD = 7.03$ ). Contrary to our hypothesis, we again found no significant correlations between the total time spent on preparation<sup>2</sup> and the IM intention variables (see Table 1). Thus, on a broad level we found no support for Hypotheses 1a and 1b.

### 3.5 | Preparation categories

To expand the above results, we conducted analyses for the separate categories. For a descriptive overview of the separate categories in regard to the IM intention factors, the time spent using it, and the frequencies, see Appendix C. Two preparation categories with a significant impact on overall faking were found. First, the preparation category *online videos* showed significant effects in a positive direction on all faking variables. First and foremost, a positive effect on overall faking intentions was revealed,  $F(1, 235) = 9.20$ ,  $p = .003$ ,  $\eta_p^2 = .038$ . Contrary to this finding, no significant effect on the overall honest IM intentions was found,  $F(1, 235) = 2.55$ ,  $p = .112$ . Next, we looked into the effects on the four faking factors, finding significant positive effects of preparation via *online videos* on the faking factors SIC, EIC, and IP. The specific ANOVA values are displayed in Table 3. Regarding honest IM, we found that preparation via *online videos* was significantly associated with higher honest self-promotion but showed no significant effects on honest ingratiation or honest defensive IM (see Table 3 for the ANOVA values). None of the above results changed when the control variables were added to the analysis. The time spent preparing by watching *online videos* (see Appendix C for descriptive values) showed no significant correlation with overall faking

intentions ( $r = -.12$ ,  $p = .246$ ) or honest IM intentions ( $r = -.12$ ,  $p = .246$ ).

Second, *professional preparation* was also assumed to be positively correlated with faking intentions. An  $n$  of 43 participants (18.14% of the total sample) had participated in one of the two categories defined as *professional preparation*. Multiple statistical issues arise when comparing distinctly unequal cell sizes as in 43 professionally prepared participants versus 194 non-professionally prepared participants (Overall et al., 1995). Hence, the following analyses should be interpreted carefully and can be characterized as exploratory. Once again, we ran one-way ANOVAs on overall faking intentions, the IFB factors, and honest IM intentions as well as its factors. Levene's test for equality of variances revealed heteroskedasticity of residuals for the variable EIC,  $F(1, 235) = 5.25$ ,  $p = .023$ . This is especially problematic since a violation of the assumption of homoscedasticity potentially leads to a biased  $F$ -statistic when group sizes are unequal (Wen et al., 2007). To account for this violation of assumption, we followed the recommendation by Delacre et al. (2019) and performed Welch's  $F$ -tests. As indicated by the descriptive means in Table 3 and in Appendix C, the group of professionally prepared participants reported a significantly higher mean on overall faking intentions than the participants without *professional preparation*,  $F(1, 61.82) = 6.31$ ,  $p = .015$ ,  $\eta_p^2 = .026$ . Also, significant effects in the same direction with higher mean values for professionally prepared participants have been found for SIC, EIC and IN (values displayed in Table 3). No significant effect, however, was found for IP. Furthermore, as expected, no significant effect on overall honest IM was found,  $F(1, 57.92) = 0.31$ ,  $p = .579$ . Moreover, we found no significant effects on the honest IM factors (see Table 3). Correlating the time spent on preparation by professional means with overall faking intentions ( $r = -.18$ ,  $p = .281$ ) and with overall honest IM ( $r = .13$ ,  $p = .442$ ) revealed no significant correlations.

Lastly, the effects of the remaining preparation categories were analyzed. Due to unequal cell sizes ( $n_{\text{used}} = 221$  vs  $n_{\text{not-used}} = 16$ ), we excluded the category *information research* from further analyses. For *guides*, we found no significant effect on overall faking intentions  $F(1, 235) = 0.10$ ,  $p = .745$ . Preparation via *guides* also showed no significant effect on overall honest IM,  $F(1, 235) = 0.68$ ,  $p = .408$ . Likewise, preparation via *conversations with friends, family, etc.*

**TABLE 2** One-way ANOVA results of the predictor condition on the four faking and three honest IM intention factors

Dependent variable	$M_{\text{video}}$ (SD)	$M_{\text{control}}$ (SD)	$F(1, 235)$	$p$	partial $\eta^2$
Slight image creation	2.58 (0.67)	2.51 (0.67)	0.69	.404	.003
Extensive image creation	2.07 (0.77)	2.00 (0.74)	0.62	.431	.003
Image protection	2.65 (0.65)	2.47 (0.67)	4.27	.040	.018
Deceptive ingratiation	2.74 (0.71)	2.67 (0.75)	0.50	.478	.002
Honest self-promotion	4.21 (0.77)	4.19 (0.73)	0.01	.905	<.001
Honest defensive	3.35 (0.74)	3.38 (0.77)	0.10	.742	<.001
Honest ingratiation	3.52 (0.75)	3.49 (0.74)	0.11	.732	<.001

Note:  $N = 237$ . The predictor condition was coded 0 = video group ( $n = 120$ ) 1 = control group ( $n = 117$ ).

showed no significant effect on overall faking intentions,  $F(1, 235) = 1.23, p = .269$ . No significant effect on overall honest IM intentions was found either,  $F(1, 235) = 0.23, p = .630$ . Similarly, *practicing* showed no significant effect on overall faking intentions,  $F(1, 235) = 0.005, p = .944$ ; no effect of *practicing* on honest IM intentions was found either,  $F(1, 235) = 0.27, p = .603$ . We again controlled for gender and age, as well as for interview experience, but the results remained unchanged. We followed the above analyses by computing correlations between the time spent on the respective categories and overall faking intentions, finding no significant correlation between the time spent preparing via the respective category and overall faking intentions for *guides* ( $r = .12, p = .234$ ), *conversations* ( $r = .01, p = .902$ ), or *practicing* ( $r = .08, p = .483$ ). The same pattern was found for honest IM ( $r = .005, p = .957, r = .04, p = .573$  and  $r = .11, p = .335$ , respectively).

### 3.6 | Interview experience and additional variables

Considering the remaining study variables and the control variables, correlation analyses revealed effects for subjective interview experience (see Table 1). Participants who claimed to feel more experienced at the job interview process also reported higher overall faking intentions and higher intentions on the faking factors SIC, EIC, IP, and honest ingratiation. However, subjective interview experience did not significantly correlate with deceptive ingratiation, overall honest IM, self-promotion, or honest defensive. In comparison to the subjective interview experience, we conducted the same correlations with the number of previous interviews as an objective indicator of interview experience; however, Table 1 displays that the number of interviews showed no significant correlations with any faking or honest IM intentions, nor did the number of months since a participant's last interview show any effects on IM or the effects of the condition. As a last point, no significant differences between the students of the sample ( $n = 86$ ) and the working participants ( $n = 135$ ) on overall faking intentions were found,  $F(1, 219) = 0.001, p = .996$ . Alike, no effect on overall honest IM intentions was found,  $F(1, 219) = 0.12, p = .724$ . The same holds true for the IM factors.

## 4 | DISCUSSION—STUDY 1

The purpose of Study 1 was to examine the relationship between applicant interview preparation and subsequent faking intentions. We hypothesized that the overall extent of applicants' interview preparation is positively correlated with subsequent faking and honest IM intentions. Considering modern ways of interview preparation, we tested if manipulating participants by having them watch an authentic online video (Wehrle, 2017) that offered tips for a successful job interview, increases IM intentions in a subsequent fictional job interview. In addition, we checked if different kinds of past preparation behavior impact IM intentions.

TABLE 3 Separate ANOVAs of preparation via online videos and professional preparation on different IM intentions

IM intentions	Online videos				Professional preparation <sup>a</sup>							
	$M_{\text{used}}$ (SD)	$M_{\text{not-used}}$ (SD)	F	df	p	$\eta^2_p$	$M_{\text{used}}$ (SD)	$M_{\text{not-used}}$ (SD)	F	df	p	$\eta^2_p$
SIC	2.68 (0.68)	2.44 (0.65)	7.36	1,235	.007	.030	2.73 (0.62)	2.51 (0.68)	4.39	1,65.90	.017	.026
EIC	2.19 (0.79)	1.91 (0.70)	7.95	1,235	.005	.033	2.31 (0.85)	1.97 (0.71)	5.91	1,55.85	.018	.030
IP	2.67 (0.63)	2.47 (0.68)	5.58	1,235	.019	.023	2.67 (0.66)	2.53 (0.66)	1.45	1,62.38	.233	.006
IN	2.86 (0.74)	2.59 (0.70)	7.88	1,235	.005	.032	2.98 (0.70)	2.65 (0.72)	7.86	1,63.53	.007	.031
Honest self-promotion	4.07 (0.82)	4.36 (0.67)	5.73	1,235	.017	.024	4.17 (0.82)	4.21 (0.73)	0.07	1,57.80	.787	.000
Honest defensive	3.27 (0.79)	3.44 (0.72)	3.09	1,235	.080	.013	3.45 (0.64)	3.35 (0.78)	0.91	1,71.54	.343	.003
Honest ingratiation	3.53 (0.76)	3.48 (0.74)	0.20	1,235	.648	.001	3.59 (0.82)	3.48 (0.73)	0.57	1,57.71	.452	.003

Note:  $N = 237, n_{\text{used}} = 134, n_{\text{not-used}} = 103$  for online videos.

<sup>a</sup>The category "professional preparation" was computed by combining the two categories "preparation by seminars" and "trainings and coaching and career advice" ( $n = 43$ ). Due to unequal cell sizes ( $n_{\text{used}} = 43$  vs.  $n_{\text{not-used}} = 194$ ) for professional preparation, Welch's F-tests were calculated.

We found interview preparation to be common among the participants but also noticed interindividual differences in regard to the use of specific preparation categories; this will be covered in the general discussion. At an approximate estimate, the level of faking intentions are comparable to those found in a student sample by Hogue et al. (2012). This aligns with our test that students and working participants did not differ from each other in terms of IM intentions. Testing Hypotheses 1a and 1b, we found no significant correlation for either the total number of preparation categories used or the overall amount of time invested in the preparation with faking or honest IM intentions. Since the different categories vary tremendously in terms of their usage and effects, the abovementioned result is understandable. Also, the presented preparation video significantly increased faking intentions on the factor image protection (IP) but not on the overall faking intentions. To some extent, this can be explained by the content of the presented video (see Appendix A). Many of the presented tips aim to disguise unfitting characteristics rather than to construct fictional ones. The focus of the video could also explain the non-significant effect on honest IM (in contrast to Hypothesis 1b). Therefore, the content of the preparation video seems to be of importance, but watching one short video does not, per se, trigger higher overall faking intentions. That said, it shows that participants are somewhat susceptible to interview advice which is in line with empirical evidence for the effectiveness of virtual interview training (Langer et al., 2016).

On a more negative note, our study suggests that the effectiveness of interview preparation on deceptive IM must also be assumed. Interestingly, Bourdage et al. (2018) also found an effect of self-reported interview training on IP but none of the other faking factors. This might be indicative for specific faking factors that are more apt than others to be impacted by interview preparation. It might also stem from the fact that it is unlikely for coaches to actively promote lying (EIC) but to instead suggest a less drastic measure like omitting negative information. In sum, based on a broad aggregation of preparation and our manipulation, we found only limited support for Hypotheses 1a and 1b.

The aforementioned finding is somewhat put into perspective when past preparation via *online videos* is considered as well. This type of preparation was significantly correlated with higher means on the variables overall faking intentions, slight image creation, extensive image creation, deceptive ingratiation, and image protection. Considering honest IM, a positive correlation with self-promotion was found. Given the mean time of 2.11 hr (adjusted by cutting off the outliers above the 90 percentile) spent on preparation via *online videos*, applicants will watch more than one video in preparation for an important job interview. In the process, viewers would most likely encounter videos covering different aspects of IM behavior. In turn, this variety of videos could lead to the increased impact by past preparation via watching *online videos* on faking and self-promotion in comparison to the presented preparation video. On an exploratory note, we found that *professional preparation* was positively correlated with all faking intention factors except for image protection. Given the unequal group sizes, this comparison needs to be discussed cautiously. Despite the

need for follow-up studies, this result supports the theoretical notion that *professional preparation* (e.g., interview preparation seminars) is correlated with higher faking intentions (Levashina & Campion, 2006). In sum, the effects of preparation via *online videos* and by professional means indicate that advice from alleged experts, rather than interview preparation in general, increases faking intentions. This effectiveness might be due to the fact that both aforementioned preparation categories achieve a more realistic content presentation compared to preparation categories like reading guides (as discussed in online Supporting Information S1). Taken together, the present findings support Hypothesis 1a.

#### 4.1 | Limitations of Study 1

The design implemented for Study 1 allowed for a broad test of Hypotheses 1a and 1b as well as a field-experimental approach. Despite that, only limited generalization of the results is appropriate because the specific manipulation video covered a wide range of different interview questions, but the advice focused mainly on IP and on deceptive IM. Thus, in an effort to increase the ecological validity, an authentic video was chosen but the content of the online video was not controlled. In addition, it is reasonable to assume that different *online videos* aim specifically at different IM categories. In sum, this creates an entangled structure of effects.

The scenario of an imaginary job interview also raises some issues. First, there is a time incongruence because we assessed past preparation but applied it to a future job interview. This could be inappropriate if the situational aspects change (i.e., actually being in need of a new job, job characteristics, etc.). A stricter control of such variables would be required. For instance, applicants might not turn to faking if the stakes are not high enough (e.g., initial and informed attractiveness needs to be present, Marcus, 2009). This may have led to lower effect sizes than preparation would potentially have on actual faking behavior. Second, the use of IM intentions is problematic in regard to the effects of preparation on IM due to the underlying theoretical processes. For instance, it remains unclear if it is mainly the capacity to fake that preparation influences. Since the motivation to fake is theoretically more strongly associated with intentions to fake than capacity to fake (Ellingson & McFarland, 2011), one would expect smaller effects on faking intentions but larger effects on actual faking. Overall, the design of Study 1 did not allow us to test Hypotheses 2 to 4 due to the abovementioned restrictions. Therefore, in order to expand and clarify the above findings, we conducted Study 2.

### 5 | STUDY 2

The goal of Study 2 was to extend the findings of Study 1 by resolving some of the limitations by multiple adjustments. First, we decided to focus on actual IM behavior in the past to resolve the aforementioned limitations attached to faking intentions. Second,

we added further variables to test our Hypotheses 2 to 4 and to account for the complex theoretical assumptions in an effort to integrate theoretical postulates and empirical findings. Third, we decided to recruit a student sample. Regarding our hypotheses, and given that students are naturally less experienced than their older counterparts, it can be assumed that they should be more amenable to the influences of the preparation process and also that they would benefit more from it. In addition, student samples are commonly used in faking (Levashina & Campion, 2007) and IM (Turnley & Bolino, 2001) research. Lastly, we added additional control variables (i.e., importance of the job interview).

## 6 | METHOD

### 6.1 | Design and sample

To test the hypotheses, we conducted a correlational design. Prerequisites for participants were a) having had a job interview in the past 12 months; b) being enrolled currently as a student; and c) being proficient in German. A sample of  $N = 206$  participants was again recruited using Prolific Academic. Participating took about 10 min, and participants were compensated with 1.10€. The sample consisted of 88 female, 115 male, and three diverse participants with a mean age of 23.1 years ( $SD = 5.3$ ). About 85.9% of the sample declared as full-time students, while the remaining 14.1% studied part-time while working a full-time job. An average of 2.6 ( $SD = 3.1$ ) years of work experience was reported, which was subsequently logarithmized due to high skewness ( $\gamma = 3.32$  before and  $\gamma = 0.15$  after transformation). Participants had done an average of 4.5 interviews ( $SD = 4.6$ ), which was also logarithmized. The importance of the job interview ("How important was it for you to be successful in the job interview?") was assessed on a 5-point scale from 1 = not important at all to 5 = very important. The mean was 3.9 ( $SD = 0.8$ ). Also, the attractiveness ("The company is an attractive employer for me," and "The company is one of my favorite employers") was rated on a 5-point scale with a mean of 3.5 ( $SD = 0.8$ ).

### 6.2 | Procedure

The study was again carried out using the online survey software Unipark (QuestBack, Cologne, Germany). The participants first answered general demographic questions (regarding gender, age, education, work experience, occupation, and number of interviews) and then specific questions about their last interview (regarding quality of memory, preparation categories used, interview duration, need for a new job, result, and attractiveness of the job). Afterward, the IM during the last interview was assessed by implementing a randomized item order. Lastly, the perceived interview difficulty, willingness, opportunity and capacity to fake, and subjective ATIC were assessed using the following measures.

## 6.3 | Measures

### 6.3.1 | Impression management and job interview preparation

Deceptive IM was operationalized the same way as in Study 1 using the IFB Levashina and Campion (2007) in its German translation by Buehl and Melchers (2017). For Study 2, the original instruction and items were used because they refer to faking in the past. The instruction was "Please think about your last employment interviews that you had. What strategies from the list below did you use during your interview? Rate the extent to which you used each strategy by circling the appropriate number." The Cronbach's  $\alpha$  for the entire scale was .96. Cronbach's  $\alpha$  values of .87 for SIC, .93 for EIC, .83 for IP, and .89 for IN were found. Honest IM was measured by the German translation (see appendix B) of the HIIM-S (Bourdage et al., 2018) again. The items from study 1 were retained but were grammatically adjusted to assess IM behavior in the last interview. The items were presented in a randomized fashion. The Cronbach's  $\alpha$  for the entire scale was .78. The Cronbach's  $\alpha$  values of self-promotion, honest ingratiation and honest defensive IM were .70, .70, and .68, respectively.

To assess the preparation categories applicants had used, we implemented the same procedure as in Study 1. The instruction read, "Please report which of the following methods of preparation you used in advance of your last job interview." The used categories were coded binary (0 = not used, 1 = used). The participants also reported the time they spent using each category (hours). We again included the overall extent of preparation by calculating the number of different preparation categories used as well as the overall time spent on preparation. We again included an "other" category so that subjects could state alternate methods of preparation that the category system might have left out. Five subjects stated additional methods of preparation using the "other" category. One applicant reported the use of career service consultation while the other categories referred to extended self-reflection (e.g., by going through the application documents).

### 6.3.2 | Willingness, capacity, and opportunity to fake

We assessed participants' willingness to fake in their interviews using two items created by Law et al. (2016). The two items were, "I was more than willing to deceive the interviewer" and, "I felt motivated to mislead the interviewer." These two items were translated into German and mostly cover the motivation to fake. We also added a third item: "I was willing to bend the truth to improve my chances for success." The Cronbach's  $\alpha$  of the three items was .79. We measured the capability or confidence participants had in using faking in their interviews using the three items used by Law et al. (2016). The three items were, "I felt confident in my ability to deceive the interviewer"; "I could have provided inaccurate information about myself without the interviewer knowing it"; and, "I could have misled

the interviewer if I had wanted to." The items were translated into German. The Cronbach's  $\alpha$  was .71. The opportunity to fake was measured using six items, with four of those aiming at the IFB factors and two assessing the general impression of opportunities to fake in the interview. The items were, "I had the opportunity to give answers that stretched the truth"; "I had the opportunity to lie to the interviewer"; "I had the opportunity to cajole the interviewer"; "I had the opportunity to omit aspects that would have reflected badly on me"; "There were opportunities to mislead the interviewer"; and, "There were opportunities to deceive the interviewer." The Cronbach's  $\alpha$  was .85.

### 6.3.3 | Perceived interview difficulty and (subjective) ATIC

The perceived interview difficulty was measured using eight items (e.g., "I had difficulty coming up with good answers to the interviewer's questions") first implemented by Chapman and Zweig (2005). The items were rated on a 7-point scale from 1 = strongly disagree to 7 = strongly agree. The Cronbach's  $\alpha$  was .82. The present study design did not allow for objective assessment of the ATIC because participants did not receive the same interview questions; instead, we assessed the subjective ATIC or confidence in knowing about the selection criteria in the interview. Five items were created: "I knew what the interviewer tried to find out with his/her questions"; "It was obvious to me what the interviewer wanted to hear"; "I felt like I knew the motives hidden behind the interviewer's questions"; "I figured out what the interviewer actually wanted to find out"; and, "I knew which criteria the respective questions were aimed at." The Cronbach's  $\alpha$  of the ATIC scale was .82.

## 7 | RESULTS

For overall faking, a mean of 2.20 ( $SD = 0.66$ ) with a range from 1.03 to 4.10 was reported. The descriptive values and intercorrelations of the major study variables can be found in the correlation matrix (Table 4). The preparation category *information research* was used by 89.3% of the participants, and therefore again excluded from further analysis due to the unequal cell size. Testing Hypotheses 1a and 1b again, we first looked at the number of categories used as well as the overall time spent on preparation. The latter was transformed by its natural logarithm in order to reduce the skewness ( $M = 1.51$ ,  $SD = 0.73$  after transformation<sup>3</sup>). Both the number of different categories as well as the overall time spent on preparation positively correlated with overall faking,  $r = .17$ ,  $p = .010$  and  $r = .23$ ,  $p = .003$ , respectively. Including both variables in a linear regression on overall faking, we found that the multiple correlation for the regression (with an  $R^2$  of .05) was significantly different from zero,  $F(2, 158) = 4.49$ ,  $p = .013$ . The number of different categories used showed no significant effect on overall faking ( $\beta = -.01$ ,  $t = -0.22$ ,  $p = .822$ ). The variable total

time spent on preparation showed a significant positive effect on overall faking ( $\beta = .24$ ,  $t = 2.77$ ,  $p = .006$ ). Similarly, significant positive correlations with honest IM were found,  $r = .20$ ,  $p = .003$  and  $r = .20$ ,  $p = .013$ , respectively. Again testing the two variables in a linear regression, we found that the multiple correlation for the regression (with an  $R^2$  of .04) was significantly different from zero,  $F(2, 158) = 3.48$ ,  $p = .033$ . A significant positive coefficient for the total time spent on preparation ( $\beta = .17$ ,  $t = 2.02$ ,  $p = .045$ ) was revealed. However, the number of different preparation categories used showed no significant effect on honest IM ( $\beta = .05$ ,  $t = 0.61$ ,  $p = .537$ ).

Next, we looked at the effects of certain preparation categories on impression management. Appendix D presents in detail the descriptive values of the specific categories for each IM factor. To further test Hypotheses 1a and 1b, we ran linear regressions with faking overall or honest IM as dependent variables and all preparation categories except *information research* as predictors. This approach made it possible to identify the categories that remained significant predictors even if the others are included. Regarding overall faking, the multiple correlation for the regression (with an  $R^2$  of .18) was significantly different from zero,  $F(5, 200) = 8.89$ ,  $p < .001$ . Significant coefficients for *online videos* ( $\beta = .33$ ,  $t = 5.17$ ,  $p < .001$ ) and *professional preparation* ( $\beta = .22$ ,  $t = 3.40$ ,  $p = .001$ ), indicating higher overall faking values for participants who used these kinds of preparation, were found. None of the above results changed when we controlled for the importance of the interview, but we found a significant negative association between importance and faking ( $\beta = -.13$ ,  $t = -2.14$ ,  $p = .033$ ). Regarding overall honest IM, the multiple correlation for the regression (with an  $R^2$  of .11) was also significantly different from zero,  $F(5, 200) = 5.18$ ,  $p < .001$ . We found significant positive effects for *online videos* ( $\beta = .21$ ,  $t = 3.12$ ,  $p = .002$ ) and *professional preparation* ( $\beta = .23$ ,  $t = 3.35$ ,  $p = .001$ ) on overall honest IM. None of the other categories showed significant effects on IM. The regression values for each category are displayed in Table 5. Next, we examined the impact of *professional preparation* and *online videos* on the IM factors. Table 6 shows the separate ANOVA values for the seven IM factors (comparable to Table 3 of Study 1). The group of participants who used *professional preparation* or *online videos* reported significantly higher values on all IM factors except for honest self-promotion. In sum, the data support Hypotheses 1a and 1b.

### 7.1 | ATIC and capacity to fake

To test Hypotheses 2 to 4, we examined effects of job interview preparation on different dependent variables. As postulated by Levashina and Campion (2006), as well as by Roulin et al. (2016), the variables willingness ( $r = .75$ ,  $p < .001$ ), opportunity ( $r = .50$ ,  $p < .001$ ), and capacity to fake ( $r = .53$ ,  $p < .001$ ), as well as subjective ATIC ( $r = .32$ ,  $p < .001$ ) and perceived interview difficulty ( $r = .26$ ,  $p < .001$ ), all showed significant positive correlations with overall faking.

We first tested Hypothesis 2 on a broad level by running a regression with the number of different categories used and the total

TABLE 4 Means, standard deviations, and correlations among the major variables of Study 2

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Faking (overall)	2.20	.66	-																								
2. SIC	2.25	.66	.94**	-																							
3. EIC	1.92	.75	.91**	.86**	-																						
4. IP	2.17	.73	.90**	.79**	.79**	-																					
5. IN	2.46	.77	.88**	.79**	.69**	.71**	-																				
6. Honest IM (overall)	3.05	.62	.48**	.45**	.33**	.43**	.54**	-																			
7. Self-Promotion	3.60	.80	.06	.10	-.07	.04	.16	.68**	-																		
8. Honest Ingratiation	2.91	.83	.50**	.46**	.33**	.41**	.61**	.80**	.37**	-																	
9. Defensive	2.65	.85	.50**	.45**	.46**	.48**	.42**	.74**	.21**	.41**	-																
10. Total number of categories	3.14	1.61	.17	.16	.12	.18	.12	.18**	.20**	.11	.18**	.16*	-														
11. Total preparation time (h) <sup>b</sup>	1.51	.73	.23**	.16*	.24**	.23**	.18*	.20*	.02	.10	.29**	.44**	-														
12. Guides <sup>a</sup>	.42	.49	.02	.00	-.03	.03	.06	.13	.11	.16*	.00	.44**	.12	-													
13. Online Videos <sup>a</sup>	.44	.49	.35**	.35**	.30**	.32**	.30**	.22**	.04	.23**	.22**	.39**	.34**	.01	-												
14. Conversations <sup>a</sup>	.65	.47	-.08	-.08	-.12	-.09	-.01	.01	.06	.02	-.05	.39**	.17*	.05	.01	-											
15. Practicing <sup>a</sup>	.31	.46	.10	.07	.09	.12	.08	.05	.04	.02	.06	.59**	.32**	.14*	.18**	.05	-										
16. Professional <sup>a</sup>	.22	.42	.24**	.25**	.24**	.22**	.18**	.23**	.12	.15	.25**	.56**	.30**	.05	.07	.03	.23**	-									
17. Interview Difficulty	3.58	1.00	.26**	.27**	.23**	.26**	.18*	.02	-.14*	-.04	.23**	.06	.22**	-.02	.31**	-.08	.03	.06	-								
18. Capacity	2.56	.96	.53**	.48**	.53**	.50**	.40**	.20**	-.01	.16*	.29**	-.02	.06	-.00	.10	-.18*	.01	.04	.04	-							
19. Opportunity	2.60	.90	.50**	.48**	.47**	.50**	.38**	.25**	.06	.18*	.31**	-.05	.09	-.02	.11	-.17*	.04	-.03	.09	.80**	-						
20. Willingness	1.89	.91	.75**	.70**	.77**	.71**	.54**	.12	-.17*	.13	.28**	.13	.21**	-.02	.26**	-.13	.09	.22**	.25**	.59**	.50**	-					
21. ATIC	3.28	.77	.32**	.31**	.24**	.27**	.35**	.45**	.34**	.42**	.24**	.03	.03	.02	.01	-.08	.05	.17*	-.11	.41**	.38**	.20**	-				
22. Attractiveness	3.51	.88	-.09	-.04	-.10	-.12	-.05	.11	.18**	.11	-.04	.03	-.15	.14*	-.13*	.00	.04	.05	.00	-.15*	-.22**	-.14*	.12	-			
23. Number of interviews <sup>b</sup>	1.21	.73	-.11	-.12	-.16*	-.05	-.06	.02	.05	.05	-.06	-.00	-.10	.04	-.20**	-.07	.00	.03	.00	-.07	-.04	-.09	-.00	.22**	-		
24. Importance	3.93	.88	-.11	-.06	-.13	-.11	-.09	.09	.11	.06	.01	.15*	-.03	.11	.03	.05	.10	.06	.01	-.15*	-.10	-.13	-.00	.36**	.21**	-	
25. Gender <sup>c</sup>	.43	.49	-.11	-.07	-.17*	-.14*	-.01	.07	.10	.13	-.07	-.02	-.02	.01	-.04	.03	.00	-.08	.00	-.15*	-.12	-.13	-.08	.12	.10	.07	-
26. Age	23.14	5.35	-.18**	-.17*	-.25**	-.14*	-.11	.05	.09	.07	-.06	.02	.00	.02	-.13	.01	.06	.03	.01	-.17*	-.13	-.20**	-.05	.17*	.41**	.18**	.09

Note: N = 206.

<sup>a</sup>1 = used, 0 = not used.<sup>b</sup>The logarithmized variables were used to calculate the correlations.<sup>c</sup>1 = male, 0 = female.\**p* < .05. \*\**p* < .01.

**TABLE 5** Linear regressions on faking and honest IM with preparation categories as predictors

Variables	Faking <sup>a</sup>				Honest IM <sup>b</sup>			
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Guides	0.01	0.08	0.15	.875	0.15	0.08	1.83	.068
Online videos	0.45	0.08	5.17	<.001	0.26	0.08	3.12	.002
Conversations with friends, family, etc.	-0.14	0.09	-1.55	.121	0.00	0.08	-0.00	.998
Practicing with friends, family, etc.	-0.007	0.09	-0.72	.943	-0.07	0.09	-0.75	.453
Professional preparation <sup>c</sup>	0.35	0.10	3.40	.001	0.34	0.10	3.35	.001
<i>R</i> <sup>2</sup>	0.18				0.11			

Note: *N* = 206.

<sup>a</sup>Faking was computed by using the overall mean of the Interview Faking Behavior Scale (IFB).

<sup>b</sup>Honest IM was computed by using the overall mean of the short Honest Interview Impression Management scale (HIIM-S).

<sup>c</sup>The category "professional preparation" ( $n_{used} = 47$ ) was computed by combining the two categories "preparation by seminars" ( $n_{used} = 19$ ) and "trainings and coaching and career advice" ( $n_{used} = 28$ ).

**TABLE 6** Separate ANOVAs of online videos and professional preparation on the IM factors

IM factors	Online videos					Professional preparation <sup>a</sup>				
	<i>M</i> <sub>used</sub> (SD)	<i>M</i> <sub>not-used</sub> (SD)	<i>F</i> (1, 198)	<i>p</i>	$\eta_p^2$	<i>M</i> <sub>used</sub> (SD)	<i>M</i> <sub>not-used</sub> (SD)	<i>F</i> (1, 198)	<i>p</i>	$\eta_p^2$
SIC	2.51 (0.67)	2.03 (0.58)	26.64	<.001	.119	2.55 (0.70)	2.15 (0.63)	13.73	<.001	.065
EIC	2.18 (0.79)	1.72 (0.65)	18.29	<.001	.085	2.26 (0.84)	1.82 (0.69)	13.65	<.001	.065
IP	2.43 (0.69)	1.95 (0.69)	25.33	<.001	.113	2.47 (0.71)	2.08 (0.71)	11.26	.001	.054
IN	2.73 (0.74)	2.26 (0.73)	20.40	<.001	.093	2.72 (0.67)	2.39 (0.79)	7.10	.008	.035
Honest self-promotion	3.64 (0.77)	3.58 (0.83)	0.37	.541	.002	3.79 (0.72)	3.55 (0.82)	2.94	.088	.015
Honest defensive	2.86 (0.73)	2.48 (0.90)	12.58	<.001	.060	3.05 (0.75)	2.53 (0.84)	5.10	.025	.025
Honest ingratiation	3.13 (0.77)	2.47 (0.84)	9.83	.002	.047	3.15 (0.60)	2.84 (0.87)	13.80	<.001	.065

Note: *N* = 206. Number of past interviews, importance of the interview, and gender were used as control variables.  $n_{used} = 91$ ,  $n_{not-used} = 115$  for online videos.

<sup>a</sup>The category "professional preparation" ( $n_{used} = 47$ ) was computed by combining the two categories "preparation by seminars" ( $n_{used} = 19$ ) and "trainings and coaching and career advice" ( $n_{used} = 28$ ).

time spent on preparation as predictors on the criterion ATIC. The multiple correlation for the regression (with an  $R^2$  of .04) did not significantly differ from zero,  $F(2, 153) = 0.32$ ,  $p = .723$ . Also, no significant coefficients for either the number of different categories ( $\beta = -.06$ ,  $t = -0.69$ ,  $p = .486$ ) or the total preparation time ( $\beta = .06$ ,  $t = 0.67$ ,  $p = .502$ ) were found. Further testing Hypothesis 2, we computed a regression of the different preparation categories on ATIC. The multiple correlation for the regression (with an  $R^2$  of .03) did not significantly differ from zero,  $F(5, 191) = 1.55$ ,  $p = .175$ . However, we found that *professional preparation* had a significant positive effect on ATIC ( $\beta = .17$ ,  $t = 2.32$ ,  $p = .021$ ). Preparation via *online videos* ( $\beta = .003$ ,  $t = 0.04$ ,  $p = .961$ ), *conversing* ( $\beta = -.09$ ,  $t = -1.32$ ,  $p = .187$ ) or *practicing* with friends, family, etc. ( $\beta = .01$ ,  $t = 0.20$ ,  $p = .839$ ), and *guides* ( $\beta = .01$ ,  $t = 0.23$ ,  $p = .815$ ) did not show significant coefficients. We consider this finding as limited support for Hypothesis 2.

## 7.2 | Willingness to fake

The willingness to fake showed significant positive correlations with all faking factors and honest defensive IM (see Table 4). In contrast, a significant negative correlation was found with honest self-promotion. Considering Hypothesis 3, we first tested the number of different preparation categories used and the total time spent on preparation as predictors in a regression on the criterion willingness to fake. The multiple correlation for the regression (with an  $R^2$  of .04) was significantly different from zero,  $F(2, 153) = 3.60$ ,  $p = .030$ . The number of different preparation categories used remained a non-significant predictor ( $\beta = .009$ ,  $t = 0.10$ ,  $p = .915$ ), but the total preparation time had a significant positive effect on the willingness to fake ( $\beta = .20$ ,  $t = 2.34$ ,  $p = .020$ ). Next, we included the preparation categories as predictors in a regression on the willingness to fake. The multiple correlation for the regression (with an  $R^2$  of



.12) was significantly different from zero,  $F(5, 191) = 5.63, p < .001$ . Preparation via *online videos* ( $\beta = .24, t = 3.53, p = .001$ ) and *professional preparation* ( $\beta = .20, t = 2.95, p = .004$ ) showed significant positive effects on the willingness to fake. *Guides* ( $\beta = -.026, t = -0.37, p = .708$ ) and *practice* ( $\beta = .01, t = 0.17, p = .858$ ) remained non-significant predictors. Furthermore, we found preparation via *conversations with friends, family, etc.* ( $\beta = -.13, t = -1.99, p = .048$ ) to be associated with a lower willingness to fake. However, the latter effect becomes non-significant ( $\beta = -.12, t = 1.91, p = .058$ ) if the importance of the interview ( $\beta = -.16, t = -2.38, p = .018$ ) is added as a control variable, while both *online videos* ( $\beta = .24, t = 3.66, p < .001$ ) and *professional preparation* ( $\beta = .21, t = 3.16, p = .002$ ) remain significant predictors with positive coefficients. Overall, Hypothesis 3 was supported by the data.

### 7.3 | Interview difficulty

In the present study, the perceived interview difficulty was positively correlated to overall faking (and the four faking factors) and honest defensive IM but negatively correlated to honest self-promotion (see Table 4). The number of preparation categories used did not significantly correlate with interview difficulty ( $r = .06, p = .391$ ), but the total time spent on preparation was positively correlated with the perceived interview difficulty ( $r = .22, p = .005$ ).

We first tested Hypothesis 4 by running a regression of the total preparation time and the number of different preparation categories used on the criterion interview difficulty. The multiple correlation for the regression (with an  $R^2$  of .05) was significantly different from zero,  $F(2, 153) = 4.49, p = .013$ . The number of different preparation categories used did not show a significant effect ( $\beta = -.08, t = -0.96, p = .338$ ), but a higher total preparation time was associated with a higher perceived interview difficulty ( $\beta = .26, t = 2.96, p = .003$ ). Next, we calculated a regression with the preparation categories as predictors. The multiple correlation for the regression (with an  $R^2$  of .10) was also significantly different from zero,  $F(5, 191) = 4.60, p = .001$ . No significant coefficients were found for *guides* ( $\beta = -.02, t = -0.34, p = .731$ ), *conversing* ( $\beta = -.08, t = -1.22, p = .221$ ) or *practicing with friends, family, etc.* ( $\beta = -.02, t = -0.35, p = .727$ ), and *professional preparation* ( $\beta = .05, t = 0.74, p = .459$ ). However, preparation via *online videos* ( $\beta = .31, t = 4.48, p < .001$ ) had a significant positive effect on the perceived interview difficulty. The results remained unchanged when the importance of the interview was controlled for. Thus, we found support for Hypothesis 4.

### 7.4 | Additional analyses and control variables

We also considered additional variables and included further control variables. Given the empirically confirmed effectiveness that interview training can have (Langer et al., 2016), we checked the impact of preparation on the reported interview outcome by calculating a logistic regression of the preparation categories and the total time

spent on preparation on outcome ( $n_{\text{positive outcome}} = 156$  vs.  $n_{\text{negative outcome}} = 30$ ). The negative outcome was coded as 0 and the positive outcome as 1. Given the unequal cell sizes, only a cautious interpretation of the findings is appropriate. A significant regression equation with a Nagelkerke's  $R^2$  of .17 was found,  $\chi^2(6) = 15.98, p = .014$ . *Guides* ( $B = -0.41, p = .391$ ), *online videos* ( $B = -0.38, p = .440$ ), *conversations* ( $B = -0.41, p = .426$ ), and *practicing with friends, family, etc.* ( $B = -0.42, p = .419$ ) all showed no significant effect on the interview outcome. However, *professional preparation* ( $B = -1.39, p = .040$ ) and total time spent preparing ( $B = -1.54, p < .001$ ) were negatively associated with the interview success.

Next, we again looked into the objective (number of previous interviews) as well as subjective interview experience. A higher subjective interview experience was significantly correlated with higher values on all IM factors except for honest self-promotion (see Table 4). The variable number of previous interviews<sup>4</sup> was only negatively correlated with EIC. The attractiveness of the jobs for which participants interviewed could potentially impact the findings of preparation on IM because the necessary motivation to fake (Ellingson & McFarland, 2011) might only exist when the job holds a certain degree of attractiveness. A higher job attractiveness was significantly correlated with more honest self-promotion ( $r = .18, p = .008$ ) but showed no significant correlation with any other IM variable (see Table 4).

Multiple theoretical frameworks (e.g., Levashina & Campion, 2006) assume that the opportunity to fake moderates the relationship between the willingness to fake and actual faking behavior. Also, to complement the subjective opportunity to fake, we assessed the duration of the interview. Levashina and Campion (2006) proposed that shorter interviews provide more opportunity to fake. Significant negative correlations with overall faking as well as the opportunity to fake (see Table 4) confirmed this pattern for the present data. In the subsequent analysis, we, therefore, controlled for the abovementioned variables and for gender to increase the validation of the present study's findings.

To test if the control variables change the findings of preparation on IM, we computed a linear regression on overall faking. As predictors, we added the preparation categories, attractiveness of the job, importance of the interview, opportunity to fake, the number of interviews, and gender. The multiple correlation for the regression (with an  $R^2$  of .45) was significantly different from zero,  $F(10, 181) = 14.89, p < .001$ . We found significant positive coefficients for the predictors *professional preparation* ( $\beta = .26, t = 4.58, p < .001$ ), preparation by *online videos* ( $\beta = .34, t = 5.90, p < .001$ ), attractiveness ( $\beta = .15, t = 2.48, p = .014$ ), and the opportunity to fake ( $\beta = .49, t = 8.43, p < .001$ ). A higher importance of the interview was, however, significantly associated with less faking ( $\beta = -.12, t = -1.99, p = .048$ ). *Practicing* ( $\beta = -.04, t = -0.68, p = .495$ ) or *having conversations with friends, family, etc.* ( $\beta = .05, t = 0.97, p = .330$ ), *guides* ( $\beta = .02, t = 0.39, p = .696$ ), the number of past interviews ( $\beta = -.04, t = -0.79, p = .429$ ), and gender ( $\beta = .002, t = 0.03, p = .972$ ) remained non-significant predictors. The results remained unchanged compared to the regression model without the control variables, with that said, our findings do not depend on the control variables.

Lastly, we also conducted exploratory mediation analyses to test if preparation might pose indirect effects on different outcome variables. Due to methodological constraints (e.g., lack of temporal precedence), we provide the mediation analyses in online Supporting Information S2.

## 8 | DISCUSSION—STUDY 2

The purpose of Study 2 was to examine the relationship between applicants' job interview preparation and actual IM behavior. Unlike the results for IM intentions, the extent of applicants' preparation showed significant positive correlations with both deceptive and honest IM. Thus, we found support for Hypotheses 1a and 1b. The divergent effects of the general extent of preparation found in Study 2 (compared to Study 1) could be due to the time congruency aligning the specific preparation behavior to the IM behavior in the specific interview, indicating that past preparation has less influence on future IM behavior. Thus, the specificity of preparation behavior for different job profiles and interviews seems to be important. The repeated impact of preparation via *online videos* as well as *professional preparation* on faking is discussed below.

Concerning Hypothesis 2, we found that *professional preparation* was positively correlated with the applicants' ATIC. The effect of *professional preparation* might be due to its higher share of directed feedback in comparison to other forms of preparation (e.g., *online videos*). However, Study 2 relied on self-reports by the participants, which is a limitation in regard to ATIC as well as the opportunity to fake. Both variables are usually operationalized in a more objective way (König et al., 2007; Levashina & Campion, 2007). This could potentially explain why we found no significant effects on the capacity to fake, although *professional preparation*, indeed, showed a significant correlation with higher subjective ATIC; the abovementioned finding, thus, needs further empirical evidence. *Professional preparation* and preparation by *online videos* as well as a higher total preparation time were correlated with a higher willingness to fake (Hypothesis 3). This aligns with the theoretical postulates by Levashina and Campion (2006). Concerning Hypothesis 4, we found preparation via *online videos* to be correlated with higher perceived interview difficulty. Moreover, the categories assumed to be related mainly to the practice aspect of preparation (Messick, 1981) and reflecting oneself (e.g., *conversations* with family) were not significantly correlated with the perceived interview difficulty; external inputs, therefore, seem to prove especially effective.

The mediation analyses (see online Supporting Information S2) suggest that *online videos* and *professional preparation* have positive indirect effects on overall faking via a higher willingness to fake. Furthermore, the mediation analyses suggest that *online videos* have a positive indirect effect on the willingness to fake because of a higher perceived interview difficulty. Lastly, in regard to the effects on the IM factors, it is noteworthy that honest self-promotion is not positively correlated with *professional preparation* or preparation via *online videos*, but all other IM factors are. In line with our

theoretical reasoning, honest self-promotion requires applicants to be in possession of fitting (or externally suggested) qualifications. Since preparation by watching *online videos* is also correlated with a higher perceived interview difficulty, applicants might not feel like they actually possess these qualifications. Consequently, applicants must turn to deceptive forms of IM or use other forms of honest IM.

## 9 | GENERAL DISCUSSION

We conducted two studies to test the theoretically assumed (Levashina & Campion, 2006; Marcus, 2009; Roulin et al., 2016) relationship between interview preparation (e.g., interview coaching) and deceptive as well as honest IM. First, a one-factorial online field experiment was implemented. We tested if watching an authentic online video (Wehrle, 2017) that offered tips for a successful job interview increases IM intentions in a subsequent fictional job interview. Second, we conducted a study focusing on past faking behavior and added further faking-related variables as specified by the theoretical frameworks. We first discuss the preparation behavior before linking it to IM.

### 9.1 | Applicant preparation usage

To obtain an overview of the usage of our developed category system, we merged the preparation data of Studies 1 and 2 ( $N = 443$ ). Combining the data on preparation behavior of both studies provides an impression of how applicants prepare. As was expected due to the high-stakes situation an interview represents, 99.5% ( $n = 441$ ) of the applicants reported having used at least one kind of preparation. Since 91.4% of participants reported use of *information research*, we deem this as an obvious minimum standard for preparation and also somewhat of a necessity. In comparison, preparation via categories like *online videos* (43.8%), *conversations* (67.7%), or *practicing* (32.5%) with friends, family, or acquaintances was more evenly distributed. Lastly, the categories considered as *professional preparation* were used by 20.4% of the individuals, indicating a substantial proportion of applicants use this rather sophisticated and costly kind of preparation.

The preparation pattern of both studies shows that (a) individuals differ in regard to their preparation used and our category system reliably detects these differences; (b) low-cost and low-effort preparation (e.g., searching for information, talking to family members, etc.) show higher frequencies than does higher effort preparation (e.g., *practicing with friends* or attending a *professional preparation* seminar), which adds to the face validity of the category system; and (c) the aggregated questions used in previous studies (e.g., Bourdage et al., 2018; Kristof-Brown et al., 2002) might, as expected, not be ideal for examining the effects of job interview preparation because they do not take into account the complexity of preparation. As mentioned, almost every applicant used *information research*, which could be because *information*

research is arguably the most important avenue for preparation as it solely concerns job and employer-related information but excludes interpreting the job interview by oneself or others. Interestingly, the preparation behavior does not depend on the importance of a job interview, which might be an indicator of the influence of other variables (e.g., personality traits as suggested by Levashina & Campion, 2006 and Roulin et al., 2016). The interindividual differences in preparation behavior indicate that interview preparation is a subject of practical importance.

## 9.2 | Relationship between applicants' preparation and IM

Certain categories (e.g., *online videos* and *professional preparation*) are particularly impactful while others (e.g., *practicing* or *having conversations* with friends, family, etc.) do not at all impact IM behavior. This suggests a difference between simple practice in advance of the interview and being prepared by a (semi-)professional or commercial third-person entity (i.e., external input). In summary, only preparation that stems from (professional) external sources seems to increase IM behavior, while the other categories do not show any effects on IM. The same pattern was found for the perceived interview difficulty. The preparation categories that did not show significant correlations with IM can mostly be characterized as peer-level preparation. While these categories rely on self-reflection and individualized feedback, no professional insights are given to the individual. In sum, the external advice seems to make a difference and provoke the willingness to fake as well as deceptive IM behavior. Since this does not apply to preparation by *guides*, the format of presentation also seems to be important (as suggested in online Supporting Information S1).

While *professional preparation*, as hypothesized, was correlated with a higher subjective ATIC (Roulin et al., 2016), it did not significantly impact the capacity to fake. This might be due to a lack of fit for the individual job profile as commercial providers often offer fixed courses (see online Supporting Information S1 for examples). Levashina and Campion (2006) have postulated that realistic job previews would indirectly impact the willingness to fake by enhancing the applicants' capacity to fake and opportunity recognition in a way similar to how interview coaching does. The commonality might be the specificity to the job. *Online videos* moreover, do not provide any directed (i.e., individualized) advice, and therefore lack specificity even more; this could explain the rather negative effects of preparation via *online videos* which are even amplified (e.g., on the perceived interview difficulty) in comparison to *professional preparation*. In conclusion, the data pattern suggests that *online videos* and *professional preparation* provoke the urge or perceived need to fake and, therefore, the willingness to fake (Levashina & Campion, 2006) but neither delivers the concrete tools (e.g., actual criteria) that could significantly increase the capacity to fake (Roulin et al., 2016).

Overall, the present findings suggest that interview preparation needs to be differentiated by categories to obtain a more specific

point of view on interview preparation and faking. Also, hypotheses and theoretical postulates should be differentiated accordingly.

## 9.3 | Limitations and aspects for future research

Although Study 2 has reduced the number of limitations inherent to the design of Study 1, additional general limitations should be identified here as lines for potential future research. First, a crucial limitation lies within the operationalization of faking. Although having a proven track record of successful usage in research (Bourdage et al., 2018), the IFB is a self-report method with the inherent limitations associated with it (e.g., flawed introspection or social desirability). Future research could address these issues by altering the faking operationalization (e.g., by coding IM behavior; Weiss & Feldman, 2006).

The second limitation mostly concerns the specific content of job interview preparation. Comparing different kinds of preparation but not different kinds of content limits the generalization of the results and does not allow for specific conclusion as to which contents increase IM and which do not. By manipulating (e.g., aiming for specific faking factors) or categorizing preparation content and length, researchers might be able to obtain more specific knowledge. Testing different contents and formats of presentation would make for a stronger argument. In studies of interviewee coaching (e.g., Langer et al., 2016; Maurer et al., 2008; Tross & Maurer, 2008), different components were tested. This approach could be used to isolate effects of job interview preparation on IM as well. A fitting design could be conducting actual mock-up interviews comparing the applicants' IM dependent on different contents as well as on different formats of preparation. Also, the effects of interview preparation remain ambiguous. To understand the underlying processes, it is necessary to examine whether interview preparation also influences variables that are thus far unconsidered. For example, interview preparation might reduce job interview anxiety (McCarthy & Goffin, 2004) which in turn could increase interviewees' capacity (Levashina & Campion, 2006) to fake.

Lastly, we introduced a new preparation category system which was systematically developed to cover the most common methods for applicants' job interview preparation. Our findings discovered systematic differences between applicants, but there might exist additional underlying factors (e.g., personality traits). Given the lack of data on this subject, more empirical and theoretical work on how applicants prepare for job interviews is called for.

## 9.4 | Practical implications

For practitioners and organizations (e.g., hiring managers), the given results cut both ways. The extent of applicants' interview preparation in general does not seem to be significantly correlated with faking intentions but with actual faking behavior in the past. Two preparation categories seem to pose a threat to the quality of

assessment. Preparation via *professional means* can lead to higher deceptive and honest IM; due to this finding, it is advisable to monitor the relevant *professional preparation* providers and counter specific misinformation. Preparation via *online videos* is also related to higher deceptive and honest IM, but given our mixed results when manipulated, it seems to depend on the extent of consumption and the specific preparation videos in play. Thus, it is desirable for organizations to have some influence on applicants' preparation and optimally retain the positive effects on honest IM but eliminate the problematic effects on faking.

A practical approach based on our empirical findings could be that organizations publish online video(s) themselves to counter the negative effects that public online videos can produce. This approach has been framed as providing applicants with pre-test information and preparation (PTIP). PTIP has been shown to reduce negative applicant reactions (Burns et al., 2008) and to enhance positive fairness perceptions (Lievens et al., 2003). Building on these effects, providing an own online video offering information about the company and the interview process could help mitigate the negative effects public online videos can have. In turn, offering this kind of preparation could also reduce the perceived uncertainty that applicants experience, potentially prompting them to turn to unhelpful preparation. Since both of the preparation categories positively correlated with faking rely on external input instead of practice and self-reflection, telling applicants what is expected from them (i.e., the specific selection criteria) might prove helpful in preventing them from turning toward public online videos or commercial trainings in the first place. Notably, providing applicants the evaluated criteria beforehand has been shown to pose no detrimental effects on construct and criterion-related validity in structured interviews (Klehe et al., 2008).

As the remaining preparation categories showed no significant correlations with higher faking or higher honest IM, it seems appropriate to advise applicants to additionally search for further information about the organization or branch of industry if they wish to prepare further. Practicing by simulating a job interview or conversing with friends or family (e.g., asking about their perceptions) can be encouraged as well, thus prompting applicants to focus on internal (e.g., self-reflection and practice) instead of external preparation while still being given advice on how to prepare. Additionally, the provided video might incorporate an identification warning. Law et al. (2016) found identification warnings to particularly reduce the capacity to fake. This could potentially counter the effects of a higher willingness to fake related to preparation via public *online videos*. Optimally, by implementing all of the above, the provided online video would still be associated with higher honest IM but not with higher faking.

For applicants, our findings suggest that preparation can have a downside, and the decision on how and to what extent one prepares should be made with some deliberation. First, spending too much time on preparation and using preparation by *professional means* should be deployed carefully, since both showed potential negative effects on interview success; further research is, however, required to solidify this finding. Second, faking hasn't been unambiguously

linked to higher interview success (Melchers et al., 2020). Instead, it inherently features the risk of an applicant getting caught (e.g., Roulin et al., 2016). Thus, preparation that is correlated with higher faking should not be desirable from the applicant's perspective. As the number of different preparation categories used is positively correlated with faking it seems reasonable that applicants rely on fewer but more sound methods of preparation. Preparing via *online videos* and spending more time on preparation were also correlated with an undesirable higher perceived interview difficulty (Chapman & Zweig, 2005), while preparation via *information research*, reading *guides*, and *conversing and practicing* with friends, family, etc., were not correlated with higher faking and could be beneficial to applicants. Although further research is needed, some degree of practice (i.e., simulating an interview) could prove helpful as it might aid in reducing interview anxiety (McCarthy & Goffin, 2004) and in turn improving interview performance.

## 10 | CONCLUSION

The present studies examined if applicants' job interview preparation is correlated with higher honest or deceptive impression management. This is of particular importance for personnel selection because if interview preparation increases the applicants' faking, it potentially poses a threat to the quality of selection. This proposition is also brought forward by multiple scientific faking frameworks (Levashina & Campion, 2006; Marcus, 2009; Roulin et al., 2016). We found positive correlations between the extent of interview preparation and deceptive as well as honest IM. Similarly, a presented online video significantly increased faking intentions on image protection, but the three remaining faking factors, as well as honest IM intentions, were not significantly influenced. However, we found effects of increased faking intentions as well as past faking behavior when the applicants report past preparation via *online videos* or *professional preparation*. The effects of these two categories on past IM behavior showed a significant correlation with higher IM on all seven IM factors except honest self-promotion. Given that the remaining categories did not show significant correlations with IM, our results suggest the need to differentiate among specific categories of interview preparation. Future studies should further attempt to determine which underlying processes induce these differences and isolate effects of specific preparation categories.

## ACKNOWLEDGMENT

Open access funding enabled and organized by ProjektDEAL.

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## ENDNOTES

<sup>1</sup> We have used the logarithmized number of interviews for the reported analyses to reduce the influence of outliers. We also tested

if the results change when the non-transformed variable is used instead. The non-transformed variable showed significant negative correlations with overall honest IM intentions ( $r = -0.13$ ,  $p = .035$ ), honest self-promotion ( $r = -0.12$ ,  $p = .048$ ), and honest defensive IM ( $r = -0.15$ ,  $p = .021$ ). When including the non-transformed number of interviews as a control variable in the ANOVAs of the predictor condition on the honest IM variables (see main text), we found a significant effect on overall honest IM,  $F(1, 230) = 8.37$ ,  $p = .004$ ,  $\eta^2_p = 0.035$ . We also found a significant effect on self-promotion,  $F(1, 230) = 7.32$ ,  $p = .007$ ,  $\eta^2_p = 0.031$ . Lastly, a significant effect on honest defensive was found,  $F(1, 230) = 4.70$ ,  $p = .031$ ,  $\eta^2_p = 0.020$ .

<sup>2</sup> The significance levels of the analyses concerning the total time spent on preparation remained unchanged when the non-transformed total time spent on preparation was included instead.

<sup>3</sup> The significance levels of the analyses regarding the total time spent on preparation remained unchanged when the non-transformed variable was used instead.

<sup>4</sup> The correlation between the number of previous interviews and EIC becomes non-significant ( $r = -0.13$ ,  $p = .051$ ) when the non-logarithmized number of previous interviews was used instead. All other analyses concerning the number of previous interviews showed unchanged significance levels.

## REFERENCES

- Alliger, G. M., & Dwight, S. A. (2000). A meta-analytic investigation of the susceptibility of integrity tests to faking and coaching. *Educational and Psychological Measurement, 60*(1), 59–72. <https://doi.org/10.1177/00131640021970367>
- Amaral, A. A., Powell, D. M., & Ho, J. L. (2019). Why does impression management positively influence interview ratings? The mediating role of competence and warmth. *International Journal of Selection and Assessment, 27*(4), 315–327. <https://doi.org/10.1111/ijsa.12260>
- Barbee, J. R., & Keil, E. C. (1973). Experimental techniques of job interview training for the disadvantaged: Videotape feedback, behavior modification, and microcounseling. *Journal of Applied Psychology, 58*(2), 209–213. <https://doi.org/10.1037/h0035655>
- Barrick, M. R., Shaffer, J. A., & DeGrassi, S. W. (2009). What you see may not be what you get: Relationships among self-presentation tactics and ratings of interview and job performance. *Journal of Applied Psychology, 94*(6), 1394–1411. <https://doi.org/10.1037/a0016532>
- 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*(6), 1080–1109. <https://doi.org/10.1177/0149206308324325>
- Bolino, M. C., Long, D., & Turnley, W. (2016). Impression management in organizations: Critical questions, answers, and areas for future research. *Annual Review of Organizational Psychology and Organizational Behavior, 3*(1), 377–406. <https://doi.org/10.1146/annurev-orgpsych-041015-062337>
- Bourdage, J. S., Roulin, N., & Tarraf, R. (2018). "I (might be) just that good": Honest and deceptive impression management in employment interviews. *Personnel Psychology, 71*(4), 597–632. <https://doi.org/10.1111/peps.12285>
- Buehl, A. K., & Melchers, K. G. (2017). Individual difference variables and the occurrence and effectiveness of faking behavior in interviews. *Frontiers in Psychology, 8*, 1–15. <https://doi.org/10.3389/fpsyg.2017.00686>
- Buehl, A. K., Melchers, K. G., Macan, T., & Kühnel, J. (2018). Tell me sweet little lies: How does faking in interviews affect interview scores and interview validity? *Journal of Business and Psychology, 34*(1), 107–124. <https://doi.org/10.1007/s10869-018-9531-3>
- Burns, G. N., Siers, B. P., & Christiansen, N. D. (2008). Effects of providing pre-test information and preparation materials on applicant reactions to selection procedures. *International Journal of Selection and Assessment, 16*(1), 73–77. <https://doi.org/10.1111/j.1468-2389.2008.00411.x>
- 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*(3), 673–702. <https://doi.org/10.1111/j.1744-6570.2005.00516.x>
- Delacre, M., Leys, C., Mora, Y. L., & Lakens, D. (2019). Taking parametric assumptions seriously: Arguments for the use of Welch's F-test instead of the classical F-test in one-way ANOVA. *International Review of Social Psychology, 32*(1), 1–12. <https://doi.org/10.5334/irsp.198>
- Ebner, K., & Kauffeld, S. (2018). Laufbahngestaltung durch Karrierecoaching. [Design of professional careers via career coaching.]. In S. Kauffeld, & D. Spurk (Eds.), *Handbuch Karriere und Laufbahnmanagement* (pp. 1–26). Springer-Verlag GmbH.
- Ellingson, J. E., & McFarland, L. A. (2011). Understanding faking behavior through the lens of motivation: An application of VIE Theory. *Human Performance, 24*(4), 322–337. <https://doi.org/10.1080/08959285.2011.597477>
- Ellis, A. P. J., West, B. J., Ryan, A. M., & DeShon, R. P. (2002). The use of impression management tactics in structured interviews: A function of question type? *Journal of Applied Psychology, 87*(6), 1200–1208. <https://doi.org/10.1037/0021-9010.87.6.1200>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biometrical sciences. *Behavior Research Methods, 39*(2), 175–191.
- Gino, F., & Pierce, L. (2009). Dishonesty in the name of equity. *Psychological Science, 20*(9), 1153–1160. <https://doi.org/10.1111/j.1467-9280.2009.02421.x>
- Gino, F., & Pierce, L. (2010). Lying to level the playing field: Why people may dishonestly help or hurt others to create equity. *Journal of Business Ethics, 95*(1), 89–103. <https://doi.org/10.1007/s10551-011-0792-2>
- Griffith, R. L., Lee, L. M., Peterson, M. H., & Zickar, M. J. (2011). First dates and little white lies: A trait contract classification theory of applicant faking behavior. *Human Performance, 24*(4), 338–357. <https://doi.org/10.1080/08959285.2011.597475>
- Hartwig, M., & Bond, C. F. (2011). Why do lie-catchers fail? A lens model meta-analysis of human lie judgments. *Psychological Bulletin, 137*(4), 639–659. <https://doi.org/10.1037/a0023589>
- Hausknecht, J., Day, D. V., & Thomas, S. C. (2004). Applicant reactions to selection procedures: An updated model and meta-analysis. *Personnel Psychology, 57*, 639–683. <https://doi.org/10.1111/j.1744-6570.2004.00003.x>
- Hermes, M., Albers, F., Böhnke, J. R., Huelmann, G., Maier, J., & Stelling, D. (2019). Measurement and structural invariance of cognitive ability tests after computer-based training. *Computers in Human Behavior, 93*, 370–378. <https://doi.org/10.1016/j.chb.2018.11.040>
- Higgins, C. A., Judge, T. A., & Ferris, G. R. (2003). Influence tactics and work outcomes: A meta-analysis. *Journal of Organizational Behavior, 24*(1), 89–106. <https://doi.org/10.1002/job.181>
- Ho, W. (2019). Developing professional communication: The construction of a multimodal understanding of job interviews. *Languages, 4*(1), 5. <https://doi.org/10.3390/languages4010005>
- Hogue, M., Levashina, J., & Hang, H. (2012). Will i fake it? The interplay of gender, machiavellianism, and self-monitoring on strategies for honesty in job interviews. *Journal of Business Ethics, 117*(2), 399–411. <https://doi.org/10.1007/s10551-012-1525-x>
- Klehe, U.-C., König, C. J., Richter, G. M., Kleinmann, M., & Melchers, K. G. (2008). Transparency in structured interviews: Consequences for construct and criterion-related validity. *Human Performance, 21*(2), 107–137.
- Kleinmann, M., Ingold, P. V., Lievens, F., Jansen, A., Melchers, K. G., & König, C. J. (2011). A different look at why selection procedures work: The role of candidates' ability to identify criteria. *Organizational*

- Psychology Review*, 1(2), 128–146. <https://doi.org/10.1177/2041386610387000>
- König, C. J., Melchers, K. G., Kleinmann, M., Richter, G. M., & Klehe, U.-C. (2007). Candidates' ability to identify criteria in nontransparent selection procedures: Evidence from an assessment center and a structured interview. *Journal of Selection and Assessment*, 15(3), 283–292. <https://doi.org/10.1111/j.1468-2389.2007.00388.x>
- Kristof-Brown, A., Barrick, M. R., & Franke, M. (2002). Applicant impression management: Dispositional influences and consequences for recruiter perceptions of fit and similarity. *Journal of Management*, 28(1), 27–46. <https://doi.org/10.1177/014920630202800103>
- Langer, M., König, C. J., Gebhard, P., & André, E. (2016). Dear computer, teach me manners: Testing virtual employment interview training. *International Journal of Selection and Assessment*, 24(4), 312–323. <https://doi.org/10.1111/ijasa.12150>
- Law, S. J., Bourdage, J., & O'Neill, T. A. (2016). To fake or not to fake: Antecedents to interview faking, warning instructions, and its impact on applicant reactions. *Frontiers in Psychology*, 7, 1–13. <https://doi.org/10.3389/fpsyg.2016.01771>
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34–37. <https://doi.org/10.1037/0033-2909.107.1.34>
- Levashina, J., & Campion, M. A. (2006). A model of faking likelihood in the employment interview. *International Journal of Selection and Assessment*, 14(4), 299–316. <https://doi.org/10.1111/j.1468-2389.2006.00353.x>
- Levashina, J., & Campion, M. A. (2007). Measuring faking in the employment interview: Development and validation of an interview faking behavior scale. *Journal of Applied Psychology*, 92(6), 1638–1656. <https://doi.org/10.1037/0021-9010.92.6.1638>
- Levashina, J., Hartwell, C. J., Morgeson, F. P., & Campion, M. A. (2014). The structured employment interview: Narrative and quantitative review of the research literature. *Personnel Psychology*, 67(1), 241–293. <https://doi.org/10.1111/peps.12052>
- Levin, R. A., & Zickar, M. J. (2002). Investigating self-presentation, lies, and bullshit: Understanding faking and its effects on selection decisions using theory, field research, and simulation. In J. M. Brett & F. Drasgow (Eds.), *The psychology of work: Theoretically based empirical research* (pp. 253–276). Lawrence Erlbaum Associates, Publishers.
- Lievens, F., De Corte, W., & Brysse, K. (2003). Applicant perceptions of selection procedures: The role of selection information, belief in tests, and comparative anxiety. *Journal of Selection and Assessment*, 11(1), 67–77. <https://doi.org/10.1111/1468-2389.00227>
- Macan, T. (2009). The employment interview: A review of current studies and directions for future research. *Human Resource Management Review*, 19(3), 203–218. <https://doi.org/10.1016/j.hrmr.2009.03.006>
- Marcus, B. (2009). "Faking" from the applicant's perspective: A theory of selfpresentation in personnel selection settings. *International Journal of Selection and Assessment*, 17(4), 417–430. <https://doi.org/10.1111/j.1468-2389.2009.00483.x>
- Marggraf-Micheel, C., Höft, S., & Bonnist, H. (2006). Coaching and practice: Strategien zur Vorbereitung von Teilnehmern auf Assessment-Center-Verfahren. [Coaching and practice: Strategies to prepare applicants for assessment center procedures]. *Wirtschaftspsychologie*, 8(4), 31–39.
- Maurer, T., Solamon, J. M., Andrews, K. D., & Troxtel, D. D. (2001). Interviewee coaching, preparation strategies, and response strategies in relation to performance in situational employment interviews: An extension of Maurer, Solamon, and Troxtel (1998). *Journal of Applied Psychology*, 86(4), 709–717. <https://doi.org/10.1037/0021-9010.86.4.709>
- Maurer, T., Solamon, J. M., & Lippstreu, M. (2008). How does coaching interviewees affect the validity of a structured interview? *Journal of Organizational Behavior*, 29(3), 355–371. <https://doi.org/10.1002/job.512>
- Maurer, T., Solamon, J., & Troxtel, D. (1998). Relationship of coaching with performance in situational employment interviews. *Journal of Applied Psychology*, 83(1), 128–136. <https://doi.org/10.1037/0021-9010.83.1.128>
- McCarthy, J., & Goffin, R. (2004). Measuring job interview anxiety: Beyond weak kness and sweaty palms. *Personnel Psychology*, 57, 607–637.
- McDaniel, M. A., Whetzel, D. L., Schmidt, F. L., & Maurer, S. D. (1994). The validity of employment interviews: A comprehensive review and meta-analysis. *Journal of Applied Psychology*, 79(4), 599–616. <https://doi.org/10.1037/0021-9010.79.4.599>
- McFarland, L. A., & Ryan, A. M. (2000). Variance in faking across non-cognitive measures. *Journal of Applied Psychology*, 85(5), 812–821. <https://doi.org/10.1037/0021-9010.85.5.812>
- McFarland, L. A., & Ryan, A. M. (2006). Toward an integrated model of applicant faking behavior. *Journal of Applied Social Psychology*, 36(4), 979–1016.
- Melchers, K. G., Kleinmann, M., Richter, G. M., König, C. J., & Klehe, U.-C. (2004). Messen Einstellungsinterviews das, was sie messen sollen? Zur Bedeutung der Bewerberkognitionen über bewertetes Verhalten. [Do selection interviews measure what they intend to measure? The impact of applicants' cognitions about evaluated behavior]. *Zeitschrift Für Personalpsychologie*, 3(4), 159–169. <https://doi.org/10.1026/1617-6391.3.4.159>
- Melchers, K. G., Roulin, N., Buehl, A.-K. (2020). A review of applicant faking in selection interviews. *International Journal of Selection and Assessment*, 28(2), 123–142. <http://dx.doi.org/10.1111/ijasa.12280>.
- Messick, S. (1981). The controversy over coaching: Issues of effectiveness and equity. In B. F. Glenn (Ed.), *New directions for testing and measurement: Issues in testing—Coaching, disclosure, and ethnic bias* (Vol. 11, pp. 21–53). Jossey-Bass.
- Nikolaou, I., & Georgiou, K. (2018). Fairness reactions to the employment interview. *Journal of Work and Organizational Psychology*, 34(2), 103–111. <https://doi.org/10.5093/jwop2018a13>
- Overall, J. E., Atlas, R. S., & Gibson, J. M. (1995). Tests that are robust against variance heterogeneity in  $k \times 2$  designs with unequal cell frequencies. *Psychological Reports*, 76, 1011–1017.
- Palan, S., & Schitter, C. (2018). Prolific.ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, 17, 22–27. <https://doi.org/10.1016/j.jbef.2017.12.004>
- Palmer, D. K., Campion, M. A., & Green, P. C. (1999). Interviewing training for both applicant and interviewer. In R. W. Eder & M. M. Harris (Eds.), *The employment interview handbook* (pp. 337–353). Sage.
- Reinhard, M.-A., Greifeneder, R., & Scharmach, M. (2013). Unconscious processes improve lie detection. *Journal of Personality and Social Psychology*, 105(5), 721–739. <https://doi.org/10.1037/a0034352>
- Reinhard, M.-A., Scharmach, M., & Müller, P. (2013). It's not what you are, it's what you know: Experience, beliefs, and the detection of deception in employment interviews. *Journal of Applied Social Psychology*, 43(3), 467–479. <https://doi.org/10.1111/j.1559-1816.2013.01011.x>
- Rosenfeld, P. (1997). Impression management, fairness, and the employment interview. *Journal of Business Ethics*, 16(8), 801–808.
- Roulin, N., Bangerter, A., & Levashina, J. (2015). Honest and deceptive impression management in the employment interview: Can it be detected and how does it impact evaluations? *Personnel Psychology*, 68(2), 395–444. <https://doi.org/10.1111/peps.12079>
- Roulin, N., & Krings, F. (2020). Faking to fit in: Applicants' response strategies to match organizational culture. *Journal of Applied Psychology*, 105(2), 130–145. <https://doi.org/10.1037/apl0000431>
- Roulin, N., Krings, F., & Binggeli, S. (2016). A dynamic model of applicant faking. *Organizational Psychology Review*, 6(2), 145–170. <https://doi.org/10.1177/2041386615580875>
- Sackett, P. R., & Wanek, J. E. (1996). New developments in the use of measures of honesty integrity, conscientiousness,

- dependability trustworthiness, and reliability for personnel selection. *Personnel Psychology*, 49(4), 727–829. <https://doi.org/10.1111/j.1744-6570.1996.tb02450.x>
- Salgado, J. F. (2016). A theoretical model of psychometric effects of faking on assessment procedures: Empirical findings and implications for personality at work. *International Journal of Selection and Assessment*, 24(3), 209–228. <https://doi.org/10.1111/ijsa.12142>
- Salgado, J. F., & Moscoso, S. (2002). Comprehensive meta-analysis of the construct validity of the employment interview. *European Journal of Work and Organizational Psychology*, 11(3), 299–324. <https://doi.org/10.1080/13594320244000184>
- Snell, A. F., Sydel, E. J., & Lueke, S. B. (1999). Towards a theory of applicant faking: Integrating studies of deception. *Human Resource Management Review*, 9(2), 219–242. [https://doi.org/10.1016/S1053-4822\(99\)00019-4](https://doi.org/10.1016/S1053-4822(99)00019-4)
- Stevens, C. K., & Kristof, A. L. (1995). Making the right impression: A field study of applicant impression management during job interviews. *Journal of Applied Psychology*, 80(5), 587–606. <https://doi.org/10.1037/0021-9010.80.5.587>
- Tett, R. P., & Simonet, D. V. (2011). Faking in personality assessment: A “multi-saturation” perspective on faking as performance. *Human Performance*, 24(4), 302–321. <https://doi.org/10.1080/08959285.2011.597472>
- Tross, S. A., & Maurer, T. J. (2008). The effect of coaching interviewees on subsequent interview performance in structured experience-based interviews. *Journal of Occupational and Organizational Psychology*, 81(4), 589–605. <https://doi.org/10.1348/096317907x248653>
- Turnley, W. H., & Bolino, M. C. (2001). Achieving desired images while avoiding undesired images: Exploring the role of self-monitoring in impression management. *Journal of Applied Psychology*, 86(2), 351–360. <https://doi.org/10.1037/0021-9010.86.2.351>
- Van Iddekinge, C. H., Raymark, P. H., & Roth, P. L. (2005). Assessing personality with a structured employment interview: Construct-related validity and susceptibility to response inflation. *Journal of Applied Psychology*, 90(3), 536–552. <https://doi.org/10.1037/0021-9010.90.3.536>
- Wehrle, M. [Martin Wehrle: Coaching- und Karrieretipps]. (2017, February 24). Vorstellungsgespräch Fragen und Antworten: Die 10 häufigsten Fragen—perfekt antworten // M. Wehrle. [Job interview questions and answers: The 10 most common questions—answer perfectly]. [Video file]. <https://www.youtube.com/watch?v=ITf6uCRNUo4>
- Weiss, B., & Feldman, R. S. (2006). Looking good and lying to do it: Deception as an impression management strategy in job interviews. *Journal of Applied Social Psychology*, 36(4), 1070–1086. <https://doi.org/10.1111/j.0021-9029.2006.00055.x>
- Wen, M. J., Chen, S. Y., & Chen, H. J. (2007). On testing a subset of regression parameters under heteroscedasticity. *Computational Statistics & Data Analysis*, 51(12), 5958–5976.
- Wright, G., & Ayton, P. (1988). Decision time, subjective probability, and task difficulty. *Memory & Cognition*, 16(2), 176–185. <https://doi.org/10.3758/BF03213487>
- Yu, Z., Ramanarayanan, V., Lange, P., & Suendermann-Oeft, D. (2018). An open-source dialog system with real-time engagement tracking for job interview training applications. In M. Eskenazi, L. Devillers, & J. Mariani (Eds.), *Advanced social interaction with agents* (pp. 199–207). Springer International Publishing.

## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

**How to cite this article:** Schudlik K, Reinhard M-A, Müller P. Prepared to fake? The relationship between applicants' job interview preparation and faking. *Int J Select Assess*. 2021;29:29–54. <https://doi.org/10.1111/ijsa.12317>

**APPENDIX A CONTENT PREPARATION-VIDEO**

The entire German video can be found online (Wehrle, 2017) and a video transcript can be obtained from the corresponding author. The video lasts 6 min and 20 s. Below is a translation of the 10 presented questions, the according statements (advice) by coach, and the corresponding IM dimensions. The statements are abbreviated.

Nr.	Question	Core statement	IM dimensions
1	Why do you want to start specifically in our company?	Secret meaning: Do you have specific motivation for this particular company or is it just one of many applications?	SIC, IN, honest ingratiation, honest self-promotion
2	Where do you see yourself in five years?	Explain an optimal development for this specific job and don't mention promotions just yet	IP, SIC, IN, honest ingratiation
3	If you could do things all over again today, would you choose the same career path for yourself?	Secret meaning: Have you made bad career choices and carry the can for it now? This might translate into bad decisions on the job	IP, Honest defensive
4	What are your greatest strengths and weaknesses?	Do not mention job-relevant weaknesses but such that are irrelevant. Vice versa for the strengths	IP
5	What are the biggest achievements in your life?	Secret meaning: Are the achievements of professional or personal nature? Only mention professional ones	SIC, Honest self-promotion
6	What was your biggest mistake?	Mention mistakes that took place long ago and are already corrected	IP, Honest defensive
7	In what areas do you want to improve?	Secret meaning: What are your weaknesses? Don't mention job-relevant ones	IP
8	What do your colleagues think your boss could improve on?	The opinion will be interpreted as your own. Show loyalty to your old boss	SIC, IN, honest ingratiation
9	Have you applied for other jobs?	Do not mention zero or a high number but one or two other applications instead	EIC, IP
10	What was your most recent salary and how much do you want to earn at our company?	Demand a 10%–15% higher salary by mentioning the risks accompanying a job change	None



## APPENDIX B GERMAN TRANSLATION OF THE HIIM-S

The HIIM-S by Bourdage et al. (2018) has been translated using translation and retranslation. All items were answered on a 5-point Likert scale from 1 (gar nicht) to 5 (äußerst). The scale was chosen to align with the IFB translation by Buehl and Melchers (2017). The items have been adjusted to assess intentions instead of past behavior. A procedure similar to the operationalization by McFarland and Ryan (2006) was chosen. The corresponding item number from the original item by Bourdage et al. (2018) can be found in parentheses after the items.

### Self-promotion

1. Ich habe darauf geachtet, dem Interviewer meine beruflichen Referenzen darzulegen. (HSPROM11)
2. Ich habe dafür gesorgt, dass der Interviewer um meine Fähigkeiten und Fertigkeiten weiß. (HSPROM3)
3. Ich habe den Interviewer wissen lassen, dass meine Qualifikationen gut zu der Stelle passen. (HSPROM5)
4. Ich habe frühere Berufserfahrungen erwähnt, damit der Interviewer um meine Kompetenzen weiß. (HSPROM9)

### Honest ingratiation

1. Ich habe versucht, die gemeinsamen Meinungen oder Werte des Interviewers und mir herauszufinden und diese hervorzuheben. (HINGRT3)
2. Ich habe geteilte Werte und Ziele von mir und der Organisation herausgefunden und betont. (HINGRT5)
3. Wenn der Interviewer Ansichten geäußert hat, die ich teile, habe ich mich darauf konzentriert, diese in meine Antworten einzubinden. (HINGRT9)
4. Ich habe Interessen angesprochen, die ich mit dem Interviewer teile. (HINGRT 12)

### Defensive

1. Ich habe dem Interviewer meine ehrliche Einschätzung darüber gegeben, weshalb ich in der Vergangenheit keine Kontrolle über bestimmte negative Ereignisse hatte. (HDEFIM1)
2. Ich habe dem Interviewer von Schritten berichtet, die ich unternommen habe, um eine Wiederholung negativer Ereignisse zu verhindern. (HDEFIM2)
3. Ich habe mein Bedauern darüber geäußert, wie ich mit bestimmten Situationen in der Vergangenheit umgegangen bin und wie ich mich in der Zukunft verbessern möchte. (HDEFIM5)
4. Ich habe Gründe dafür angeführt, weshalb mir ein negatives Ereignis, für das ich verantwortlich war, schlussendlich positiv zugutekam. (HDEFIM8)

## APPENDIX C DESCRIPTIVE PROPERTIES OF THE SEPARATE PREPARATION CATEGORIES IN STUDY 1

The table below displays the means and standard deviations (in parentheses) of the IM intention factors for the respective interview preparation categories (used vs. not used), as well as the time spent using it.

IM factors		Interview preparation category				
		Guides	Online videos	Conversations with friends, family, etc.	Practicing with friends, family, etc.	Professional preparation <sup>a</sup>
<b>Time spent</b>		<b>2.20 (1.52)</b>	<b>2.11 (1.73)</b>	<b>2.07 (1.29)</b>	<b>1.62 (0.75)</b>	<b>3.41 (2.60)</b>
Used	SIC	2.55 (0.62)	2.68 (0.68)	2.52 (0.64)	2.55 (0.63)	2.73 (0.62)
	EIC	1.98 (0.70)	2.19 (0.79)	2.00 (0.72)	2.03 (0.75)	2.31 (0.85)
	IP	2.56 (0.66)	2.67 (0.63)	2.51 (0.64)	2.51 (0.66)	2.67 (0.66)
	IN	2.72 (0.66)	2.86 (0.74)	2.69 (0.70)	2.77 (0.75)	2.98 (0.70)
	Self-promotion	4.30 (0.72)	4.07 (0.82)	4.20 (0.79)	4.21 (0.77)	4.17 (0.82)
	Defensive	3.36 (0.74)	3.27 (0.79)	3.41 (0.72)	3.41 (0.75)	3.45 (0.64)
	Honest ingratiation	3.52 (0.79)	3.53 (0.76)	3.49 (0.76)	3.53 (0.81)	3.59 (0.82)
<i>n</i>		105	103	166	80	43
Not used	SIC	2.55 (0.71)	2.44 (0.65)	2.60 (0.75)	2.54 (0.69)	2.51 (0.68)
	EIC	2.08 (0.79)	1.91 (0.70)	2.12 (0.81)	2.04 (0.75)	1.97 (0.71)
	IP	2.56 (0.67)	2.47 (0.68)	2.66 (0.71)	2.58 (0.66)	2.53 (0.66)
	IN	2.70 (0.78)	2.59 (0.70)	2.74 (0.80)	2.68 (0.72)	2.65 (0.72)
<i>n</i>	Self-promotion	4.12 (0.76)	4.36 (0.67)	4.19 (0.64)	4.19 (0.74)	4.21 (0.73)
	Defensive	3.37 (0.77)	3.44 (0.72)	3.27 (0.82)	3.34 (0.76)	3.35 (0.78)
	Honest ingratiation	3.49 (0.72)	3.48 (0.74)	3.53 (0.73)	3.49 (0.72)	3.48 (0.73)
		132	134	71	157	194

Note.  $N = 237$ . The category *information research* was dismissed from further analyses due to unequal cell sizes ( $n_{\text{used}} = 221$  vs.  $n_{\text{not-used}} = 16$ ). The time spent (hr.) was adjusted by cutting off the values above the 90 percentile to eliminate extreme outliers.

<sup>a</sup>The category "professional preparation" was computed by combining the two categories "preparation by seminars" and "trainings and coaching and career advice."

## APPENDIX D DESCRIPTIVE PROPERTIES OF THE SEPARATE PREPARATION CATEGORIES IN STUDY 2

The table below displays the means and standard deviations (in parentheses) of the IM factors on the respective interview preparation categories (used vs. not used) for Study 2, as well as the time spent using it.

IM factors		Interview preparation category				
		Guides	Online videos	Conversations with friends, family, etc.	Practicing with friends, family, etc.	Professional preparation <sup>a</sup>
<b>Time spent</b>		<b>1.83 (1.20)</b>	<b>1.88 (1.00)</b>	<b>1.59 (0.85)</b>	<b>1.55 (0.71)</b>	<b>2.31 (1.59)</b>
Used	SIC	2.25 (0.65)	2.51 (0.67)	2.21 (0.65)	2.32 (0.64)	2.55 (0.70)
	EIC	1.89 (0.72)	2.18 (0.79)	1.85 (0.69)	2.03 (0.76)	2.26 (0.84)
	IP	2.19 (0.72)	2.43 (0.69)	2.12 (0.70)	2.30 (0.76)	2.47 (0.71)
	IN	2.52 (0.73)	2.73 (0.74)	2.46 (0.77)	2.57 (0.69)	2.72 (0.67)
	Self-promotion	3.71 (0.79)	3.64 (0.77)	3.64 (0.79)	3.66 (0.83)	3.79 (0.72)
	Defensive	2.66 (0.79)	2.86 (0.73)	2.61 (0.84)	2.73 (0.82)	3.05 (0.75)
	Honest ingratiation	3.07 (0.81)	3.13 (0.77)	2.93 (0.84)	2.94 (0.82)	3.15 (0.60)
<i>n</i>		87	91	134	64	47
Not used	SIC	2.24 (0.68)	2.03 (0.58)	2.32 (0.69)	2.21 (0.67)	2.15 (0.63)
	EIC	1.94 (0.77)	1.72 (0.65)	2.05 (0.84)	1.86 (0.74)	1.82 (0.69)
	IP	2.15 (0.74)	1.95 (0.69)	2.26 (0.77)	2.10 (0.71)	2.08 (0.71)
	IN	2.42 (0.80)	2.26 (0.73)	2.48 (0.78)	2.42 (0.81)	2.39 (0.79)
<i>n</i>	Self-promotion	3.53 (0.81)	3.58 (0.83)	3.53 (0.83)	3.58 (0.79)	3.55 (0.82)
	Defensive	2.64 (0.89)	2.48 (0.90)	2.71 (0.87)	2.61 (0.86)	2.53 (0.84)
	Honest ingratiation	2.80 (0.83)	2.47 (0.84)	2.88 (0.81)	2.90 (0.84)	2.84 (0.87)
		119	115	72	142	159

Note.  $N = 206$ . The category *information research* was dismissed from further analyses due to unequal cell sizes ( $n_{\text{used}} = 184$  vs.  $n_{\text{not-used}} = 22$ ). The time spent (hr.) was adjusted by cutting off the values above the 90 percentile to eliminate extreme outliers.

<sup>a</sup>The category "professional preparation" was computed by combining the two categories "preparation by seminars" and "trainings and coaching and career advice."