How Asynchronous Video Interview Design Affects Applicant Outcomes:

Interview Performance, Impression Management, Anxiety, and Perceived Fairness

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Abstract

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Abstract: This research examines how the allowance and usage of two asynchronous video interview (AVI) design features (response preparation time (PT) and number of attempts to record a response) may influence crucial applicant outcomes. The outcomes of interview performance, anxiety, perceived fairness, and impression management (IM) behaviours are examined using a 2 (low PT, unlimited PT) × 2 (one attempt, five attempts) design. Prolific users from the United States (N = 223) participated in one of four AVI conditions and responded to five structured interview questions. Results were analyzed using path models and correlations. Interview performance was related to interviewees' usage of multiple attempts and honest IM. Anxiety was associated with using more attempts and with lower perceived fairness. Several limitations of the study's methodology are raised, and practical implications for both interviewees of AVIs and employers using AVIs are discussed.

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How AVI Design Affects Applicant Outcomes: Interview Performance, Impression Management, Anxiety, and Perceived Fairness

The employment interview is a near-ubiquitous applicant selection tool that has commonly been used in hiring processes for over 100 years (Levashina et al., 2014; Macan, 2009), and though the in-person interview may be traditional, advances in technology have brought about new means of conducting interviews. One of the most recent developments in interview technology has been the asynchronous video interview (AVI), a one-way interview conducted completely online (via special AVI platforms), in which applicants video-record their responses to the employer's interview questions. Raters or would-be interviewers then watch and evaluate the videos at a later time or, more increasingly, an artificial intelligence (AI) software may analyze the videos and conduct a preliminary screening or ranking of applicants to "aid" the selection process (HireVue, n.d. a).

Though the potential evaluation of applicants by computer algorithms and a lack of real-time communication may pose a stark contrast between AVIs and traditional in-person interviews, AVIs offer many benefits to both employers and applicants (Lukacik et al., 2020). This includes: a) Lower costs and more efficient use of time; as no travel is involved, travel expenses can thus be eliminated, and fewer hours are spent interviewing applicants and/or interviewers are able to review a larger number of applicants in the same amount of time; b) Ease of access, as anyone with a smartphone or computer and webcam can participate in an interview from anywhere in the world; c) Increased structure and consistency of the interview; each applicant is subjected to the same interview experience (e.g. identical questions, time allowed per response), thus creating a standardized interview process and ensuring fairness across applicants; d) Customizability of the interview questions and interview process to the needs of the employer,

as many AVIs allow for structural features of the interview to be modified, and; e) Analytical possibilities, such as AI evaluation or screening of applicants, which potentially may help to reduce the biasing effects of human evaluators in hiring decisions (Gorman et al., 2018; Langer et al., 2017).

With these advantages, it is no surprise that large organizations like Unilever, Ikea, Cathay Pacific, and KraftHeinz (HireVue, n.d. b; VidCruiter, n.d.) have been integrating AVIs into their selection processes. Indeed, many employing organizations are looking to third-party providers of AVI platforms such as HireVue, VidCruiter, SparkHire, Jobvite, and ConveyIQ (to name a few), as evidenced by the providers' customer lists. Although it is clear that AVIs are already quite popular of a selection tool among employers, the increasing use of AVIs in hiring processes is perhaps somewhat concerning, given the limited amount of research to date that has been conducted on AVIs. Importantly, however, the medium in which interviews are conducted can substantially affect how the interview is perceived and experienced by both interviewers and interviewees; existing research on technology-mediated interviews suggests that the findings from in-person interviews cannot be generalized to technology-mediated forms of interviews and, similarly, the different types of technology-mediated interviews (e.g. telephone, videoconference, AVI) cannot be generalized to each other either (Blacksmith et al., 2016; Lukacik et al., 2020). In the interest of both applicants and employers, it is clear that AVIs require more empirical investigation if they are to hold an increasingly central role within the selection and hiring landscape (Lukacik et al., 2020), as it is not yet well understood how AVIs may function differently as a selection tool and how AVIs may influence various selection outcomes. The present study therefore aims to contribute to AVI research by examining how differences in AVI structure and design may bring about differences in applicants' reactions,

behaviours, and performance which, in turn, may have substantial impacts for other outcomes of interest pertaining to both employers (e.g. organizational attractiveness) and applicants (e.g. interview outcomes). More specifically, AVI design will be examined in relation to interview performance, anxiety, impression management (IM) behaviours, and perceptions of fairness. A brief overview of the extant literature on AVIs is provided next.

AVI Research To-Date

In 2006, when videotaped interviews were increasing in popularity, findings from Van Iddekinge and colleagues revealed that evaluations of interviewees' performance in structured interviews differed depending on whether the interview was evaluated in-person or via a videotaped recording, suggesting early on that the ratings and research findings from face-to-face interviews perhaps would not generalize to video-recorded interviews. A more recent meta-analysis conducted by Blacksmith et al. (2016) further supports this lack of generalizability across interviews media; these authors found that, relative to in-person interviews, technology-mediated interviews (e.g. phone, videoconference) were more likely to result in negative applicant reactions and lower interview scores. Around the time when AVIs were just starting to increase in popularity, Guchait et al. (2014) qualitatively and quantitatively examined applicants' perceptions of and reactions to AVIs; they found that applicants supported the use of AVIs in selection settings for the purposes of applicant screening, increasing interview fairness, saving on time and travel costs, and increasing job and interview opportunities, but they also found that AVIs were low in overall favourability due to their impersonal nature, lack of feedback, and potential for technical difficulties. More recent studies on applicant reactions to AVIs have mostly supported Guchait et al.'s (2014) findings. Brenner et al. (2016) found that attitudes towards AVIs were affected by how useful and easy to use applicants perceived AVIs to be.

Langer et al.'s (2017) results showed that AVIs may not negatively affect interviewees' performance ratings, but may have negative consequences for their affective reactions, privacy concerns, and perceived fairness in interpersonal and communication domains. Similarly, Basch et al. (2020) found that, relative to video-conference interviews and in-person interviews, AVIs were the perceived as being the lowest in fairness, predictive job-relatedness, opportunity to perform, social presence, and opportunity to use IM.

In investigating a potential solution to the negative reactions commonly observed with AVIs, Basch and Melchers (2019) demonstrated that providing interviewees with explanations about the increased flexibility and standardization of AVIs can help improve interviewees' perceptions of fairness and usability; in turn, this can have positive indirect effects on perceptions of organizational attractiveness, thus suggesting a cost-effective method of mitigating some of the negative aspects of AVIs. However, slightly different results were found by Langer et al. (2018), who used a demonstration of a highly automated interview and found that being transparent about the interview procedure can be both helpful and harmful towards organizational attractiveness perceptions. That is, although more information about the interview procedure made participants feel they were being informed and being treated with open honesty, more information also had a direct negative relationship with attractiveness perceptions.

AVIs have also been examined in relation to automation and AI-based evaluation. Langer et al. (2019) found that interviews that incorporated a high degree of automation (i.e. automated acquisition and analysis of information, decision-making, and implementation of decisions/ actions) were perceived to be more ambiguous and lower in fairness, social presence, controllability, and overall favourability. In contrast, Suen, Chen, and Lu (2019) found no differences in perceived fairness of AVIs evaluated by humans and AVIs evaluated by an AI. In

Langer et al. (2020), participants who partook in an asynchronous, audio-only interview were found to give shorter responses, use less deceptive IM, and perceive less opportunity to perform when they were led to believe their responses were being evaluated automatically by a computer rather than a human. Langer et al. (2016) have also found virtual, automated interview training to be effective in improving interviewees' use of non-verbal behaviours, interview performance, and interview anxiety. Finally, Suen, Hung, and Lin (2019) were able to develop a highly accurate AI for automatic detection of personality traits in AVIs.

Several topics within or related to AVI research have only been examined by one or two studies. In the only validation study conducted so far, Gorman et al. (2018) demonstrated that the criterion-related validity of AVIs can be at least as strong as that of in-person structured interviews, providing evidence for the psychometric properties of AVIs. But, as a notable caveat, Gorman et al.'s study relied on self-reports of job performance, which may have limited reliability and validity as a measure of job performance. Both Suen, Chen, and Lu (2019) and Torres and Gregory (2018) found that applicants' physical appearance significantly related to human evaluators' ratings of interview performance. Also examined by Torres and Gregory (2018) was how the viewing order of candidates' application materials (i.e. resume first and AVI second, or AVI first and resume second) can affect overall evaluations of a candidate; viewing an applicant's resume before their AVI recordings was associated with lower overall evaluations of the candidate, suggesting that employers should be mindful of when AVIs are used within the overall selection process. Horn and Behrend (2017) examined the effect of the "picture-in-picture" window in synchronous videoconference interviews (i.e. the small window that displays what your camera is viewing) and found that the presence (versus absence) of the window was associated with experiences of higher cognitive load in interviewees.

Within the backdrop of the hospitality industry, a few additional articles on AVIs have also been published. Mejia and Torres (2017) conducted a qualitative study with corporate recruiters and found several key considerations related to the adoption and implementation of AVIs, from the perspective of hospitality industry employers (of whom had 0-4 years of experience with using AVIs): a) AVIs need to be easy to use, and save on time and costs; b) AVIs "augment" the interview process by giving the employer an opportunity to establish their brand, and by allowing recruiters to "put a name to a face"; c) The novelty of AVIs raises concerns for both applicants (e.g. nervousness, skepticism) and employers (e.g. reduced response rates); d) Issues with applicant aesthetics and unprofessionalism (e.g. inappropriate clothing, lighting, posters or pictures in the background, disturbances). Torres & Mejia (2017) wrote a conceptual paper on how AVIs may align with the needs and interests of the hospitality industry, and the outcomes that adopting AVIs may have for their employee selection and recruitment processes. They suggest that AVIs should be used in conjunction with personal communications (e.g. phone calls, emails) from a recruiter before and/or after the AVI to counteract the impersonal nature of AVIs, and with other selection tools (e.g. in-person interviews, cognitive ability tests). They additionally proposed that the use of AVIs would likely increase the size and quality of the applicant pool, attract a younger (more technologically-savvy) generation of potential candidates, and increase the influence of applicant aesthetics in selection decisions.

Lastly, a detailed research agenda outlining the current state of AVI research and potential areas of interest was created by Lukacik et al. (2020). As authors such as Lukacik et al. (2020) and Langer et al. (2017) have noted, there is a clear need to investigate how differences in AVI structure and design affect applicants' reactions and outcomes, which the current study will begin to address.

AVI Design and the Interview Experience

As mentioned earlier, one of the advantages of AVIs is the ability to customize and modify its structure to suit employers' or interviewers' preferences. AVI design, as defined by Lukacik et al. (2020), refers to "how the interview is programmed, or the configuration of features that are chosen, to create the user experience" (p. 4). Such modifiable design features include (but are not limited to) aspects like maximum response duration, the ability to re-record or re-attempt responses, and the amount of time allowed to prepare a response. However, making such changes to the design and format of the AVI may subsequently produce differences in how applicants approach, perform in, and experience different AVIs. As research like Blacksmith et al. (2016) has demonstrated that the results of different interview approaches cannot be directly compared to one another, this suggests that different AVI designs may not be comparable to each other either, thus raising the question of whether some AVI designs are more likely to result in particular outcomes. For instance, AVIs designed to draw quick responses from interviewees may allow only five seconds of response preparation time, one attempt per question, and a maximum response duration of 60 seconds. As this design would be relatively stressful and leave little room for interviewees to make errors or corrections, it could produce lower overall interview performance scores, stronger anxiety, and self-selection out of the hiring process, but it could also minimize the opportunity for faking responses (Lukacik et al., 2020). In contrast, AVIs designed to encourage maximal interview performance could be designed with an unlimited amount of response preparation time, allow multiple attempts, and allow a response time of three minutes. This latter design would be somewhat less restrictive and more "forgiving", in that applicants have more leeway to make and correct errors. Such a design could therefore result in relatively better interview performance scores and help to reduce interviewees'

anxiety, though the greater leeway could also increase the occurrence of faking in responses (Lukacik et al., 2020). Notably, research has yet to empirically examine how differences in AVI designs may influence applicants' interview experiences, behaviours, or outcomes.

As such, the present study will examine how changes to two aspects of AVI design, response preparation time (PT) and the allocation of multiple recording attempts affect the applicant outcomes of interview performance, IM behaviours, anxiety, and perceived fairness. This research may ultimately help to inform employers' choices in AVI design, as some configurations of AVI features may be more prone to eliciting particular reactions and behaviours from applicants. Additionally, results may help inform potential interviewees of AVIs if associations between particular applicant variables and interview performance arise.

Theoretical Background

Figure 1 shows the relationships that are hypothesized between the study variables; although a few other relationships will be examined during data analysis in an exploratory fashion, the relationships depicted in this diagram represent the core hypotheses and research interests of this study. The theoretical background behind these core hypothesized relationships are discussed in the sections that follow.

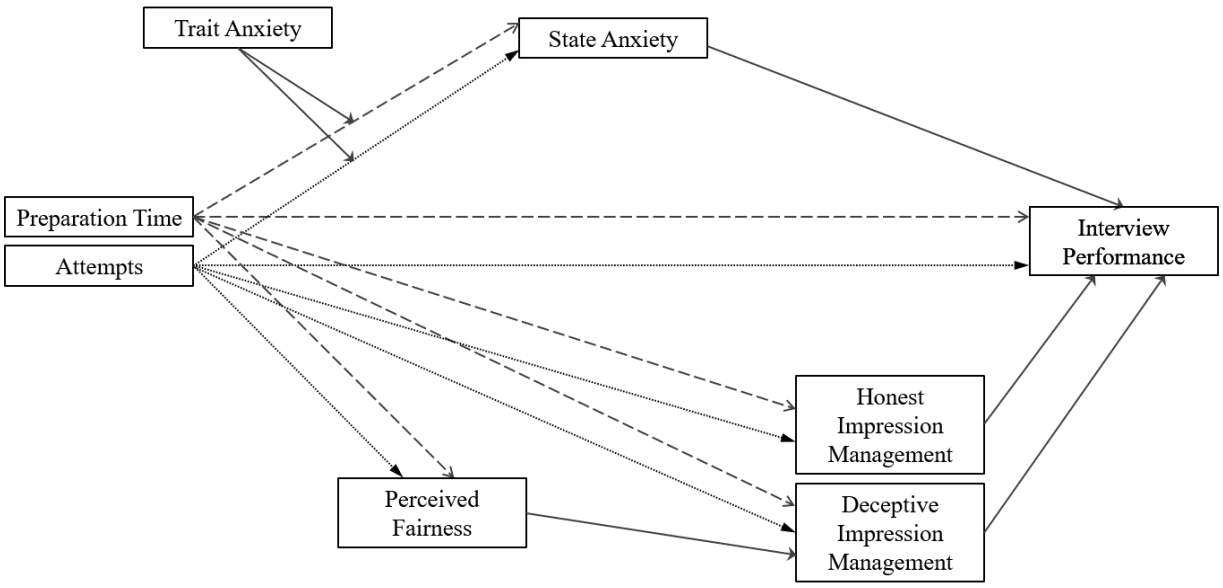

Figure 1. Model of main hypothesized relationships between the study variables. Differences in arrow styling were added to aid visual interpretation only.

Interview Performance

Interview performance ratings have been shown to vary systematically, based on the medium that the interview is conducted in (Blacksmith et al., 2006; Van Iddekinge et al., 2006). As such, a core area of interest to be examined in this thesis is whether differences in interview performance arise as a result of differences in an AVI's design. Any observed variations in performance ratings between AVI designs may have noteworthy implications for employers and organizations using AVIs; as AVIs designed with different features may be higher or lower in difficulty relative to other designs, variations in performance across designs may be an informative indicator of how easy or difficult it may be for applicants to perform. For instance, an AVI in which a large proportion of participants are able to score highly may be indicative of an AVI that was too easy. As results from a low-difficulty AVI may potentially limit the utility of the AVI's results towards differentiating the performance or suitability of applicants, knowing

the relative difficulty of any particular AVI design can therefore provide greater context for assessing applicants.

It can be reasonably expected that AVI designs offering longer PTs and/or the option for multiple recording attempts will correlate with better interview performance scores; objectively, longer PTs would give interviewees more time to adequately prepare a response after viewing the interview question, and the ability to re-attempt responses would give interviewees the opportunity to improve upon answers, correct mistakes, or deal with unexpected interruptions. Thus, improvements in interview performance are generally expected with the allocation of more PT and multiple attempts.

Hypothesis 1a: Interview performance scores will be higher in AVI designs allowing for longer preparation times.

Hypothesis 1b: Interview performance scores will be higher in AVI designs allowing for multiple recording attempts.

The hypothesized relationship between AVI design and improvements in interview performance are expected to be affected by complex relationships between applicants' IM use, anxiety, and perceived fairness of the AVI design, and these hypothesized relationships are expanded upon next.

Anxiety and Interview Performance

As the anxiety experienced during an interview is likely to be a function of both person (i.e. trait) and situational (i.e. state) influences (Martens et al., 1990), it is important to consider the influences of both sources when assessing interview anxiety. The influence of interview state anxiety (referred to as just "state anxiety" henceforth) will be addressed first, and an examination

of the influence of interview trait anxiety (referred to as just "trait anxiety" henceforth) will follow.

State Anxiety.

The evaluative and high-stakes nature of interviews is often associated with feelings of anxiety and distress in applicants (Rynes et al., 1991). However, higher levels of anxiety can detrimentally affect interview performance, with meta-analytic findings indicating negative correlations between interview performance and both state (r = -.24) and trait (r = -.08) anxiety (Powell et al., 2018). State anxiety (non-interview-specific), which differs from trait anxiety, refers to temporary feelings of apprehension, nervousness, and worry arising as a result of stresses affecting the individual (Powell et al., 2018; Spielberger, 1985). With interview state anxiety, these feelings arise specifically from employment interview situations (Powell et al., 2018).

Indeed, anxiety may have negative effects on interview performance for a number of reasons. For instance, in line with the attentional control theory of anxiety (Eysenck et al., 2007), considerable evidence exists linking anxiety to cognitive interference and subsequent declines in performance on cognitively demanding tasks (McCarthy et al., 2016; Powell et al., 2018). This theory proposes that individuals experiencing anxiety will direct their attention towards internal (e.g. thoughts) or external (e.g. distractions) threat-related stimuli, leaving fewer attentional resources for performing the task at hand (Eysenck et al., 2007). Given that an interview is an evaluative situation requiring individuals to maximize their performance (in other words, it is a cognitively demanding task), it is unsurprising that anxiety correlates with lower interview performance (Powell et al., 2018). Powell and colleagues (2018) additionally suggest that anxiety may interfere with one's ability to display the appropriate subtle behavioural cues; those

experiencing strong anxiety may be more likely to neglect the social cues that would make them appear more warm and likable to an interviewer (e.g. smiling; Heerey & Kring, 2007), and may also be more likely to display behaviours that interviewers might interpret as nervous tics (e.g. licking lips; Feiler & Powell, 2016), both of which may lead to less favourable evaluations of interview performance.

These results suggest that applicants experiencing anxiety are less likely to perform well in an interview, and may therefore be less likely to be hired for a job, despite the possibility that these individuals may demonstrate equivalent or superior job performance if hired (McCarthy & Goffin, 2004). In support of this, Schneider et al. (2019) demonstrated that interview anxiety can present a bias in the predictive validity of interviews; although higher interview anxiety was indeed related to poorer interview scores, interview anxiety itself was not significantly related to subsequent job performance. In fact, interview performance was only a significant predictor of job performance if applicants were low (one standard deviation below the mean) in interview anxiety; interview performance became a nonsignificant predictor for those high (one standard deviation above the mean) in interview anxiety, suggesting that applicant interview anxiety can have a substantial negative effect on the validity of interviews.

An AVI, in any configuration, would likely be unable to eliminate interviewees' experiences of anxiety entirely, due to the often high-stakes nature of employment interviews. However, the breadth of possible configurations in AVI designs means that some configurations of AVI features may increase applicant anxiety, while others may help diminish it (Lukacik et al., 2020), with differences in interview performance likely following as a result. For instance, an AVI design allowing for longer PTs may provide interviewees with the time they need to adequately process the cognitively demanding task of responding well to an interview question.

Similarly, the option of having multiple recording attempts provides interviewees with multiple tries to achieve a "maximum performance"-level response, potentially reducing the anxiety experienced during any one attempt. It is therefore of interest to examine how AVI design may directly affect the anxiety experienced during the interview, as it may help to identify AVI conditions that reduce it, thereby reducing the potential bias of interview anxiety on the predictive validity of AVIs. (However, it is acknowledged that whether state anxiety raises or lowers as a result of these two AVI design features may depend on whether the interviewee is higher or lower on trait anxiety, and this is expanded upon in the next section.) Experiences of anxiety during an interview may have additional consequences as well, as applicants who experience greater anxiety during the interview may perceive the organization more negatively (McCarthy & Goffin, 2004). This may increase the risk of applicants self-selecting out of the hiring process (Lukacik et al., 2020), as well as contribute to potential difficulties in attracting and retaining potential applicants in future hiring efforts.

It is therefore hypothesized that the design of the AVI will directly affect state anxiety, in that AVI designs incorporating a longer PT or multiple attempts should result in lower state anxiety. In turn, state anxiety is expected to relate to interview performance, such that lower state anxiety scores are correlated with higher interview performance scores. Lastly, as AVI design should influence state anxiety, and state anxiety should affect interview performance scores, state anxiety is hypothesized to be a mediator of the relationship between AVI design and interview performance.

Hypothesis 2a: State anxiety will be lower in AVI designs allowing for longer response preparation times.

Hypothesis 2b: State anxiety will be lower in AVI designs allowing for multiple recording attempts.

Hypothesis 2c: State anxiety and interview performance scores will be negatively correlated.

Hypothesis 2d: State anxiety will mediate the relationship between the AVI design features and interview performance scores.

Trait Anxiety.

Trait anxiety, which refers to differences between individuals in the frequency and intensity of anxiety experienced (Powell et al., 2018; Spielberger, 1985), may influence the relationship between AVI design features and state anxiety (and thus, subsequent interview performance as well), such that an interviewee high in trait anxiety may react and behave differently to some AVI features, relative to someone lower in trait anxiety. First, relative to individuals low in trait anxiety, those high in trait anxiety may not only experience state anxiety more frequently, but may experience stronger state anxiety as well (Meijer, 2001). Given the robust relationship between levels of state anxiety and subsequent interview performance (meta-analytic r = -.24; Powell et al., 2018), it therefore seems likely that individuals high in trait anxiety will exhibit not only higher state anxiety, but poorer interview performance as well. Indeed, Powell et al.'s (2018) meta-analysis indicates that higher trait anxiety is generally associated with lower interview performance (meta-analytic r = -.13 to -.16), though to a lesser extent than that of state anxiety.

Second, as discussed earlier, longer PTs and the ability to re-attempt responses can, in general, be expected to serve as advantages to interviewees, as they can take them as opportunities to improve their performance. However, the anxiety literature suggests that these

AVI features may not result in reductions in state anxiety for trait-anxious individuals, to the same extent that such features would for those low in trait anxiety. For instance, socially anxious individuals are known to engage in post-event processing (Brozovich & Heimberg, 2008), a maladaptive emotion regulation strategy in which individuals review their performance in past social situations with a repetitive focus on personal deficiencies (Clark & Wells, 1995; Sarfan et al., 2019). Engaging in post-event processing has, in turn, been linked to greater occurrences of negatively biased self-evaluations of performance in social situations, which consequently reinforces negative beliefs and assumptions about one's performance in future social situations (Brozovich & Heimberg, 2008). Therefore, it is possible that for trait-anxious individuals, AVIs designed with features like re-recording and reviewing attempts may be of more harm than help for reducing state anxiety or improving interview performance (Lukacik et al., 2020), as these features may further enable maladaptive behaviours associated with anxiety (such as post-event processing) and make the self-evaluation of personal performances more salient of an event.

Additionally, because post-event processing can occur prior to the start of a social or performance event as an anticipatory behaviour (rather than solely as a post-event behaviour; Brozovich & Heimberg, 2008) and because socially anxious individuals assume even before the start of an event that they will not be able to meet the performance expectations of the audience (in the context of this research, the interviewer or rater; Rapee & Heimberg, 1997), it is possible that longer PTs may bode poorly for trait-anxious individuals as well. By giving them more opportunity (i.e. time) to anticipate an evaluative, high-stakes social situation (i.e. recording a response to each interview question) and ruminate over negative self-evaluations, such AVI designs may decrease the likelihood of reductions in state anxiety for trait-anxious individuals.

On the contrary, one could just as easily argue the opposite—that more lenient AVI designs do not work to the detriment of trait-anxious individuals, but rather, they substantially help to lessen anxiety and increase the likelihood of performance improvements instead. For instance, one could argue that longer PTs may give anxious individuals the time they need to calm themselves down, engage in coping strategies, and then adequately prepare a response to the question, or that multiple recording attempts can help reduce the pressure of needing to perform well during any one attempt, effectively reducing state anxiety. In partial support of this view, findings from the literature on test anxiety have found that different dimensions of test anxiety are associated with different coping strategies and behaviours leading up to a testing event. For example, experiencing distracting performance-inhibiting or -interrupting thoughts was associated with avoidance behaviours, low task-orientation, and low preparation towards upcoming tests (Stöber, 2004). In contrast, simply worrying about the test outcome and its potential consequences was associated with high task-orientation and preparatory behaviours (Stöber, 2004). Thus, given that anxiety may relate to adaptive behaviours as well (and not just maladaptive behaviours), it is indeed possible that the leniencies offered by particular AVI designs may help reduce the state anxiety of trait-anxious individuals, thus helping them improve their response performance.

However, this example also illustrates the possibility that the relationship between AVI design and trait anxiety may be dependent on what aspect of the interview the person is anxious about. Similar to how test anxiety has been found to be comprised of several distinct dimensions, interview anxiety has been identified as having five dimensions (performance, appearance, communication, social, and behavioural anxiety; McCarthy & Goffin, 2004), each of which may be associated with different adaptive or maladaptive behaviours and may result in different

interview performance outcomes. For instance, if given a more lenient AVI design, individuals whose trait anxiety more closely resembles performance anxiety may use the advantages afforded by such an AVI to engage in more of the adaptive, task-oriented, preparatory behaviours, whereas individuals whose trait anxiety more closely resembles social anxiety may find themselves at a disadvantage when the same features simply enable them to engage in more of the maladaptive behaviours discussed earlier, like biased self-evaluations and post-event processing.

Although trait anxiety may interact with AVI design to moderate the effect of AVI features on state anxiety, the reviewed literature suggests that anxiety could give rise to either adaptive or maladaptive reactions and behaviours, and it is unclear whether trait-anxious individuals will experience increased or decreased state anxiety as a result of longer PTs or multiple attempts. As such, because the role of trait anxiety as a moderator of the relationship between the AVI features and state anxiety is unclear, it is difficult to make more specific predictions on the nature of this interaction. This potential moderating effect will therefore be examined in a more exploratory fashion, as a research question.

Research Question 1a: How does trait anxiety moderate the relationship between preparation time and state anxiety?

Research Question 1b: How does trait anxiety moderate the relationship between multiple recording attempts and state anxiety?

Impression Management and Interview Performance

IM refers to a class of behavioural techniques that individuals use during a social interaction to influence the impressions that others form of them (Leary & Kowalski, 1990). As the employment interview is a high-stakes social interaction in which applicants are motivated to

present themselves to an interviewer as the ideal candidate, applicants are highly likely to employ the use of IM tactics during an interview (Bourdage et al., 2018). Indeed, some studies have shown upwards of 97% of interviewees engaging in at least one IM tactic over the course of an interview (e.g. Ellis et al., 2002; Bourdage et al., 2018), and IM use has shown to be a cross-cultural phenomenon, used within U.S. (Levashina & Campion, 2007), European, and Chinese populations (König et al., 2012). At the broadest level, IM tactics can be nonverbal (e.g. smiling, maintaining eye contact) or verbal (Stevens & Kristof, 1995). Verbal IM behaviours can be either honest or deceptive, as applicants can either truthfully represent themselves, or they can intentionally misrepresent themselves by exaggerating or fabricating experiences or skills that they do not posses (Bourdage et al., 2018; Levashina et al., 2014). Within that, IM tactics can be assertive self-focused (e.g. self-promotion of personal achievements and competencies), assertive other-focused (e.g. ingratiation, opinion conformity to the employer or interviewer), or defensive (e.g. justifying or omitting negative past events, apologizing; Bourdage et al., 2018).

Meta-analytic results indicate that applicant use of IM in interviews is moderately correlated with higher ratings of interview performance (r = .21 for structured interviews and r = .47 for unstructured interviews; Barrick et al., 2009), potentially by influencing interviewers' perceptions of person-job fit, person-organization fit, similarity to the interviewer, and applicant suitability (Chen & Lin, 2014; Higgins & Judge, 2004; Kristof-Brown et al., 2002). In contrast, IM use in interviews is relatively much less correlated with subsequent job performance (r = .15; Barrick et al., 2009), suggesting that IM may have a biasing effect on the predictive validity of interviews. However, the extent to which IM represents a bias in interviews can still be debated (Levashina et al., 2014). On one end, as deceptive IM by definition involves faking or exaggerating, it is clearly something that should be controlled for in interviews to prevent

selection decisions being made on the basis of false information, and is therefore much less of a debate. On the other end, interviewers actually expect applicants to use honest IM in interviews (Ralston & Kirkwood, 1999), as honest self-promotion can convey job-relevant information to an employer and reflect other desirable applicant qualities (Rosenfeld, 1997) like interest in the job (Bozeman & Kacmar, 1997) and competency in social situations (Kristof-Brown et al., 2002). Additionally, the extent to which IM use in interviews is relevant to selection decisions and future job performance may depend on the job or performance domain; for example, McFarland et al. (2003) found that IM use was related to interpersonal performance, which may be a relevant aspect for jobs that may benefit from employees engaging in IM, such as customer-facing jobs (Levashina et al., 2014).

AVIs present a unique social dynamic that is different from that of other technology-mediated interview forms (e.g. telephone, videoconference) or in-person interviews; as there is no real-time social interaction between interviewer and interviewee, this may affect IM behaviours. Indeed, it has been argued that all technology-mediated forms of interviews impede applicants' ability to use IM tactics to some extent, as technology mediation can restrict the observation of nonverbal cues, including IM tactics (Blacksmith et al., 2016; Van Iddekinge et al., 2006). Given the lack of real-time communication and the lack of an identifiable "interviewer" in AVIs with which to interact with, applicants' IM use within AVIs is likely to differ from that of other synchronous interview methods. Indeed, Basch et al. (2020) found that AVIs were perceived to be low in potential for IM use, though research has yet to examine actual IM use in AVIs. Additionally, given the design flexibility of AVIs, it is possible that some configurations of features may result in greater IM use, while others may decrease it. For example, by increasing response preparation times or allowing for multiple attempts, less

restrictive AVI designs can give applicants more opportunities to use and incorporate IM into their responses. And, given the robust positive relationship between IM use and interview ratings demonstrated by Barrick et al. (2009), AVI designs that impact applicants' opportunity to use IM are likely to affect subsequent interview performance ratings as well. Interviewees' IM use will therefore be examined as a mediator of the relationship between AVI design and interview performance, with the hypothesis that more PT and multiple attempts will result in greater IM use and, thus, higher interview performance ratings.

Hypothesis 3a: Impression management use will increase in AVI designs allowing for longer response preparation times.

Hypothesis 3b: Impression management use will increase in AVI designs allowing for multiple recording attempts.

Hypothesis 3c: Impression management use and interview performance will be positively correlated.

Hypothesis 3d: Impression management use will mediate the relationship between the AVI design features and interview performance.

Perceived Fairness

Relative to traditional in-person interviews, technology-mediated interviews have often shown to be less favourable among applicants, perhaps in part because they are perceived as less fair (Blacksmith et al., 2016). Lower perceived fairness in technology-mediated interviews may occur for a number of reasons. For instance, applicants may feel disadvantaged having to familiarize themselves with a new technology or interview format, they may feel that the interview setting is impersonal, they may perceive a lack of control over the interview, or they may feel that they were not given an adequate opportunity to perform (Blacksmith et al., 2016).

In line with Gilliland's (1993) theory of applicant reactions to selection procedures, evidence indicates that applicants' perceived fairness of selection procedures can impact critical applicant outcomes like job acceptance intentions, recommendation intentions, and organizational attractiveness (e.g. Basch & Melchers, 2019; Konradt et al., 2013; Langer et al., 2018). As such, many researchers who have investigated applicant reactions to different types of technology-mediated selection methods have cautioned that poor favourability among applicants to these methods can have undesirable effects for employers' future hiring efforts, should employers decide to use them (e.g. Dineen et al., 2004; Konradt et al., 2013; Langer et al., 2017; Langer et al., 2018). Thus, if AVIs are to continue being used, it seems that it would be in the interest of both employers and applicants to investigate what AVI designs may be perceived as more fair and favourable by applicants. One of the aims of this research is therefore to evaluate how interviewees' perceived fairness of the AVI differs across AVI conditions.

Gilliland's (1993) model of applicant reactions to selection procedures outlines the procedural justice components of selection procedures and their impact on the overall fairness of the process. These procedural justice components fall under three factors: formal characteristics of the selection process (e.g. job relatedness, opportunity to perform); explanation, justification, and feedback about a selection decision, and; the employer's interpersonal treatment of applicants (e.g. adequate communication, respect). Changes to the design of AVIs can therefore directly impact the formal characteristics factor of procedural justice. For instance, longer PTs and multiple attempts both increase applicants' *opportunity to perform* (a component of the formal characteristics factor), while other AVI modifications may impact other aspects of procedural justice, such as how adding the chance to review all recorded attempts before choosing one to submit would impact *reconsideration opportunity* (another formal characteristics

component, defined as the opportunity to review one's data; Gilliland, 1993). Thus, although different modifications to AVI design could affect different aspects of procedural justice, within the context of our two chosen design features (longer PTs and multiple recording attempts), it is expected that AVIs designed with more PT or multiple attempts will be perceived as more fair by interviewees.

Hypothesis 4a: Perceived fairness will increase in AVI designs allowing for longer preparation times.

Hypothesis 4b: Perceived fairness will increase in AVI designs allowing for multiple recording attempts.

Perceived Fairness and Impression Management Use.

How fair a selection procedure is perceived to be by applicants may subsequently affect how they behave towards it. One such behaviour that may be affected within interviews is applicants' IM behaviours. In Levashina and Campion's (2006) model of faking likelihood, it is theorized that faking (i.e. deceptive IM) in employment interviews is a function of applicants' capacity, willingness, and opportunity to fake. It is also theorized that applicants who feel they have been treated unfairly in an interview will be more willing to fake, as these applicants will be motivated to retaliate and restore equity by means of faking to improve their scores or evaluations. In support of Levashina and Campion's theory, Bourdage et al. (2018) found that interviewees who perceived an interview as unfair were more likely to engage in deceptive IM, whereas those who perceived it as fair were more likely to engage in honest IM. It stands to reason, then, that increasing applicants' perceived fairness of the interview process may decrease willingness to fake, or in other words, willingness to engage in deceptive IM. Therefore,

AVI designs that are perceived as less fair may see higher occurrences of deceptive IM, relative to AVI designs that are perceived as more fair. Because changes to AVI design are expected to bring about changes in perceived fairness of the interview, and because perceived fairness is expected to influence deceptive IM use, perceived fairness is hypothesized to be a mediator of the relationship between AVI design and IM use. Although less restrictive AVI designs are expected to correlate positively with perceived fairness, perceived fairness is expected to correlate negatively with deceptive IM use; the indirect effect of AVI design on deceptive IM use via perceived fairness may thus overall be negative. In comparison, seeing as the direct effect of AVI design on deceptive IM use is expected to be positive (see Hypotheses 3a and 3b), it is possible that a suppression effect will occur when perceived fairness is included as a mediator, such that the direct effect and indirect effect negate each other.

Hypothesis 4c: Perceived fairness and deceptive impression management use will be negatively correlated.

Hypothesis 4d: Perceived fairness will mediate the relationship between the AVI design features and deceptive impression management use.

Exploratory Analyses

Additionally, although this study will mainly focus on the impact of the manipulated AVI features (i.e. the amount of PT given and one versus multiple recording attempts) on the reactions and outcomes of interviewees, it is important to note that any observed differences in outcome variables may actually be due, in part or full, to the extent to which these AVI features are used by interviewees; that is, the actual number of attempts used (if multiple attempts are allowed) or the amount of PT used, rather than

what is available based on the manipulation of the features. As such, these possibilities will also be examined in a parallel set of analyses, whereby the manipulated variable of recording attempts will instead be operationalized as the number of recording attempts used, and the manipulated variable of PT will instead be operationalized as the average amount of time spent prior to the first recording attempt per question.[1] However, as this was considered more exploratory, no specific hypotheses were created for this second set of analyses.

At the recommendation of a member of the thesis committee, there are a few additional areas of interest that will be examined as exploratory analyses. As these are exploratory, no specific hypotheses were formed. The first analysis will examine the nature of any interactive effects between PT and multiple attempts on interview performance, IM, perceived fairness, and state anxiety. Indeed, although the study employs a factorial design, no hypotheses about potential interaction effects were made above, as it is unclear (based on the existing literature) whether such interactions between AVI design features would be of any value or importance to the outcomes. As such, these will be examined in an exploratory fashion. The second analysis will examine whether any moderating effect of trait anxiety on the relationship between the AVI features and state anxiety (presented in Research Questions 1a and 1b) differs across factors of the trait anxiety measure, given that differences in the type of anxiety experienced may give rise to different behaviours and reactions as a result. This will be examined if, during the

[1] Due to technical limitations of the time data recorded by the AVI platform used, actual PT usage could only be operationalized as the mean number of minutes elapsed prior to the first attempt per question, rather than the mean number of non-recording minutes spent per question or the mean number of minutes elapsed prior to each recording attempt.

main analyses, the trait anxiety measure overall is found to have a moderating effect on state anxiety, to determine whether the effects differ across factors of trait anxiety.

Methods

Participants

An *a-priori* power analysis was conducted in R version 4.0.1 using the package *semPower* to determine required sample size. With an alpha of $\alpha = .05$, RMSEA = .08, $df = 18$, and desired power of $\beta = .80$, the suggested minimum sample size was $N = 176$. Given this and other commonly suggested rules-of-thumb for SEM sample sizes (Kenny, 2020), our aim was to have a final sample of at least 200 participants with usable data. To account for the removal of participants with poor or incomplete data, we over-sampled and recruited 284 individuals.

Participants were recruited over seven weeks in April and May of 2020 via Prolific, an online research platform. To be eligible to participate, individuals had to be of 18 years of age or older and United States residents. Additionally, in order to limit the influence of practice effects and overlap in AVI study participants, any Prolific users who had participated in a prior AVI-related study conducted by the author's advisor were considered ineligible and were prevented from participating in the study. Of the 284 individuals who took part in the study, 41 participants were excluded from the final sample; 35 of these participants were eliminated due to having no or little data, and six participants were eliminated due to failing one or more attention checks, leaving a sample of 243 participants.

On average, participants were 30.36 years old ($SD = 9.87$; range = 18-70 years). The sample was evenly split across gender (male = 51%). A majority of participants (70%) reported obtaining a bachelor's degree or higher as their highest education level, while 2% reported obtaining a technical/vocational degree, 27%, a high school diploma, and fewer than 1% reported

being less than high school educated. The sample was largely White (64%), followed by East Asian (9%), Black (9%), Hispanic/Latinx (9%), South Asian (3%), mixed/multiracial (3%), Middle Eastern (2%), and Native/Aboriginal/Pacific Islander (1%) individuals. Participants had a mean of 9.96 years (*SD* = 8.90; range = 0-48 years) of full-time or part-time work experience. The mean number of non-AVI job interviews (e.g. in-person, telephone) participated in prior to the study was 8.36 (*SD* = 13.3; range = 0-100), while the mean number of AVIs (including both job-related and job-unrelated interviews) participated in prior to the study was .87 (*SD* = 2.37; range = 0-25).

Procedure and Design

On Prolific, participants were given a brief description of the study tasks and were informed that they would be paid £7.50 for study completion, with a chance to receive a bonus payment of £10.00 if they scored among the top interviewees. They were informed that they would have to complete the study in one sitting. Participants were then redirected from Prolific to the AVI platform; this platform is a Canadian research-based AVI platform belonging to the author's advisor and the advisor's research colleagues.

On the AVI platform, participants were presented with the informed consent form, followed by the job description/advertisement of the job that they would be "interviewing" for (see Appendix A). They were randomly assigned into one of four experimental conditions in the 2 (low preparation time, unlimited preparation time) × 2 (one attempt, five attempts) design. In low-PT conditions, participants were given 15 seconds of PT for Questions 1-3, and 40 seconds of PT for Questions 4-5.[2] Following random assignment, participants were provided with a brief

[2] These PTs were intended to give participants enough time to only read the question, and were determined by assessing the question-reading times of six (non-participant) individuals (included both native and non-native English-speakers) prior to data collection. Notably, to accommodate the delays in page loading times, these times were set to 17 seconds and 47 seconds on the platform.

description of what an AVI is (this included a short explanation of the flexibility and standardization offered by AVIs), as well as with instructions specific to the procedures of their experimental condition (see Appendix B).

To give participants an opportunity to become familiar with the AVI procedure, a practice round was provided before the start of the interview, and participants were given a chance to interact with the platform's features in a configuration/procedure that was identical to what they would experience during the interview.[3] They were then asked to respond to three behavioural interview questions and two situational interview questions (see Appendix C), presented one at a time as text (each question was visible at all times until proceeding to the next question). All participants received the same questions in the same order. They were given a maximum response time of three minutes per recording attempt. In low PT conditions, upon loading the new page for each interview question, participants had a set amount of time before video-recording automatically began; in unlimited PT conditions, participants had to click a button to begin recording. In one-attempt conditions, participants were automatically redirected to the next question upon finishing recording. In five-attempt conditions, upon finishing recording an attempt, a drop-down list of all recorded attempts appeared, and participants were allowed to either choose an attempt to submit as the response to be evaluated or record a new response if they had attempts remaining.

After finishing the interview procedure, participants were informed that the content of their responses to upcoming parts of the study would have no bearing on their eligibility for compensation or study bonuses, and were thus encouraged to respond as honestly as possible.

[3] Participants were not provided with an actual practice interview question, but were taken to a page that allowed them to see and experience what the process for each interview question would look like. As such, data from this practice round was not used in any way during analyses.

After completing a measure of state anxiety (see Appendix D) and a measure of perceived fairness (see Appendix E), participants began the task of identifying their IM behaviours. They were first provided with definitions and examples of IM tactics, as well as instructions for the IM identification task (see Appendix F). To ensure that the definitions and instructions had been read, participants were asked to correctly classify four examples of IM behaviours (see Appendix G). They were then asked to review each of the video responses that they submitted for evaluation (i.e. five videos), and to indicate within each video when and which IM tactic was being used. Lastly, participants were asked to complete a trait anxiety measure (Appendix H), followed by several demographic questions. Participants were then debriefed and paid via Prolific.

The thesis author, another graduate industrial/organizational psychology student, and an undergraduate research assistant served as raters for the interview videos. Participants were randomly assigned across raters. Performance on each question was scored using behaviourally anchored rating scales (BARS; see Appendix I), and an overall rating of interview performance was obtained by taking the mean of each participant's scores. After all ratings were collected, the top seven participants with the highest mean interview scores were awarded a £10.00 bonus payment, via Prolific.

Materials and Measures

Job description.[4] A job description for the role of Business Operations Manager was created (see Appendix A) by referring to real job advertisements for similar and related roles

[4] Notably, our original recruitment plan was to recruit a substantial portion of the study's sample from Saint Mary's University's Business School programs through the Business School's Career Centre, with the intent of using Masters-level students from the university's business programs. As such, the resulting job description, interview questions, and interview scoring guide were created with the Career Centre staff and with this intended sample in mind. However, this became an infeasible source of participants due to reasons and circumstances unforeseen, and recruitment was shifted to Prolific entirely, though the interview and scoring materials were kept largely unchanged.

(e.g. Finance Director) as well as online job analysis resources such as O*NET and NOC. The job posting was created in majority by the thesis author, with reviews and edits offered by the thesis advisor. To ensure realism and content accuracy of the job posting, changes were also made based on a review and edit from career counsellors at Saint Mary's University's Business School's Career Centre; as these individuals are experienced in preparing graduate-level students for roles like that of Business Operations Manager, they were considered as having greater knowledge of the mock position's work field.

Interview questions. Five structured interview questions were created in majority by the thesis author, with changes made based on reviews and edits offered by the thesis advisor and by the aforementioned Career Centre counsellors. These questions were based on an evaluation of the competencies required for the Business Operations Manager role. Three past-behavioural interview questions and two situational interview questions were used (see Appendix C).

Interview performance. Interview performance was assessed on each question by one of three raters on a 5-point scale using BARS[5] anchored at 1-, 3-, and 5-point ratings; all five of any one participant's videos[6] were scored by one rater (with the exception of 28 randomly selected participants who were scored by all three raters to evaluate inter-rater reliability). The BARS were created in majority by the thesis author, with reviews and edits offered by the thesis advisor and Career Centre counsellors, to ensure that the rating scales were fair and realistic. Further edits were made by the author, thesis advisor, and other interview raters after all three raters

[5] The development process of a BARS typically involves a job analysis and the collection of critical incidents from job incumbents or supervisors to a) identify the core competencies of the job, b) guide the development of structured interview questions, and c) identify the behaviours appropriate for each scoring level of an interview question (Roulin, 2017). We attempted to mirror this procedure for the development of the mock interview materials by using job analysis resources like O*NET and NOC to develop the job description and identify core competencies, and by using the Career Counsellors' knowledge and expertise of the surrounding job field to advise the development of the interview questions and scoring guides.
[6] Note that in five-attempt conditions, only the attempt that was submitted by the participant for evaluation was scored (i.e. one video per question).

viewed and rated the videos of a random sample of 20 participants; the final version of the BARS that was used to conduct ratings can be found in Appendix I.

Prior to scoring, all three raters and the thesis advisor met to discuss the interview questions and BARS; several participant videos were viewed and scored, and any discrepancies between raters were discussed and resolved. All three raters then separately viewed and scored the same random sample of 20 participants, in order to evaluate inter-rater reliability. A second meeting with the raters and thesis advisor was held to again discuss and resolve any large discrepancies in ratings, and to make changes to the BARS to improve rating consistency. Upon establishing good consistency across raters and agreement on the BARS, the remaining participants were then randomly assigned to one of the three raters. An indicator of each participant's overall interview performance was obtained by taking their mean across all five question scores. Raters were allowed to re-watch the videos as many times as needed, and were encouraged to take adequate breaks between scoring sessions to avoid rater fatigue. Another eight participants were randomly chosen for all raters to score, in order to re-evaluate inter-rater reliability. Rater ICCs for each question are described in the results section below.

Impression management. Participants coded each of their submitted videos (i.e. five videos) for IM behaviours within the AVI platform. Although the accuracy and honesty of IM data obtained through self-report is a potential concern, self-report of IM use in interviews is standard practice in IM research (though it is more commonly done through the use of Likert scales). Furthermore, IM cannot be effectively coded by interviewers or observers, as the use of deceptive IM cannot be accurately detected and distinguished from uses of honest IM (Roulin et al., 2015).

Prior to the task, participants were ensured that the evaluation portion of the study was over, and made aware that the content of their responses to remaining questions or tasks would have no influence on their interview scores or payment. They were provided with a brief explanation of what IM is, examples and definitions of four IM types (honest-assertive, deceptive-assertive, honest-defensive, and deceptive-defensive), and task instructions for IM coding (see Appendix F1). To ensure that participants understood the differences between each IM tactic, on the next page, they were shown four examples of IM behaviours and asked to correctly identify the type of IM tactic that each behaviour exemplified (see Appendix G); this was later used during analyses to select participants based on the quality of their IM data. For the task, participants were instructed to watch each of their five videos and to indicate the start time of when one of the four IM tactics were used within a video; each of the four IM tactics was associated with a specific button on-screen, and the AVI software recorded when each button was clicked during the video. A shortened version of the task instructions and four IM tactic definitions were visible on-screen at all times during the task (see Appendix F2). Although data was collected for four different IM tactics, the four tactics were separated and grouped into two IM variables (honest IM tactics and deceptive IM tactics) in order to simplify analyses. As such, for analyses, honest IM was operationalized as the total number of uses (across all five videos) of both honest-assertive and honest-defensive tactics, and deceptive IM was operationalized as the total number of uses of deceptive-assertive and deceptive-defensive tactics.

Perceived fairness. A three-item measure adapted from Smither et al. (1993) and Macan et al. (1994) was used (see Appendix E). These three items were found by Bauer et al. (2001) to correlate with the three higher-order factors of the Selection Procedural Justice Scale (SPJS) at r = .69 (social and communication factor), r = .50 (structural/process factor), and r = .39 (job-

relatedness content). An example item is, “Overall, the method of video interviewing used was fair.” Across the three items, Cronbach’s α = .91.

State anxiety. An adapted version of the Measure of Anxiety in Selection Interviews scale (MASI; McCarthy & Goffin, 2004) was used (see Appendix D). Eighteen items from three of the five factors were used; that is, communication anxiety, social anxiety, and performance anxiety were assessed. Example items include, “I became so apprehensive in the interview that I was unable to express my thoughts properly,” and “I was overwhelmed by thoughts of doing poorly when I was in the interview.” For the overall measure, Cronbach’s α = .94, with alphas for the individual factors ranging from .84 to .93.

Trait anxiety. A combination of the Short Form Social Interaction Anxiety Scale (SIAS; Peters, et al., 2012) and Short Form Test Anxiety Inventory (TAI; Taylor & Deane, 2002) were used to assess social, communication, and performance anxiety at the trait level (see Appendix H). The short-form SIAS is a six-item measure used to assess communication and social interaction anxiety, while the short-form TAI is a five-item measure used to assess performance/test anxiety. For the overall measure combining both the SIAS and TAI, Cronbach’s α = .88, while individually, SIAS α = .83 and TAI α = .92.

Attention checks. Three attention check items were dispersed throughout the post-interview portion of the study, amongst the state anxiety and trait anxiety items. These items were “I eat cement every day,” “I have never used a computer before”, and “I have been to Mars”.

Results

Descriptive statistics, scale reliabilities, and correlations between all main study variables are presented in Table 1. Means and standard deviations separated by condition are presented in

Table 2. Analyses were conducted in R version 4.0.1, with additional functions used from the R packages *psych*, *lavaan*, *semPower*, and *dplyr*.

Data Preparation

As there was only a small proportion (< 5%) of cases with missing data on one or more of the main study variables, participants with missing data were excluded listwise from analyses. The proportion of cases with missing data was not found to differ across conditions ($\chi^2(3, N = 243) = 3.34$, $p = .34$), and 12 out of the 243 participants were excluded. Furthermore, participants were deemed to be multivariate outliers and excluded from the sample if they either exceeded the Mahalanobis distance critical χ^2 value of 26.13 ($df = 8$, $p < .001$) or had a Cook's distance greater than $4/(n - k - 1)$, where n is the sample size and k is the number of predictors (i.e. $4/(243 - 8 - 1)$; Bollen & Jackman, 1985). On the basis of these criteria, an additional eight participants were excluded.[7] This resulted in a working sample of $N = 223$. Following this, an additional 51 participants were removed from the sample for failing to correctly answer at least three out of four IM task comprehension items (refer to Appendix G) correctly, resulting in a secondary working sample of $N = 172$. Although the $N = 172$ sample can be expected to have more accurate and better quality data due to the elimination of participants who may not have completed the IM identification task correctly, the smaller sample also results in lower power. Notably, this smaller sample size is very close to the required minimum N of 176 as calculated in the *a priori* power analysis. As such, analyses were tested with both samples, though only the results of the $N = 223$ sample were used for hypothesis testing (based on an evaluation of model fit and power, discussed below in the Hypothesis Testing section).

[7] In making the decision to exclude eight multivariate outliers, the models were tested both with and without the eight outliers included in the sample. As the exclusion of these outliers was found to have a notable impact on observed results, these participants were excluded from the final sample.

Table 1

Descriptive Statistics, Correlations, and Scale Reliabilities of Main Study Variables (N = 223)

	Variables	*N*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1	Preparation Time Condition	223	.51	.50	-										
2	Attempts Condition	223	.48	.50	.03	-									
3	Average Minutes	223	.62	.75	**.26****	-.13	-								
4	Average Attempts	223	1.69	.83	-.01	**.86****	-.12	-							
5	Interview Performance	223	2.91	.84	.00	.11	.03	**.15***	-						
6	State Anxiety (Overall)	223	2.75	.91	.03	.05	.00	.13	-.10	(.94)					
7	State Anxiety: Communication	223	2.54	.86	.00	-.05	.06	.03	**-.15***	**.86****	(.84)				
8	State Anxiety: Social	223	2.82	1.01	.04	.10	-.04	**.17***	-.08	**.91****	**.66****	(.84)			
9	State Anxiety: Performance	223	2.89	1.14	.03	.07	-.02	**.15***	-.06	**.94****	**.71****	**.82****	(.93)		
10	Trait Anxiety (Overall)	223	2.73	.82	.06	.04	.08	.05	-.02	**.68****	**.63****	**.61****	**.62****	(.88)	
11	Trait Anxiety: SIAS	223	2.53	.87	.05	.00	**.16***	.00	-.01	**.49****	**.50****	**.45****	**.41****	**.84****	(.83)
12	Trait Anxiety: TAI	223	2.97	1.08	.05	.08	-.01	.10	-.03	**.66****	**.57****	**.58****	**.64****	**.85****	**.43****
13	Perceived Fairness	223	3.80	.83	-.10	.07	.00	.02	-.02	**-.25****	**-.34****	**-.18****	**-.18****	-.10	-.06
14	Honest IM	172	19.34	13.84	.06	.01	-.11	-.01	**.29****	-.10	**-.16***	-.05	-.07	-.08	-.04
15	Deceptive IM	172	2.43	3.48	.04	-.08	.03	-.14	.10	.10	.10	.08	.09	.15	**.18***
16	Log Honest IM	172	1.18	.32	.04	.00	-.10	-.02	**.34****	-.15	**-.19***	-.10	-.12	-.10	-.06
17	Log Deceptive IM	172	.28	.36	.05	-.11	.05	**-.17***	.12	.14	.14	.10	.13	**.20****	**.23****
18	AVI Experience	220	.85	2.43	-.09	-.05	-.04	-.03	.09	-.01	-.02	-.02	.01	.04	.04
19	Interview Experience	218	8.50	13.77	-.06	-.01	-.05	.01	.01	-.05	.01	-.09	-.06	-.03	-.03
20	Work Experience (Years)	220	1.17	9.05	-.05	.10	-.04	.06	-.01	**-.21****	**-.20****	**-.18****	**-.19****	**-.21****	**-.14***
21	Education	222	.72	.45	-.08	.00	-.10	.01	.12	**-.14***	-.11	-.12	**-.14***	-.07	-.05
22	Age	222	3.47	1.11	-.08	.07	-.05	.04	-.05	**-.20****	**-.18****	**-.17****	**-.19****	**-.20****	-.12
23	Gender	223	1.49	.52	-.06	.09	-.04	.15	.12	**.36****	**.34****	**.33****	**.31****	**.24****	**.14***

Table 1 (continued)

	Variables	12	13	14	15	16	17	18	19	20	21	22
1	Preparation Time Condition											
2	Attempts Condition											
3	Average Minutes											
4	Average Attempts											
5	Interview Performance											
6	State Anxiety (Overall)											
7	State Anxiety: Communication											
8	State Anxiety: Social											
9	State Anxiety: Performance											
10	Trait Anxiety (Overall)											
11	Trait Anxiety: SIAS											
12	Trait Anxiety: TAI	(.92)										
13	Perceived Fairness	-.11	(.91)									
14	Honest IM	-.09	.09	-								
15	Deceptive IM	.07	-.06	**.18***	-							
16	Log Honest IM	-.12	.07	**.92****	**.18***	-						
17	Log Deceptive IM	.12	-.05	**.17***	**.95****	**.18***	-					
18	AVI Experience	.02	.06	.02	.14	.05	**.18***	-				
19	Interview Experience	-.02	**-.16***	.03	-.09	.01	-.11	**.20***	-			
20	Work Experience (Years)	**-.21****	.04	.03	**-.18***	.03	**-.22****	-.12	**.14***	-		
21	Education	-.08	.06	.13	.03	.14	.04	.12	**.18****	**.27****	-	
22	Age	**-.22****	.04	.07	**-.19***	.07	**-.22**	-.11	.11	**.90****	**.33****	-
23	Gender	**.26****	-.06	.00	-.01	-.01	.00	-.10	.01	-.08	-.02	**-.14***

Note. Scale reliabilities are presented in parentheses along the diagonal. Significant correlations ($p < .05$) are bolded. For Preparation Time Condition, 0 = *low preparation time* and 1 = *unlimited preparation time*. For Attempts Condition, 0 = *1 attempt allowed* and 1 = *up to five attempts allowed*. Average Minutes is the mean number of minutes elapsed prior to the first recording attempt, per question. Average Attempts is the mean number of attempts used per question. For Education, 0 = *non-postsecondary educated* (i.e. high school or less) and 1 = *postsecondary educated* (i.e. college, university). For Gender, 0 = *male* and 1 = *female*. Log-transformed variables were transformed using a base-10 logarithm. IM = impression management. AVI = asynchronous video interview. SIAS = Social and Interaction Anxiety Scale. TAI = Test Anxiety Inventory.

***$p < .05$

**$p < .01$

Table 2

Means and Standard Deviations of Study Variables, by Condition (N = 223)

Variable	Preparation Time Condition		Attempts Condition	
	Low	Unlimited	1 Attempt	5 Attempts
Average Minutes	.42 (0)	.81 (1.02)	.71 (.94)	.51 (.45)
Average Attempts	1.69 (.85)	1.68 (.81)	1.00 (.00)	2.43 (.60)
Interview Performance	2.92 (.85)	2.91 (.83)	2.83 (.86)	3.01 (.81)
State Anxiety (Overall)	2.72 (.95)	2.77 (.88)	2.71 (.92)	2.79 (.90)
State Anxiety: Communication	2.54 (.87)	2.54 (.85)	2.58 (.88)	2.50 (.83)
State Anxiety: Social	2.79 (1.05)	2.86 (.97)	2.73 (1.00)	2.93 (1.01)
State Anxiety: Performance	2.86 (1.20)	2.92 (1.09)	2.82 (1.16)	2.97 (1.12)
Trait Anxiety (Overall)	2.68 (.84)	2.78 (.79)	2.70 (.79)	2.76 (.85)
Trait Anxiety: SIAS	2.49 (.87)	2.57 (.88)	2.53 (.89)	2.53 (.86)
Trait Anxiety: TAI	2.91 (1.14)	3.03 (1.02)	2.89 (1.06)	3.05 (1.09)
Perceived Fairness	3.88 (.83)	3.72 (.83)	3.74 (.85)	3.86 (.82)
Honest IM	18.46 (12.98)	20.25 (14.69)	19.17 (13.21)	19.54 (14.58)
Deceptive IM	2.30 (3.41)	2.56 (3.56)	2.70 (3.53)	2.13 (3.42)
Log Honest IM	1.17 (.30)	1.19 (.34)	1.18 (.32)	1.18 (.32)
Log Deceptive IM	.26 (.36)	.30 (.37)	.32 (.36)	.24 (.36)
AVI Experience	1.07 (3.18)	.64 (1.39)	.96 (2.34)	.73 (2.54)
Interview Experience	9.32 (12.87)	7.70 (14.61)	8.69 (14.77)	8.31 (12.69)
Work Experience (Years)	10.66 (9.57)	9.69 (8.54)	9.27 (8.77)	11.14 (9.30)
Education	.75 (.43)	.68 (.47)	.72 (.45)	.72 (.45)
Age	31.28 (9.92)	29.67 (10.27)	29.78 (9.82)	31.22 (10.42)
Gender	.53 (.50)	.46 (.54)	.45 (.52)	.54 (.52)

Note. Standard deviations are shown in parentheses. Average Minutes is the mean number of minutes elapsed prior to the first recording attempt per question. Average Attempts is the mean number of attempts used per question. For Education, 0 = *non-postsecondary educated* (i.e. high school or less) and 1 = *postsecondary educated* (i.e. college, university). For Gender, 0 = *male* and 1 = *female*. Log-transformed variables were transformed using a base-10 logarithm. IM = impression management. AVI = asynchronous video interview. SIAS = Social and Interaction Anxiety Scale. TAI = Test Anxiety Inventory.

Reliability and Inter-rater Agreement

Scale reliabilities for measures of state anxiety, trait anxiety, and perceived fairness were good to excellent (Cronbach's α = .82-.94; refer to Table 1). Inter-rater reliability for interview performance scores were evaluated using the question scores from 28 participants who were evaluated by all three raters; intra-class correlation coefficients (ICC) on the BARS were good to excellent (ICC = .87, .92, .87, .81, .92, for questions 1 through 5, respectively), suggesting reliable interview performance scores. Results of further analyses on rating source are presented in the Exploratory Analyses section.

Hypothesis Testing

The majority of hypotheses were tested via path analyses using the model presented in Figure 1. This model used the manipulation variables (referred to as PT condition and attempts condition) as the independent variables. WLSMV (weighted least squares mean and variance adjusted) was used as the estimator. This estimator is suitable for use with categorical variables, and works well with smaller samples ($N > 200$) and non-normal data (Bandalos, 2014; Rhemtulla et al., 2012); given our binary condition variables, ordinal IM count data, and relatively small sample, this estimator was considered the most suitable. MLR (a robust maximum likelihood approach) was an alternative estimator that was also considered, given that it typically performs similarly to WLSMV, works well with categorical variables, and tends to control Type I error in small sample sizes more effectively than WLSMV, though at the cost of being less powerful (Bandalos, 2014; Newsom & Smith, 2020). For these reasons, although the results presented below used WLSMV as the estimator, the model was also tested using MLR (the results of which can be seen in Appendix J). Notably, using MLR as the estimator resulted in path

estimates that were very similar to those obtained with WLSMV, with the caveat that MLR tended to result in slightly poorer model fit (see Table 5).

Using WLSMV, model fit indices overall suggested good fit for both the $N = 223$ (RMSEA = .03; SRMR = .05; CFI = .98; TLI = .95; $\chi^2(18, N = 172) = 20.40$, $p = .31$) and $N = 172$ samples (RMSEA = .05; SRMR = .05; CFI = .92; TLI = .85; $\chi^2(18, N = 223) = 29.30$, $p = .05$). However, given the comparable fit and higher power of the larger sample, results of the $N = 223$ sample are presented. Path estimates of the model estimated using the $N = 223$ sample are presented in Table 3. For transparency, path estimate results of the $N = 172$ model are presented as well, in Appendix K. Figures showing only the paths that are significant or approaching-significant, for both $N = 223$ and $N = 172$ samples, can be found in Appendix L.

Table 3

Estimates for Main Path Model, Manipulation as Predictors (N = 223)

Outcome Variable	Predictor Variable	*b*	*β*	*SE*	*p*	95% BCa CI
Interview Performance						
	Preparation Time Condition	.00	.00	.11	.98	[-.22, .21]
	Attempts Condition	***.21***	***.13***	***.11***	***.06***	***[-.01, .43]***
	State Anxiety	-.08	-.08	.07	.27	[-.21, .06]
	Honest IM	**.02**	**.26**	**.00**	**< .001**	**[.01, .02]**
	Deceptive IM	.01	.04	.02	.58	[-.02, .04]
Honest IM						
	Preparation Time Condition	.65	.02	1.91	.73	[-3.09, 4.39]
	Attempts Condition	-1.59	-.06	1.88	.40	[-5.28, 2.10]
Deceptive IM						
	Preparation Time Condition	.45	.07	.47	.34	[-.47, 1.37]
	Attempts Condition	-.28	-.04	.47	.55	[-1.19, .64]
	Perceived Fairness	-.17	-.04	.24	.48	[-.64, .29]
Perceived Fairness						
	Preparation Time Condition	***-.22***	***-.13***	***.11***	***.05***	***[-.45, .00]***
	Attempts Condition	.09	.06	.11	.41	[-.12, .31]
State Anxiety						
	Preparation Time Condition	.28	.15	.28	.33	[-.28, .84]
	Attempts Condition	.02	.01	.31	.96	[-.60, .63]
	PT × Trait Anxiety Interaction	-.09	-.15	.10	.36	[-.29, .11]
	Att. × Trait Anxiety Interaction	.00	-.01	.11	.97	[-.23, .22]
	Trait Anxiety	**.80**	**.72**	**.09**	**< .001**	**[.61, .98]**

Note. WLSMV was used as the estimator. Model fit indices: RMSEA = .03; SRMR = .05; CFI = .98; TLI = .95; $\chi^2(18, N = 172) = 20.40$, $p = .31$. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. *SE* = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. PT = Preparation Time. Att. = attempts. IM = impression management. Path estimates that are significant ($p < .05$) are bolded, while estimates that are approaching significance ($p \leqslant .10$) are bolded and italicized.

H1a and *H1b* hypothesized that having more PT and recording attempts available would positively relate to interview performance scores. PT was unrelated to interview performance, and thus *H1a* was not supported. Although also nonsignificant, notably, the relationship between the number of attempts provided and mean interview scores approached significance (b = .21, β = .13, p = .06, 95% BCa CI [-.01, .43]). But, as the p-value was greater than .05 and the confidence interval included zero, *H1b* was not supported.

In hypotheses *H2a* through *H2d*, state anxiety was hypothesized to be negatively associated with conditions allowing for more PT and/or attempts, as well as negatively associated with interview performance. However, neither unlimited PT nor the allocation of up to five recording attempts had significant associations with state anxiety. Thus, *H2a* and *H2b* were not supported. *H2c* was also unsupported, as the overall state anxiety measure (for both the path model estimate and the correlation) was unrelated to interview performance. Given that state anxiety did not relate to AVI conditions, state anxiety was not found to be a mediator of the relationships between either of the AVI features and interview performance; indirect effects were nonsignificant for both PT condition (b = -.02, β = -.01, 95% BCa [-.08, .04]) and attempts condition (b = .00, β = .00, 95% BCa [-.05, .05]), leaving *H2d* also unsupported.

RQ1 and *RQ2* sought to explore trait anxiety as a moderator of the relationship between the AVI features and state anxiety. Although state anxiety was strongly predicted by trait anxiety (b = .80, β = .72, p < .001, 95% BCa [.61, .98]), no significant moderation was found.[8]

H3a through *H3d* investigated the use of honest and deceptive IM tactics in relation to the PT given, the number of attempts allowed, and interview performance. All participants except for one (i.e. 222 out of 223) reported using at least one honest IM tactic during their

[8] In regressions conducted separately from the path model, the R^2-change of the interaction term was found to be .00 (F(1,219) = .06, p = .80) for PT condition, and .00 (F(1,219) = .37, p = .54) for attempts condition.

interview, with the total number of honest IM tactics used throughout the interview (as coded by participants) ranging from 1-76 (M = 18.29, SD = 13.90).[9] In contrast, for deceptive IM, 43% of participants (i.e. 97 out of 223) indicated zero uses of deceptive IM tactics; of the remaining 57%, participants indicated between 1-17 uses of deceptive IM tactics (M = 2.44, SD = 3.42) for the entire interview.[10]

H3a and *H3b* hypothesized that IM use would increase when more PT or recording attempts were provided, but neither honest IM use nor deceptive IM use showed any significant relationships with either of the AVI features, indicating no differences in the number of honest or deceptive IM tactics used. Prior IM research has found both honest and deceptive IM to be positively associated with interview performance scores, though our results only showed partial alignment with previous findings; only honest IM use was found to be a significant predictor of interview performance (b = .02, β = .26, p < .001, 95% BCa CI [.01, .02]). Honest IM use also showed a significant positive correlation with interview performance scores (r = .29, p < .001), though again, deceptive IM use did not. Thus, as *H3c* hypothesized that IM use and interview performance would be positively correlated, *H3c* was partially supported. As IM use was not associated with PT or number of attempts, and only honest IM was related to interview performance, IM use did not emerge as a mediator of the relationships between the AVI features and interview performance. Indirect effects through honest IM (from PT condition, b = .01, β = .01, 95% BCa CI [-.05, .07]; from attempts condition, b = -.03, β = -.02, 95% BCa CI [-.09, .04]) and deceptive IM (from PT condition, b = .00, β = .00, 95% BCa CI [-.01, .02]; from attempts

[9] For the N = 172 sample, 100% of participants reported using at least one honest IM tactic during their interview, with the total number of tactics reported ranging from 2-76 (M = 19.35, SD = 13.83).

[10] For the N = 172 sample, 45% (i.e. 77 of 172) participants indicated zero uses of deceptive IM tactics; of the remaining 56%, participants indicated between 1-17 uses of deceptive IM tactics (M = 2.42, SD = 3.48) for the entire interview.

condition, b = .00, β = .00, 95% BCa CI [-.02, .01]) were all nonsignificant, leaving *H3d* unsupported.

H4a and *H4b* proposed positive associations between both PT and the number of recording attempts allowed and interviewees' perceptions of fairness of the interviewing procedure. No significant relationships were found between either of the AVI features and perceived fairness ratings. Notably, however, a negative association between PT condition and subsequent perceptions of fairness approached significance (b = -.22, β = -.13, p = .05, 95% BCa CI [-.45, .00]), though this should be interpreted with caution as the confidence interval for this result included zero. As *H4a* and *H4b* proposed that perceived fairness would be higher for those in conditions providing more attempts and/or PT, neither of these hypotheses were supported. *H4c* hypothesized that deceptive IM use would be negatively correlated with perceived fairness, but neither the path estimate nor the correlation was significant. *H4d* proposed that perceived fairness would mediate the relationships between each of the AVI features and deceptive IM use as a result, but this hypothesis was also not supported, as indirect effects for both PT condition (b = .04, β = .01, 95% BCa CI [-.08, .15]) and attempts condition (b = -.02, β = .00, 95% BCa CI [-.07, .04]) were nonsignificant.

Exploratory Analyses

This section reports findings from additional analyses that were conducted after hypothesis testing. Included are results from the exploratory analyses that were specified in the introduction, a brief overview of additional path model variants that were run, several notable correlational findings, some further analyses assessing the influence of rating source on interview performance scores, and additional descriptive statistics on participants' IM use. Notably, although one of the pre-specified exploratory analyses sought to assess whether the moderating effect of trait anxiety on state anxiety differed across factors of trait anxiety, this analysis was not conducted, as trait anxiety was not found to be a moderator of the relationship between the AVI features and state anxiety within the main analyses.

Alternative Path Model: Actual Use of the Manipulation as Predictor Variables

To examine whether any observed effects could alternatively be attributed to participants' actual use of the AVI features, in this alternative model, the manipulation variable of PT condition was replaced with values representing the average number of minutes elapsed prior to recording the first (or only) attempt for each question (referred to as PT usage), and the manipulation variable of attempts condition was replaced with values representing the average number of attempts used per question (referred to as attempts usage). Notably, for PT usage, although it would have been preferable to have a mean value representative of the number of minutes used to "prep" per question or per recording attempt (rather than per first attempt only), the time recorded by the AVI platform did not allow for this mean to be calculated; this was a limitation of the platform. In conditions where participants were allowed up to five attempts, a mean of 2.43 attempts (*SD* = .60) were used per question. In unlimited-PT conditions, participants used a mean of .81 minutes (*SD* = 1.02) or 49 seconds before recording their first (or

only) attempt for each question. Participants in one-attempt conditions had an average of one attempt per question, and participants in low PT conditions had an average of .42 minutes (or 25 seconds) per attempt.[11]

The alternative model had moderate fit to the data when $N = 223$ (RMSEA = .07; SRMR = .06; CFI = .87; TLI = .75; $\chi^2(18, N = 223) = 34.91$, $p = .01$), with improvements in fit when using the $N = 172$ sample (RMSEA = .05; SRMR = .06; CFI = .91; TLI = .83; $\chi^2(18, N = 172) = 26.44$, $p = .09$) in which participants who failed to correctly answer at least three out of four IM task comprehension items were removed. Given the improved fit of the latter model, results of the $N = 172$ sample are presented for the alternative model, though path model results from the $N = 223$ sample can be found in Appendix M as well. For the $N = 172$ model, all path model estimates can be found in Table 4. Figures showing only the significant paths (or those approaching significance), for both $N = 223$ and $N = 172$ samples, can be found in Appendix N. As with the main model, MLR was tried as an estimator as well, the results of which can be found in Table 5 and Appendix O. The results of this alternative model will be organized and discussed in relation to the hypotheses of the main model, as this was an exploratory analysis with no pre-specified hypotheses.

[11] As participants in low-PT conditions did not have the option to begin recording an attempt before the pre-determined PT had elapsed (15 seconds for questions 1 through 3 and 40 seconds for questions 4 and 5), the average number of minutes spent prior to recording was set to .42 minutes for all participants in low PT conditions.

Table 4

Estimates for Alternative Path Model, Actual Use as Predictors (N =172)

Outcome Variable	Predictor Variable	*b*	*β*	*SE*	*p*	95% BCa CI
Interview Performance						
	Average Minutes	.12	.09	.09	.16	[-.05, .30]
	Average Attempts	**.17**	**.18**	**.07**	**.01**	**[.04, .31]**
	State Anxiety	***-.13***	***-.14***	***.08***	***.10***	***[-.28, .03]***
	Honest IM	**.02**	**.30**	**.01**	**< .001**	**[.01, .03]**
	Deceptive IM	.03	.11	.02	.14	[-.01, .06]
Honest IM						
	Average Minutes	**-3.16**	**-.14**	**1.28**	**.01**	**[-5.68, -.65]**
	Average Attempts	-1.08	-.07	1.09	.32	[-3.22, 1.05]
Deceptive IM						
	Average Minutes	.30	.05	.40	.46	[-.48, 1.07]
	Average Attempts	**-.50**	**-.12**	**.24**	**.04**	**[-.97, -.02]**
	Perceived Fairness	-.29	-.07	.28	.29	[-.84, .25]
Perceived Fairness						
	Average Minutes	-.05	-.04	.15	.76	[-.34, .25]
	Average Attempts	-.03	-.03	.07	.70	[-.17, .12]
State Anxiety						
	Average Minutes	.01	.01	.09	.90	[-.16, .18]
	Average Attempts	***.11***	***.10***	***.06***	***.09***	***[-.02, .23]***
	Avg. Min × Trait Anxiety Interaction	-.03	-.02	.10	.72	[-.22, .15]
	Avg. Att. × Trait Anxiety Interaction	-.04	-.05	.06	.51	[-.15, .07]
	Trait Anxiety	**.75**	**.67**	**.06**	**< .001**	**[.64, .86]**

Note. WLSMV was used as the estimator. Model fit indices: RMSEA = .05; SRMR = .06; CFI = .91; TLI = .83; $\chi^2(18, N = 172) = 26.44$, $p = .09$. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. *SE* = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. IM = impression management. Path estimates that are significant ($p < .05$) are bolded, while estimates that are approaching significance ($p \leqslant .10$) are bolded and italicized.

In relation to *H1a* and *H1b*, the mean number of attempts used per question positively predicted interview performance (b = .17, β = .18, p < .01, 95% BCa CI [.04, .31]). However, similarly to results found for PT condition in the main model, interview performance was unrelated to the mean number of minutes spent prior to each recording attempt.

In relation to *H2a* through *H2d* which examined state anxiety, neither PT usage nor attempts usage were related to reported state anxiety levels, and state anxiety was also unrelated to interview performance. State anxiety did not mediate the relationships between use of the AVI features and interview performance, as both indirect effects for PT usage (b = .00, β = .00, 95% BCa CI [-.02, .02]) and number of attempts used (b = -.01, β = -.01, 95% BCa CI [-.04, .01]) were nonsignificant.

In relation to *RQ1* and *RQ2*, similar to results found for the main model, no significant moderations between trait anxiety and either PT usage or attempts usage emerged for any models,[12] though the relationship between state anxiety and trait anxiety remained highly significant (b = .75, β = .67, p < .001, 95% BCa CI [.64, .86]).

In relation to *H3a* and *H3b*, honest IM and deceptive IM appeared to have different relationships with each of the AVI usage variables. Estimates for honest IM indicate a negative association between mean PT usage and overall honest IM use (b = -3.16, β = -.14, p = .01, 95% BCa CI [-5.68, -.65]); that is, spending a greater amount of time on average prior to recording the first (or sole) attempt was associated with slightly less use (i.e. a lower total count) of honest IM tactics. Honest IM use was unrelated to participants' attempts usage. Deceptive IM use, in contrast, showed some small associations with participants' average number of attempts (b = -.50, β = -.12, p = .04, 95% BCa CI [-.97, -.02]), such that using a higher number of recording

[12] In regressions conducted separately from the path model, the R^2-change of the interaction term was found to be .00 (F(1,219) = .01, p = .94) for PT usage, and .00 (F(1,219) = .39, p = .53) for attempts usage.

attempts per question was associated with slightly less use of deceptive IM tactics. The number of deceptive IM tactics used was unrelated to PT usage. In relation to *H3c*, as was similarly found in the main model, honest IM use still positively predicted interview performance scores (b = .02, β = .30, p < .01, 95% BCa CI [.01, .03]). In relation to *H3d*, neither honest IM (from PT usage, b = -.06, β = -.04, 95% BCa CI [-.11, .00]; from attempts used, b = -.02, β = -.02, 95% BCa CI [-.06, .02]) nor deceptive IM (from PT usage, b = .01, β = .01, 95% BCa CI [-.02, .03]; from attempts used, b = -.01, β = -.01, 95% BCa CI [-.04, .01]) were found to significantly mediate the relationships between use of the AVI features and interview performance.

In relation to *H4a* through *H4d*, perceived fairness was found to be unrelated to the average number of minutes, the average number of attempts, and deceptive IM use. As such, the indirect effects of both PT usage (b = .01, β = .00, 95% BCa CI [-.08, .11]) and attempts usage (b = .01, β = .00, 95% BCa CI [-.04, .06]) through perceived fairness in the prediction of deceptive IM use were nonsignificant.

Additional Model Variants

Multiple variants of both the main model and the alternative model were run for several purposes, as discussed below. Firstly, models were tested using an "overall" configuration (as presented in Figure 1), the results of which were discussed above. These models were additionally tested in "half" models (presented in Appendices P and Q), which tested specific sections and variables of the model in Figure 1. Given concerns that power of the model using the overall configuration would be inadequate to detect indirect effects, after testing the overall models, the models were separated into "halves", which attempted to reduce the reduce the size of the models by limiting the number of variables. However, these half models were found to have substantially fewer degrees of freedom (df = 3 for half models, versus df = 18 for the

overall models) and, thus, lower estimated power than the overall models.[13] As these "half" models had poorer fit indices and substantially lower estimated power than the models using the overall configuration, the results of these models are not presented or discussed further.

Secondly, as honest IM and deceptive IM were operationalized as count variables (i.e. the total number of times each IM tactic was used throughout the interview), these variables are positively skewed. As such, models involving IM variables were tested with both base-10 logarithm-transformed IM and non-transformed IM. Although the model fit indices and path estimate results of models using log-transformed IM have been included for both the main and alternative models (see Table 5 below and Appendices R and S), these models are not discussed further for reasons including: a) results of models using log-transformed IM variables were generally not found to have substantial differences from results of models using non-transformed IM; b) use of log-transformed IM variables did not result in improved model fit, and; c) issues with interpretability of path estimates when using log-transformed variables.

[13] A power analysis with an alpha of $\alpha = .05$, RMSEA = .08, $df = 3$, and desired power of $\beta = .80$ yielded a suggested minimum sample size of $N = 569$ (in contrast to the suggested $N = 176$ for the overall models, where $df = 18$).

Table 5

Comparison of Model Fit Indices

Model	RMSEA	SRMR	CFI	TLI	χ^2	χ^2 *df*	χ^2 *p*
Main model, manipulation as predictors							
WLSMV, N = 223	.03	.05	.98	.95	2.40	18	.31
WLSMV, N = 172	.05	.05	.92	.85	29.30	18	.05
MLR, N = 223	.06	.05	.90	.81	33.78	18	.01
MLR, N = 172	.06	.05	.91	.83	28.61	18	< .001
WLSMV, IM log-transformed, N = 223	.06	.05	.91	.83	32.16	18	.02
WLSMV, IM log-transformed, N = 172	.06	.06	.90	.80	29.28	18	.04
Alternative model, actual use as predictors							
WLSMV, N = 223	.07	.06	.87	.75	34.91	18	.01
WLSMV, N = 172	.05	.06	.91	.83	26.44	18	.09
MLR, N = 223	.08	.06	.86	.73	42.88	18	< .001
MLR, N = 172	.08	.06	.87	.74	36.37	18	< .001
WLSMV, IM log-transformed, N = 223	.07	.07	.85	.70	4.11	18	< .01
WLSMV, IM log-transformed, N = 172	.08	.07	.83	.67	37.52	18	< .01

Note. Models were estimated using either WLSMV or MLR. In log-transformed models, impression management variables were transformed using a base-10 logarithm. WLSMV = weighted least squares mean and variance adjusted. MLR = robust maximum likelihood. Main model variants used the manipulations (PT condition and attempts condition) as predictors, whereas the alternative model variants replaced these variables with indicators of participants' actual use of the manipulation (PT usage and attempts usage).

Condition Interaction Effects

One of the pre-specified exploratory analyses sought to explore the nature of any interaction effects between PT condition and attempts condition on interview performance, IM, perceived fairness, and state anxiety, as the study employed a factorial design. A multivariate factorial ANOVA was conducted for these outcomes. As honest IM and deceptive IM were positively skewed, the analysis included both base-10 log-transformed and non-transformed versions of the variables. However, the multivariate tests were nonsignificant and indicated no interaction effects (Wilk's $\lambda = .98$, $F(6, 214) = .69$, $p = .66$), nor any main effects of PT condition (Wilk's $\lambda = .99$, $F(6, 214) = .50$, $p = .81$) or attempts condition (Wilk's $\lambda = .95$, $F(6, 214) = 1.89$, $p = .08$). Univariate factorial ANOVAs were also conducted for each of the dependent variables individually; results were similarly nonsignificant for main and interaction effects, and are presented in Appendix T.

Notable Correlations

Multiple significant correlations of interest were found, discussed in this section. Although the overall state anxiety measure did not show a significant correlation with interview performance, when the measure was separated into its three factors (communication anxiety, social anxiety, and performance anxiety) the communication anxiety factor was found to have a significant negative correlation with interview performance ($r = -.16$, $p = .02$). State anxiety was also correlated with being female ($r = .36$, $p < .01$ for the overall measure, and $r = .31$ to $.34$, $p < .01$ for each of the three factors), which is consistent with existing research.

Moderate-strength relationships were found between the state anxiety measure and its corresponding trait anxiety counterparts. The overall state and trait measures were correlated with each other at $r = .68$ ($p < .01$). When separated into factors, the social and interaction

anxiety items (assessed using the Short Form Social Interaction Anxiety Scale, Peters et al. 2012) from the trait anxiety measure were correlated at $r = .50$ ($p < .001$) and $r = .45$ ($p < .001$) with the communication and social anxiety factors of the state anxiety measure, respectively; the performance anxiety items from the trait anxiety measure (assessed using a modified version of the Short Form Test Anxiety Inventory, Taylor & Deane, 2002) correlated with the corresponding factor of the state anxiety measure at $r = .64$ ($p < .001$). Similarly to state anxiety, trait anxiety was also positively correlated with being female ($r = .24$, $p < .01$ for the overall trait anxiety measure; $r = .14$, $p < .05$ for the social and interaction anxiety factor; $r = .24$, $p < .01$ for the performance anxiety factor), supporting existing research.

In relation to IM use, correlations revealed that honest IM use was negatively associated with the communication anxiety factor of state anxiety ($r = -.16$, $p < .05$). Deceptive IM use was positively associated with the social and interaction anxiety factor of trait anxiety ($r = .18$, $p < .05$) and negatively associated with years of work experience ($r = -.18$, $p < .05$) and age ($r = -.19$, $p < .05$).

Perceived fairness was found to be negatively correlated with state anxiety (overall state anxiety $r = -.25$, $p < .01$; communication anxiety factor $r = -.34$, $p < .01$; social anxiety factor $r = -.18$, $p < .01$; performance anxiety factor $r = -.18$, $p < .01$) and non-AVI interview experience ($r = -.16$, $p < .05$).

Mean attempts usage was found to have small, significant correlations with both the social anxiety factor ($r = .17$, $p < .05$) and the performance anxiety factor ($r = .15$, $p < .05$) of the state anxiety measure. But, when correlations were conducted with only participants who were in five-attempt conditions ($N = 107$, i.e. the participants who had the option to record more than one attempt), the mean number of attempts used was found to have significant correlations with the

overall state anxiety measure ($r = .27$, $p < .01$), as well as with each of its comprising factors (communication anxiety $r = .20$, $p < .05$; social anxiety $r = .24$, $p < .05$; performance anxiety $r = .28$, $p < .01$). Notably, the correlations between attempts usage and state anxiety were stronger when the calculations only included the participants who had the option of multiple attempts available. Additionally, the correlations appeared to vary slightly in strength and significance by factor. No significant correlations between PT usage and any of the state anxiety measures were found. When looking at trait anxiety however, PT usage was found to have a small, significant correlation with the social and interaction anxiety factor ($r = .16$, $p < .05$), suggesting that trait-anxious individuals were more likely to spend more time on each question page before recording, at least prior to the first attempt. Furthermore, when this correlation was run using only participants who were in unlimited PT conditions ($N = 113$, i.e. the participants who had control over how much time they wanted to spend before recording a response), this correlation was slightly larger and also remained significant ($r = .21$, $p < .05$).

Interview Performance Raters

An ANOVA was conducted to examine potential differences between raters on the mean interview scores of all participants in the final sample. The ANOVA was significant ($F(2, 193) = 18.04$, $p < .001$), indicating differences in mean interview performance ratings between raters. Follow-up pairwise *t*-tests (conducted with a Bonferroni correction) indicated that the mean scores of Rater 1 ($M = 2.49$, $SD = .77$) significantly differed from those of Rater 2 ($M = 3.26$, $SD = .66$, $p < .001$) and Rater 3 ($M = 3.08$, $SD = .90$, $p < .001$). The mean scores of Rater 2 did not significantly differ from that of Rater 3 ($p = .58$).

To assess any possible influence of rating source on relationships involving interview performance, regressions were conducted for each of the five variables that had hypothesized

relationships to interview performance (i.e. PT condition, attempts condition, state anxiety, honest IM, and deceptive IM; all regressions predicted interview performance as the outcome). Two sets of regressions were conducted for each variable; one in which the rater variables were dummy-coded and added as control variables in the first step before adding one of the five variables in the second step, and one in which the dummy-coded rater variables were excluded from the regression. When the coefficients of the main variables were compared across the two regressions, results were largely the same (i.e. coefficients were in the same direction and similar or identical in magnitude). These coefficients were also largely similar to the coefficients obtained from the path model results. Furthermore, Examining the R^2-change of the regressions that had the control variables did not change the significance of any of the five variables in the prediction of interview performance; variables in the path model that were significant (or near-significant) predictors of interview performance (i.e. honest IM, attempts condition) stayed significant, and variables in the path model that were nonsignificant predictors of interview performance (i.e. PT condition, state anxiety, deceptive IM) stayed nonsignificant. Thus, although significant mean differences across raters on interview performance scores were present, it was concluded that rating source did not have a significant influence on the relationships with interview performance.

Descriptive Statistics of Impression Management Tactic Use

Although the IM variables were operationalized at two levels only (i.e. honest and deceptive IM tactics) for analyses, data for the IM variables was collected at four levels (i.e. honest-assertive, deceptive-assertive, honest-defensive, and deceptive-defensive tactics). Participants most frequently used honest-assertive tactics (M = 13.22, SD = 10.87), followed by honest-defensive tactics (M = 5.06, SD = 5.50), deceptive-assertive tactics (M = 1.68, SD = 2.57),

and deceptive-defensive tactics (*M* = .76, *SD* = 1.74). Average uses of each tactic were largely similar even when the participants who failed the IM task comprehension items were removed (i.e. in the *N* = 172 sample; honest-assertive *M* = 13.84, *SD* = 10.37, honest-defensive *M* = 5.52, *SD* = 5.79, deceptive-assertive *M* = 1.71, *SD* = 2.65, deceptive-defensive *M* = .72, *SD* = 1.62).

Discussion

This thesis examined the relationships between question preparation time and the number of recording attempts given on one end, and interviewees' interview performance, anxiety, IM use, and perceived fairness on the other. These relationships were examined in two overarching models; one in which the predictors were the AVI features categorized dichotomously as conditions that participants were in (PT condition, attempts condition), and one in which the predictors were replaced with indicators of participants' actual use of the AVI features (PT usage, attempts usage). Overall, few paths and relationships were significant, and only a limited few hypotheses were supported. However, there were several interesting findings, with notable limitations and implications.

Interview Performance

Although both AVI features (PT condition and attempts condition) were expected to have positive effects on interview performance, only the allocation of multiple attempts was somewhat associated with it. Though this was technically nonsignificant (the *p*-value was .06 and the confidence interval just included zero), the standardized coefficient for this result suggests that those in conditions allowing for more attempts performed slightly better in the interview (on average, .13 standard deviations better), when compared to those in conditions allowing for a single attempt only. Additionally, this pattern was also observed in the alternative model, indicating that the more attempts a participant used, the higher their average interview

performance score was. Relative to the result from the main model, this result from the alternative model also had a slightly larger coefficient estimate (mean interview performance scores increased by an average of .18 standard deviations for each attempt used), suggesting that applicants' actual use of the multiple attempts available (rather than simply having multiple attempts available) may be more responsible for the observed differences in interview scores. However, these results should be taken in consideration with an important caveat, related to the other AVI feature, PT.

With the PT variables, neither PT condition nor PT usage emerged as significant predictors of interview performance. Although it may be possible that the allocation of additional PT has a limited effect on improving interview performance, due to technical limitations of the AVI platform, two explanations can be offered as to why no effects were observed for PT. Firstly, in the study condition where participants were given the combination of low PT and up to five attempts, the limit to PT (i.e. when recording would start in either 15 or 45 seconds after landing on the page) truly only applied to the first attempt; after finishing the recording of the first attempt, there was nothing on the platform that would force participants to start recording the next attempt (or to move on to the next question) within a certain time limit, essentially giving these participants "unlimited" PT after the first attempt. As such, the variable of PT condition was likely confounded with the variable of attempts condition, as participants could simply "discard" their first attempt in favour of the unlimited PT that would become available in between attempts.

A second limitation of the AVI platform that was relevant for the alternative model was the preparation times it recorded; although it would have been preferable to have an indicator of the mean number of minutes spent in PT per recording attempt, this could not be calculated

based on the PT usage times recorded by the platform. The closest indicator we could obtain was the time spent prior to the first recording attempt (per question), and although this is an accurate indicator of PT usage for participants who were only allowed one attempt, it is unknown how accurate this indicator may be for participants who were allowed multiple attempts, as they may have spent additional time "preparing" in between attempts. Thus, although only the number of attempts used (which was significant) and attempts condition (which only approached significance) were found to relate to interview performance, it is possible that the effects of PT may have been obscured by the availability of multiple attempts. This could be avoided and further investigated in future studies by either avoiding factorial combinations of AVI features (i.e. testing an AVI feature in isolation), or by using an AVI platform that allows for more refined control over aspects of the interview procedure.

Nevertheless, even with these limitations in mind, these findings suggest that the allocation of more attempts (and/or potentially more PT) can lead to better interview performance. This finding holds relevance for interviewees of AVIs, as it suggests that interviewees may benefit from taking any advantages afforded to them as opportunities to improve their performance. And, seeing as the majority of participants (who were given the option) used an average of two or three recording attempts out of the available five per question, this suggests for employers designing or using AVIs that two or three recording attempts may be a reasonable and sufficient number of attempts to provide interviewees with, if they choose to provide multiple attempts.

But, although having the chance to give a better interview performance would likely be preferable from the perspective of most interviewees, the extent to which these improvements in performance may affect the interview's validity towards predicting job performance are

unknown. On one hand, providing applicants with too many attempts may reduce the variance in interview performance if a high proportion of interviewees are able to perform well as a result; the reduced variance would then limit the utility of the AVI for predicting job performance. On the other hand, if providing applicants with multiple attempts does not substantially change predictive validity or variance in interview scores, then perhaps providing multiple attempts would be preferable for employers as well if the allocation of multiple attempts resulted in improved applicant experiences of the interview (which have demonstrated relationships with notable outcomes like organizational attractiveness, Basch & Melchers, 2019); this consideration would be relevant to any other AVI features that are found to have relationships with interview performance as well. However, two important results from this study should be noted. Firstly, the allocation of multiple attempts was not found to be related to perceived fairness ratings or reported anxiety levels. Secondly, interview scores did not appear to suffer from reductions in variance (for instance, standard deviations were similar across interview scores for all conditions, and were also similar to the standard deviations of other variables assessed in the study), though this may be attributable to lower participant motivation for a mock interview. As this study did not find evidence of either an improved interviewing experience or reduced variance in interview scores, it is unclear whether giving interviewees multiple attempts would serve any function for employers.

Anxiety

In general, hypotheses involving state anxiety were not supported, as neither unlimited PT nor the allocation of more attempts was associated with differences in state anxiety in the main model. One explanation may be that because the interview was a mock interview, participants may not have perceived any real stakes or pressures that one would normally feel in

a real job interview. Thus, participants may have felt relatively unfazed by the addition of more PT or more attempts, as such changes to the interview may have held little value or importance within a mock interview. However, comparison of mean state anxiety scores across studies does not suggest that participants experienced less anxiety in the present study due to the use of a mock interview. That is, when the mean interview state anxiety scores observed in this study are compared to other studies that have assessed the same three state anxiety factors (i.e. communication, social, and performance anxiety) using the same measure (i.e. the MASI), this view is not supported. Studies that used real job interviews found mean state anxiety scores ranging from 2.53 (McCarthy & Goffin, 2004) and 2.55 (Schneider et al., 2019) to 2.91 (Powell et al. 2020). Means of 2.61 and 2.53 were reported for a study using completely imaginary job interviews (i.e. a study with no actual interview; McCarthy & Goffin, 2004), and 2.75[14] for a study using mock, in-person interviews (Langer et al., 2016). Given that the state anxiety mean observed in the present study (2.75) falls somewhere in between all these values, the lack of differences in state anxiety between the AVI conditions cannot be clearly attributed to lower anxiety from having used a mock interview.

Another possibility is that, given over 60% of participants had never taken part in an AVI (for either job applications or research studies) and another 20% had only taken part in one AVI prior to this study, for the majority of participants this study was likely either their first or one of their first experiences with an AVI. This is in stark contrast to participants' experiences with non-AVI job interviews, for which over 50% of participants reported having completed at least five interviews, and over 70%, at least three. As such, the AVI was likely a relatively foreign and

[14] Unlike the other mean values reported, which were taken from the average of the communication, social, and performance anxiety factors of the MASI, this mean value additionally includes scores from the behavioural anxiety factor of the MASI (which was not measured in this study).

new interviewing experience for many participants, which in and of itself may have been anxiety-inducing, and may have decreased the likelihood of the AVI features having any lowering effects on state anxiety. And, seeing as lower interview experience corresponded with higher state anxiety in the current study, this is reinforced as a possibility. It is possible that as AVIs become an increasingly more common tool, future research may see the relationship between AVIs and interviewees' anxiety may change over time.

As employment interviews are inherently evaluative and high-stakes situations, they are often anxiety-provoking for many individuals (Rynes et al., 1991). From this perspective, then, it is possible that few AVI designs may actually succeed in reducing the anxiety experienced during an interview. The absence of reductions in state anxiety may therefore also be attributable to the possibility that these features may give anxious individuals a means of addressing their anxiety, without actually lowering it. For instance, individuals who are experiencing interview anxiety may more often have feelings of inadequacy about their response and feel the desire to redo it, and may therefore use more attempts. But, due to the interview setting, interviewees may not actually feel any less anxious even after taking multiple attempts, as the outcome of their interview performance (as evaluated by someone else) would still be unknown. Seeing as the number of attempts used showed several positive correlations with state anxiety variables (discussed in more detail next), it is possible that this latter explanation may be the case.

In the alternative model, a positive relationship between the mean number of attempts used and state anxiety was observed but did not reach significance (i.e., the *p*-value was .09 and the confidence interval included zero). Additional positive correlations were found between the mean number of attempts used, the individual factors of state anxiety (communication, social, and performance anxiety), and the overall state anxiety measure as well. Interestingly, the

different factors of state anxiety exhibited slightly varying correlations with the number of attempts used, which is consistent with research identifying interview anxiety as a multidimensional construct (McCarthy & Goffin, 2004). Performance anxiety, which reflects anxiety about the outcome of the assessment situation (McCarthy & Goffin, 2004), showed the strongest correlation with attempts used, whereas communication anxiety, which reflects anxiety about one's communication skills (both verbal and nonverbal; McCarthy & Goffin, 2004), showed the weakest correlation. These results are somewhat in line with previous research. For instance, Stöber (2004) found that adaptive behaviours (e.g. preparation) were more likely to be associated with performance anxiety, and Ayres et al. (1998) found that high communication anxiety was less likely to be associated with said adaptive behaviours, and was instead more likely to give rise to maladaptive behaviours (e.g. avoidance, negative thoughts). As the use of more attempts could certainly be considered an adaptive behaviour within the context of this study's results, these correlations support the notion that certain dimensions of interview anxiety may indeed be associated with particular adaptive behaviours and/or outcomes more so than other dimensions, as previously proposed by authors like Powell et al. (2018), Lukacik et al. (2020), and McCarthy and Goffin (2004). Notably, though this study did not include the option for participants to review or watch their recording attempts at any point during the interview (in the interest of limiting the duration of the study), this is a feature that would likely be included in other AVIs if the option to record multiple attempts was given. The possibility exists that the lack of such a reviewing feature may have limited the influence of some of the maladaptive behaviours associated with anxiety, such as post-event processing, and AVIs that include such a reviewing feature (in addition to the allocation of multiple attempts) may find different results.

Additionally, though both PT condition and PT usage were unrelated to nearly all state or trait anxiety variables (perhaps due to the aforementioned issues with the implementation and operationalization of the PT variables), PT usage showed a small, positive correlation with the social and interaction anxiety factor of trait anxiety, which reflects anxiety towards meeting, talking, or interacting with others (Mattick & Clarke, 1998). Thus, despite the use of text-based questions only and the lack of any perceivable "interviewer" in this study, which Lukacik et al. (2020) suggested as being core design considerations for those with social anxiety, interviewees who experience social anxiety (at either the state or trait level) may still perceive this type of AVI as an anxiety-inducing social situation. Although it is possible that interviewees in this type of AVI may have experienced less anxiety than they would have in an AVI with video-based interview questions (i.e. when the question is presented through a pre-recorded video of someone intended to represent an interviewer), this remains to be examined.

These findings altogether suggest that those higher in anxiety did indeed react and behave differently towards the AVI features, and may have been more inclined to use more attempts and/or more PT. Though the reasons behind this are not entirely clear, the commonly-found negative relationship between state anxiety and interview performance (Powell et al., 2018) suggests that individuals feeling greater anxiety may have needed more attempts or more PT to record a response they feel is satisfactory. But, the opposing possibility of anxiety rising as a result of using more attempts should not be ignored either.

In contrast to existing research showing a consistent negative relationship between state anxiety and interview performance (Powell et al., 2018), these two variables were found to be unrelated in the main model, and trended in the expected direction in the alternative model but did not reach significance (p = .10 and the confidence interval included zero). Additionally,

although the overall state anxiety measure was uncorrelated with interview performance, a small, negative correlation was found with interview performance when considering only the communication anxiety factor of state anxiety, providing some degree of correspondence with existing research like Schneider et al. (2019), Powell et al. (2018), and Ayres et al. (1998). Feeney et al. (2015) had also found a similar result for females (in that communication anxiety was the only factor of state anxiety that showed a negative correlation with interview performance) using in-person interviews, suggesting that this negative relationship between communication anxiety and interview performance may not be unique to AVIs. Indeed, as the exchange of information is an essential component of any interview, communication anxiety may be likely to arise in individuals who are prone to experiencing it, regardless of the medium it is conducted in.

Trait anxiety, despite being quite strongly correlated with state anxiety, was unrelated to interview performance. But, although higher trait anxiety has been linked to poorer interview performance (e.g. Ayres et al., 1998; Cook et al., 2000), this result is not entirely in opposition to previous research, as the results of Powell et al.'s (2018) meta-analysis suggests that trait anxiety does not appear to be as consistently associated with poorer interview performance, unlike state anxiety. Within this study, the lack of a relationship between trait anxiety and interview performance, as well as the lack of a more robust relationship between state anxiety and interview performance, could be attributed to several reasons.

For one, although Powell et al.'s (2018) meta-analysis included studies that examined technology-mediated interviews, given the current state of the AVI literature, it is likely that only a small number of the studies included used AVIs; given the documented limitations in the generalizability of findings across interview mediums (Blacksmith et al., 2016; van Iddekinge et

al., 2006), it is possible that the effects of anxiety on interview performance may be different in AVIs than in other previously examined interview mediums. For another, the decline in performance typically observed in those experiencing higher anxiety may have been somewhat counteracted by the use of more attempts or more PT. Lastly, it is possible that anxiety had little influence on interview performance within this study due to how the BARS were constructed and how raters were instructed to evaluate interviewees' performance. That is, participants' responses were only evaluated on the extent to which they were able to answer and address the components of the question; raters were not instructed to take other aspects of their responses like speaking/presentation skills or non-verbal behaviours into consideration. However, given that aspects like vocal and verbal cues (Miller et al., 2018), speech rate, assertiveness, and interpersonal warmth (Feiler & Powell, 2016) have been identified as being the cues of interview anxiety that can lead to lower evaluations of performance, the decision to rely on only solely the verbal content of participants' responses for performance ratings may have limited the association between anxiety and interview performance. Although following such a rating practice may not be considered practical or desirable by many employers or interviewers for real-world interview situations (e.g. when clear communication or strong interpersonal abilities are considered necessary for work),[15] a potential implication of the associations found between anxiety and interview performance is that use of structured interview questions, BARS, and a reliance on the content of responses may be one approach to limiting the negative effects of anxiety on interview performance for applicants. Interestingly, extant interview anxiety research

[15] Importantly, the undesirability of such a rating practice from the perspective of employers or interviewers does not mean that this rating approach would be bad. To the contrary, using an approach such as this may arguably be best practice, as interviewees are evaluated on the extent to which they are able to answer the question, and not the manner in which they answer the question; an interviewee's communication skills could be assessed within a separate part of interview scoring.

has not to our knowledge directly examined such elements, and this is something that future studies could explore more thoroughly.

Lastly, although it was proposed that whether an interviewee's state anxiety increases or decreases as a result of the AVI conditions could depend on the individual's trait anxiety levels, no moderation was found, in either the main or alternative models, potentially due to the issues of confounded manipulation variables as well as the lack of relationships between the AVI conditions and state anxiety within this study.

Overall, though results do not suggest that the availability of more PT or multiple attempts helps to lower state anxiety as originally hypothesized, correlations on usage of the AVI features suggests that individuals higher in anxiety (primarily at the state level, but also potentially somewhat at the trait level) may be using more attempts and/or more PT. Given that both the use of more attempts was associated with better interview performance, it seems that if AVI interviewees are anxious, it would be in their best interest to use multiple recording attempts, if such an option is available to them. Likewise, employers who choose to use AVIs may want to consider providing interviewees with such features as a potential means of reducing the negative effects that applicants' anxiety can have on their interview performance, given that interview performance can be an ineffective predictor of job performance when interviewees are high in interview anxiety (Schneider et al., 2019).

Impression Management

Although neither PT condition nor attempts condition were related to the use of honest IM or deceptive IM tactics, within the alternative model, using more attempts on average was associated with less deceptive IM use, and using more PT prior to the first recording attempt was associated with less honest IM use. Notably, all of these results were unexpected.

Beginning with honest IM, it was interesting to see that neither increased opportunity to use IM nor increased use of the AVI features were associated with greater use of honest IM and that, in fact, greater PT usage was associated with decreased counts of honest IM use. One possible explanation for the first point is motivation (or, within the context of this study, the lack thereof) to do well in the interview, which has been shown to correlate positively with honest IM use (Bourdage et al., 2018). That is, because the interview was a mock interview for a research study, and because the interview was based on a position that would likely be of little relevance or career-interest for most participants, it is likely that participants were not strongly motivated to perform well in the interview, relative to a job interview for a real position. Thus, despite being provided with more opportunities to use honest IM, participants may not have been motivated enough to want to do so. Notably however, nearly all participants reported multiple uses of IM, suggesting that motivation was not entirely absent. Another possibility is that participants may have felt differently about the effectiveness of IM use in AVIs. That is, because interviewees in AVIs are essentially speaking to a computer (rather than another person) at the time of speaking their response, participants may have felt that the AVI either limited or negated their use of IM, or felt that IM would not have as much utility towards improving performance evaluations within an AVI. This latter possibility would be in line with recent research by Basch et al. (2020), which found that opportunities for effective IM use were perceived to be lower by participants when the social presence of the interview medium was also perceived to be lower (e.g. in AVIs, one aspect of social presence would be the presence versus lack of an interviewer). In Basch et al.'s (2020) study, AVIs were also found to have the lowest perceived social presence when compared to video-conference and in-person interviews, suggesting that

participants in the current study may have also perceived social presence to be low, and may have subsequently reduced their use of IM.

As for the result showing a negative association between PT usage and number of honest IM tactics used, it is an odd finding and is therefore difficult to interpret and explain, given that one would presume that greater PT usage should correspond with a stronger question response. One possible explanation is that those who used more PT may have prepared longer and more thought-out responses, but may have devoted a larger proportion of their response times to describing things that don't require IM, like contextual or situational features. Or, those who spent more time preparing may have felt the need to do so because they experienced greater difficulty with the question; they may not have had a relevant experience to describe, or may not have known how to respond, and as such may have been less able to use honest IM. Conversely, given the issues with the operationalization of the PT usage variable (as described earlier), this would be a relevant factor to consider as well. Another potential explanation that is relevant to this finding as well as all other findings in this study involving IM is the issue of how IM was measured. As the IM variables reflected an actual count of IM tactic uses (e.g. as opposed to a self-report using a Likert scale), the method of IM measurement used could arguably be seen as a strength of the study. However, there were clear faults and disadvantages of using this approach, which introduced potential problems concerning the accuracy of the information. Firstly, there was no way of knowing whether participants identified their IM correctly. Although we tried to account for this by providing multiple examples per IM tactic definition and by filtering participants based on the number of example IM behaviours they were able to correctly categorize, it is still possible that participants may have mis-identified occurrences of IM during the task. Secondly, participants may have succumbed to issues of fatigue or boredom during the

task, particularly if the videos they recorded/submitted for evaluation were long in duration, potentially leading to under-reporting or misidentification of IM uses. Thirdly, it is possible that participants may have continued to engage in IM throughout the task if they believed that what they reported during the task would affect their interview performance scores or their eligibility for compensation; for instance, under-reporting uses of deceptive IM if they thought admitting to lying during the interview would harm their chances of payment. However, after the interview portion of the study was finished, we attempted to make it as clear as possible to participants that a) the interview portion of the study was over, b) that their responses from that point onwards would have no impact on their performance scores or their eligibility for compensation or bonus payments, and c) that they should respond as honestly as possible for the remainder of the study.

While deceptive IM use was, similarly to honest IM, hypothesized to increase with increases in the availability of opportunities to use IM, counterintuitively, deceptive IM use decreased as the mean number of attempts used rose. One possibility is that individuals who used fewer attempts may have also been less likely to put great thought or effort into their responses. Given that this was a mock interview for a research study (i.e. few perceivable stakes), any participants who decided to use deceptive IM were perhaps not very concerned with whether their lie sounded good or not, and may have had little interest in putting further effort into their response (e.g. giving any response even if it is untrue, solely because it's required for study compensation). Another possibility, which may be related to the potential issue of lower motivation discussed earlier, is the effect that participants' perceived difficulty of the interview may have on deceptive IM use; deceptive IM use has been shown to increase when participants perceive the interview as difficult (Bourdage et al., 2018). However, the allocation of more attempts as well as the overall purpose of the interview (i.e. a mock interview for a research

study) may have led participants to evaluate the interview as being neither difficult nor important, thus reducing any perceived necessity of using faking to improve performance and decreasing any motivation or willingness to use deceptive IM, despite being provided with an opportunity to use it more. Such an explanation would be in line with Levashina and Campion's (2006) model of faking likelihood, which posits that deceptive IM use is influenced by a combination of interviewees' willingness, capacity, and opportunity to fake.

Relatedly, although theory (Levashina & Campion, 2006) and existing research (Bourdage et al., 2018) suggests that interviewees may be more likely to engage in deceptive IM if they perceive the interview as unfair, no relationship was found between perceived fairness and deceptive IM use. But, given that nearly half of all participants reported zero uses of deceptive IM tactics, a floor effect and limited variance within the deceptive IM variable may have reduced the chance of finding an effect. Additionally, as mean perceived fairness was generally quite high with a small standard deviation, limited variance within the perceived fairness variable may have also contributed to the lack of an effect.

A consistent and robust relationship found in both models was the positive association between honest IM use and interview performance scores. This relationship between IM and interview performance has been well-established in the interview literature (e.g. Barrick et al., 2009; Bourdage et al., 2018; Roulin et al., 2015). And, although greater interview structure typically decreases the positive effects of IM on interview performance evaluations (Levashina et al., 2014), the current study demonstrated that interviewees' use of IM can be effective in AVIs as well (or, in other words, AVIs are also not immune to the influences of IM, despite the increased structure and lack of interviewer). In contrast, deceptive IM use was not associated with interview performance, but this may also have been due to a potential floor effect within the

deceptive IM variable. The notable practical implication of this result is that despite the lack of an actual person to speak and interact with during an AVI, interviewees should be aware of the positive effects that using IM can have on evaluations of interview performance, even when the interview is conducted via asynchronous video with no interviewer present.

There were a few additional correlational findings on IM worth mentioning. The first was a negative correlation between honest IM use and communication anxiety (a factor of the state anxiety measure), which provides some support for the notion that particular types of anxiety may be associated with less effective IM use, and aligns with Powell et al. (2020); their study, which used the same measure to assess state anxiety, found that the negative correlations between state anxiety and honest IM use were strongest for the communication anxiety factor. Given that, as briefly mentioned earlier, communication anxiety was a) the only state anxiety variable with a negative correlation to interview performance, as well as b) the factor of state anxiety with the weakest correlation to the number of attempts used, this result is in alignment with other findings on anxiety observed and discussed thus far in the study, and suggests that individuals with communication anxiety may encounter the most difficulties with being able to use IM and with interviewing overall.

The second set of notable findings were negative correlations between deceptive IM use and both age and years of work experience. Previous research (Bourdage et al., 2018) has also found relationships of similar magnitude, indicating that deceptive IM is more likely to be used by individuals who are younger and who have less work experience, perhaps due to a lack of relevant experience or qualifications.

Overall, findings for IM were a mixed bag. AVI condition did not seem to have an influence on IM use, and the usage variables showed some relations to IM that were difficult to

contextualize and explain. The fact that this study used a mock interview and an online sample from the general population raises participants' perceived necessity for using IM and their motivation (or lack thereof) as potential issues, though the approach we chose to use for the measurement of IM had certain limitations as well. As such, the relationship between AVIs and IM use requires further clarification, perhaps in studies that are able to use real employment interviews instead of mock interviews. A different approach to measuring IM could also be used to see whether results of different IM measurement methods are comparable. Nevertheless, this study was able to find a robust relationship between honest IM use and interview performance ratings, replicating a well-established relationship within the new context of AVIs.

Perceived Fairness

As mentioned earlier, perceived fairness ratings were generally quite high, indicating that most participants felt that the AVI was fair. The mean fairness score of 3.80 observed in this study was higher than the means reported by other studies that have investigated the perceived fairness of AVIs, including Basch et al. (2020; $M = 2.21$), Basch and Melchers (2019; $M = 2.84$), Langer et al. (2019; $M = 3.30$), Langer et al. (2017; $M = 3.34$), Guchait et al. (2014; $M = 3.36$), and Suen, Chen, and Lu (2019; $M = 3.50$, though this mean includes participants from both synchronous and asynchronous video interviews). As these studies which have compared AVIs to other types of interviews have found that AVIs often score more poorly when it comes to applicant reactions, this result is somewhat in opposition to existing research on applicant reactions to AVIs, particularly to the studies that have found substantially lower perceived fairness means.

One possible explanation is that having to experience and partake in the AVI may have helped temper any negative reactions that participants may have initially had before the

interview, as found by Melchers et al. (2016; Basch et al., 2020). But seeing as most existing research on applicant reactions to AVIs assessed applicants' fairness perceptions after completing an AVI (Basch & Melchers, 2019; Guchait et al., 2014; Langer et al., 2017; Suen, Chen, & Lu, 2019) and still found lower fairness scores, this explanation may not be the case. Alternatively, these high fairness ratings could also be attributed, at least in part, to having provided all participants with brief explanations on the benefits of the increased structure and flexibility associated with using AVIs as an interview method, which has been shown by Basch and Melchers (2019) to significantly improve interviewees' perceptions of fairness in AVIs. If the generally positive ratings towards all of the AVI conditions can indeed be attributed to having provided participants with clear explanations of AVIs before the interview, then this provides some encouraging evidence for employers using AVIs, as fairness perceptions have demonstrated links to other important recruitment and organizational outcomes. But, another contributing factor may be the items we used to measure fairness. Although using a measure such as the Selection Procedural Justice Scale (SPJS; Bauer et al., 2001) would have been preferred, the measure was considered too lengthy for inclusion in the study; no short-form version of the SPJS was found, and the items we used had moderate correlations with the SPJS. However, use of a more thorough and in-depth measure like the SPJS to measure perceptions of fairness perhaps would have allowed for more variance, as well as a more nuanced examination of the relationships between the AVI features and the different factors of fairness perceptions.

Although attempts condition was not associated with fairness ratings, the relationship between availability of PT and lower perceived fairness approached significance ($p = .05$). That is, having unlimited preparation time may have been associated with a decrease in fairness ratings. As the allocation of more PT was intended to improve fairness perceptions through the

procedural justice component of *opportunity to perform* (Gilliland, 1993), this finding was unexpected. Given that this result did not reach significance, it should be interpreted with caution. One possible explanation, however, may be that some participants felt that the allocation of unlimited PT made the interview too easy or too different from a "regular," synchronous-type interview, where interviewees are presented with questions and expected to answer nearly immediately afterwards. Many individuals may prepare for a job interview days in advance with the expectation of the typical question-and-immediate-response format. As such, an AVI format allowing for unlimited PT after being presented with a question may be perceived as unfair to those who would normally prepare for an interview beforehand. However, in general, fairness perceptions of AVI features should be examined in greater detail, as it is likely that different features may influence different aspects of fairness evaluations, and odd relationships such as these could be dissected further.

Perceived fairness also showed some interesting correlations with other variables in the study. Fairness ratings were found to have moderate, negative correlations with all three state anxiety factors measured, though the communication anxiety factor was found to be the most strongly correlated with fairness ratings. That is, participants who reported experiencing greater anxiety during the interview were likely to perceive the interview as less fair, with this relationship being the strongest for those reporting communication anxiety. Borrowing from Lukacik et al. (2020), it is possible that this reaction may be due to the one-way communication format inherent to AVIs, as the lack of an interviewer or other social/communication cues within an AVI that an interviewee could typically use to guide the delivery of their response may be particularly detrimental for those with communication anxiety. This result adds to the list of negative findings associated with higher communication anxiety. Employers choosing to use

AVIs should therefore be aware of the possibility of alienating individuals who experience anxiety during interviews, particularly communication anxiety. However, this concern may not be unique to AVIs and may be broadly applicable to other forms of interviews as well, seeing as communication of one's skills and experiences is a necessary component of all forms of interviews. Perceived fairness was also found to negatively correlate with non-AVI interview experience. This suggests that those who have had greater experience with the more standard, synchronous forms of interviews may be less willing to accept the AVI format of interviewing, and may generally have less favourable views towards it.

Perceptions of fairness of the AVI were unrelated to interviewing conditions and were also generally positive, to an extent that it may have reduced the variance in responses and limited the ability to find more effects. Although the high fairness ratings could be attributed to having provided all participants with explanations of the advantages of AVIs (which, in and of itself would be positive as well), high fairness ratings are an encouraging finding for both organizations and AVI researchers. Notably, although all factors of state anxiety were correlated with perceiving the interview as less fair, this relationship was strongest for communication anxiety, indicating a pattern of negative findings for individuals who experience this type of interview anxiety.

Limitations

This study had several core limitations, most of which were addressed within the context of their relationships to specific findings (or lack thereof) above. To summarize, the main limitations were: a) Difficulties with the implementation of the PT manipulation variable and with the operationalization of PT usage, which likely confounded results from the attempts variables and limited the possibility of finding effects for the PT variables; b) The Prolific

sample, which had the strength of increased variation in age and experience, but may have had negative effects on motivation to perform well in the interview; c) Use of a mock interview as opposed to a real interview, which limited the importance and stakes of the interview, and may have therefore also negatively affected participant motivation; d) The lack of ability to verify the accuracy of participants' self-reported IM usage; e) A potential floor effect and limited variation in the deceptive IM variable; f) Limited variation in the perceived fairness variable, and; g) A potential lack of power to detect mediation and interaction effects, given that these effects require relatively greater power.

Practical Implications

This thesis set out to examine the relationships between two AVI features and subsequent applicant outcomes. Though flawed, this study provided some important insights into how the provision and actual use of certain AVI features may relate to other variables of interest to the employers and applicants participating in the use of AVIs. Based on the observed findings, several practical implications can be suggested for both sides.

For applicants and interviewees in AVIs: a) Interviewees should take advantage of the opportunity to use more recording attempts if such an option is available, as interview performance ratings were found to be higher for those who used more attempts; b) For those who experience anxiety during interviews, using more attempts seems like a potentially effective strategy of limiting the negative effects that anxiety may have on interview performance, given the point just discussed; c) Additionally, the previous point may be particularly relevant for individuals who experience communication anxiety during interviews, seeing as these interviewees were found to be the least likely to use more attempts and to have lower interview performance scores; d) Interviewees should continue to use IM in AVIs, as increased use of

honest IM tactics was associated with higher interview performance scores, and; e) Those who experience communication anxiety during interviews should consider practicing the use and incorporation of IM into interview responses, as this type of anxiety was associated with less IM use.

For employers and organizations using AVIs: a) Providing multiple recording attempts per question may be helpful to those who experience anxiety during an interview; b) If choosing to provide interviewees with multiple attempts, allowing for two or three recording attempts per question may be sufficient, given that most participants did not use more than that when they were given the option to; c) Using structured interview questions, a behaviourally-anchored scoring guide, and relying on the verbal content of participants' answers may help limit the negative effects of applicants' anxiety on their interview performance; d) Despite the increased interview structure, AVIs cannot eliminate the influences of applicant IM use on performance ratings (though elimination should not necessarily be the goal anyways, particularly for honest IM); e) Providing interviewees with brief explanations on the personal advantages of AVIs may help with increasing the favourability and perceived fairness of AVIs, and; f) Employers should be mindful that individuals who experience greater anxiety during interviews may also be more likely to perceive the interviewing process as less fair, which may potentially alienate such individuals and discourage them from applying or being further interested in the employer.

Conclusion

Although AVIs have been widely used by employers for many years already, the research has been severely lagging behind. As many areas of AVIs have thus far been unexplored in the literature, this thesis took a first step into how AVIs designed with different features may influence several applicant outcomes crucial to the recruitment and selection process. Though

many of the relationships expected were altogether not found or were in the opposing direction of what was hypothesized, many will require further investigation and clarification. It is hoped that this research has provided interviewees, employers, and the broader research community with a much-needed preliminary look into the finer workings of AVIs and the influence that their design may have on interviewees' performance, behaviours, reactions, and experiences.

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Appendix A

Job Description/Posting

Business Operations Manager

Booker's America is a customer-focused personal and small business banking business. Our goal every day is to grow the good in business and life. We provide tailored solutions that our customers will have the utmost confidence in. By embracing change, forward-thinking values, and a diverse and inclusive team, we ensure that our customers are always at the centre of everything we do. For these reasons, Booker's has remained a trusted, household name among Americans nationwide for decades.

The Business Operations Manager will assess, recommend, and implement operational objectives and procedures in order to maximize efficiency and support the objectives and long-term growth of the company. This position will involve responsibilities related (but not limited) to policy formation and implementation, budgeting and finances, development of business strategy, and risk assessment. The Business Operations Manager will lead a departmental team and work closely with team leads from other related units.

Core Responsibilities:

- Align and optimize operational processes to ensure efficiency and support for strategic corporate objectives
- Develop strategic management initiatives; offer input and guidance on decisions regarding expansion or cost containment
- Analyze marketing strategies, financial and customer information, and costs to inform decision-making and strategy development
- Work closely with team members from Marketing, Business Development, and Management to devise and/or implement new plans, policies, procedures, and systems
- Identify, assess, manage, and minimize the risks/impacts associated with the introduction of new solutions, policies, legislation and new business opportunities
- Manage department budgeting and spending, create financial reports
- Establish internal and external key performance indicators for the business, and monitor and track the progress of established goals
- Contribute Operations information and recommendations, and assist in the development of business strategy, long range plans, company goals, and growth objectives
- Provide leadership and guidance to direct reports, establish performance expectations, and conduct regular one-on-one performance reviews
- Prepare briefing notes, reports, and presentation material for senior management

Required Knowledge, Skills, and Abilities:

- Master of Business Administration, Master of Finance, or other related advanced degree is a strong asset
- Excellent problem-solving skills
- Ability to develop partnerships, collaborate, and communicate with all levels of the organization (senior management, clients, other stakeholders, and your team)
- Ability to manage complex budgets, finances, and operations of the company
- Project-management and organization; ability to coordinate multiple projects with different deadlines, deliverables, and key stakeholders to report to
- Excellent verbal and written communication skills
- Leadership, coaching, and mentoring; ability to support staff and foster employee development
- Proficiency in Microsoft office and the ability to pick up new technology and software easily

Appendix B

Instructions for Interview Procedure

WHAT'S AN AVI?

As a reminder, you are participating in an asynchronous video interview (AVI).

In an AVI, you are asked to video-record a response to each interview question for an evaluator to watch at a later time. Because an AVI is completed entirely online, it allows you to complete an interview at any time you like, from any place with internet access.

AVIs allow the interview process to be *standardized* across all applicants – that is, each applicant is asked the same questions in the same order, has the same amount of time to prepare a response, and has the same amount of time to respond to a question. This helps ensure that all applicants are treated equally during the interview process.

PROCEDURE GUIDELINES

If in Condition 1 (Low PT, 1 Attempt):

> You are being interviewed for the position of Business Operations Manager at Booker's America. **Please read the guidelines below carefully**.
>
> - This interview has 5 questions. One question will be presented to you at a time. The question will remain visible at all times until moving on to the next question.
> - Video-recording will start automatically after 15 seconds for Questions 1-3, and after 40 seconds for Questions 4-5.
> - You will have 1 recording attempt per question.
> - Each video recording can be up to 3 minutes long. Your attempt will be saved and will stop recording after 3 minutes.
> - You will automatically proceed to the next interview question after you have finished recording your response.
>
> The next page will take you to a practice/demo round (this will not be evaluated and will have no effect on your scores).

If in Condition 2 (Low PT, 5 Attempts):

> You are being interviewed for the position of Business Operations Manager at Booker's America. **Please read the guidelines below carefully**.
>
> - This interview has 5 questions. One question will be presented to you at a time. The question will remain visible at all times until moving on to the next question.
> - Video-recording will start automatically after 15 seconds for Questions 1-3, and after 40 seconds for Questions 4-5.
> - You will have up to 5 recording attempts per question, but you do not need to use all attempts. **You will need to choose one attempt (per question) to submit for evaluation**; other attempts will not be evaluated and will have no bearing on your scores. Please note that each attempt will be associated with a number (i.e. Attempt 1, Attempt 2, Attempt 3, etc.), and that **you will have to remember your attempts by number when submitting – you will not be able to review or watch your attempts before choosing one to submit**, because the attempt numbers will appear in

a drop-down list. You will need to choose one attempt to submit before moving on to the next question.
- Each video recording can be up to 3 minutes long. Your attempt will be saved and will stop recording after 3 minutes.

The next page will take you to a practice/demo round (this will not be evaluated and will have no effect on your scores).

If in Condition 3 (Unlimited PT, 1 Attempt):

You are being interviewed for the position of Business Operations Manager at Booker's America. **Please read the guidelines below carefully**.

- This interview has 5 questions. One question will be presented to you at a time. The question will remain visible at all times until moving on to the next question.
- For each question, you will be able to take as much time to prepare as you'd like before starting the video-recording.
- You will have 1 recording attempt per question.
- Each video recording can be up to 3 minutes long. Your attempt will be saved and will stop recording after 3 minutes.
- You will automatically proceed to the next interview question after you have finished recording your response.

The next page will take you to a practice/demo round (this will not be evaluated and will have no effect on your scores).

Condition 4, Unlimited PT, 5 Attempts:

You are being interviewed for the position of Business Operations Manager at Booker's America. **Please read the guidelines below carefully**.

- This interview has 5 questions. One question will be presented to you at a time. The question will remain visible at all times until moving on to the next question.
- For each question, you will be able to take as much time to prepare as you'd like before starting the video-recording.
- You will have up to 5 recording attempts per question, but you <u>do not</u> need to use all attempts. **You will need to choose one attempt (per question) to submit for evaluation**; other attempts will not be evaluated and will have no bearing on your scores. Please note that each attempt will be associated with a number (i.e. Attempt 1, Attempt 2, Attempt 3, etc.), and that **you will have to remember your attempts by number when submitting – you will not be able to review or watch your attempts before choosing one to submit**, because the attempt numbers will appear in a drop-down list. You will need to choose one attempt to submit before moving on to the next question.
- Each video recording can be up to 3 minutes long. Your attempt will be saved and will stop recording after 3 minutes.

The next page will take you to a practice/demo round (this will not be evaluated and will have no effect on your scores).

Note: Participants only saw one of four versions of the Procedure Guidelines, which was dependent on their experimental condition.

Appendix C

Structured Interview Questions

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1. Describe a time when you had to collaborate with others to succeed at a task. What was the task you had to accomplish? What made the collaboration successful? What was your role or contribution?

2. Describe a situation where you had to evaluate the risks, benefits, and potential outcomes of a decision. For instance, buying something important, investing in something, starting a new project, etc. How did you handle it? And what was the outcome?

3. Describe a time when you took the lead on a group project. What was the project, how did you behave as a leader, and what was the outcome?

4. Imagine you've been hired for the position, and you are in your first week on the job. The Business Operations tasks and projects that were previously handled by other staff are now being handed off to you. As a result, you currently already have five ongoing projects, each requiring about 4-5 hours of work to be completed, including two projects with deadlines by the end of the week. Your boss has just given you a new project today, that was described as "important". On top of this, you are still in the process of familiarizing yourself with the company's financial reporting systems, company policies, etc. and find that you have more work than you can comfortably manage. What would you do?

5. Imagine that it's been a few months since you implemented a new company-wide initiative, aimed at changing the progress reporting system for long-term projects. You are realizing that it is not working the way you had anticipated. A lot of money was spent training employees to use the reporting system, but the compliance rate to your new procedures has been very low. Overall, you have seen no gains in project efficiency, and the upper management team is becoming increasingly concerned. Additionally, you and the management team have heard a few direct complaints from employees on parts of the new system. What would you do? What would you tell the management team?

Appendix D

State Anxiety Measure (Adapted from the Measure of Anxiety in Selection Interviews, McCarthy & Goffin, 2004)

Communication Anxiety

1. I became so apprehensive in the interview that I was unable to express my thoughts clearly.
2. I got so anxious while in the interview that I had trouble answering questions that I knew.
3. During the interview, I often couldn't think of a thing to say.
4. I felt that my verbal communication skills were strong.*
5. During the interview I found it hard to understand what the interviewer was asking me.
6. I found it easy to communicate my personal accomplishments during the interview.*

Social Anxiety

7. While in the interview, I became concerned that the interviewer would perceive me as socially awkward.
8. I became very uptight about having to record my responses for an interviewer.
9. I was afraid about what kind of personal impression I was making on the interviewers.
10. During the interview, I worried that my actions would not be considered socially appropriate.
11. I worried about whether the interviewers would like me as a person.

Performance Anxiety

12. In the interview, I got very nervous about whether my performance was good enough.
13. I was overwhelmed by thoughts of doing poorly when I was in the interview.
14. I worry that my interview performance will be lower than that of other applicants.
15. During the interview, I was so troubled by thoughts of failing that my performance was reduced.
16. During the interview, I was worried about what would happen if I didn't perform well.
17. While in the interview, I was worried about whether I would be a good candidate for the job.

Note. *Indicates a negatively keyed item. Items are rated on a 5-point response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*.

Appendix E

Perceived Fairness Measure (Adapted from Smither et al., 1993, and Macan et al., 1994)

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1. I think that the video interviewing process is a fair way to select people for the job of Business Operations Manager.
2. I think that the video interview was fair.
3. Overall, the method of video interviewing used was fair.

Note. Items are rated on a 5-point response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*.

Appendix F1

Task Instructions for Identification of Impression Management Behaviours

---

Please read this page carefully!!

In the following exercise, we will ask you to review each of the videos you submitted for evaluation (i.e. five videos) to identify your ***impression management*** use.

In the context of this exercise, *impression management* (IM) refers to the specific behaviours or tactics that an applicant can use during an interview to influence the impression that the interviewer/employer has of them. In interviews, applicants will use IM tactics to try to convince the interviewer/employer that they are a desirable and ideal candidate for the job. Below are two types of verbal IM tactics that applicants might use, both of which can be used either *honestly* (i.e. telling the truth) or *deceptively* (i.e. lying, exaggerating, changing small details, "borrowing" a story), with example behaviours of each:

(1) Assertive Impression Management: Actively creating a positive impression by promoting your accomplishments, skills, and experiences, or by trying to gain favour with the interviewer (e.g. through flattery, agreeing with opinions or values held by the interviewer/employer).	
a) **Honest-Assertive:** Creating a positive impression by truthfully discussing skills, experiences, or values you possess.	- Accurately describing how you handled a situation in a previous job - Accurately describing your education, credentials, knowledge - Emphasizing your fit with the organizational culture because know you share many of the same values - Complimenting the interviewer/employer on something you truly admire or appreciate about them
b) **Deceptive-Assertive:** Creating a positive impression by discussing skills, experiences, or values you do not possess.	- "Embellishing" your description of a past situation by adding small details or changing an outcome to make your experience seem more positive or impressive (e.g. changing who was involved, saying you helped 50 people when you only helped 20) - Making up a story, or "borrowing" a story that you heard from someone else - Pretending to agree with values or opinions held by the interviewer/employer - Claiming you know how to do something that you do not actually know how to do

(2) Defensive Impression Management: Justifying past behaviour, actions, or decisions to avoid leaving a negative impression on the interviewer/employer. (E.g. defending a decision you made that resulted in a poor outcome, justifying negative marks on a record, creating an excuse, apologizing.)	
a) **Honest-Defensive:** Truthfully justifying and explaining past events to avoid leaving a negative impression.	- Truthfully explaining an employment gap on your resume or a poor grade on your transcript

	- Truthfully explaining the causes leading up to a negative situation - Giving a sincere apology
b) **Deceptive-Defensive:** Justifying or explaining past events by exaggerating or making up pieces of information to avoid leaving a negative impression.	- Assigning blame and saying that someone else was at fault for a bad outcome that resulted from a group decision - Making up an excuse to explain a negative situation - Apologizing for something but feeling like you didn't actually do anything wrong

TASK INSTRUCTIONS

You will be asked to watch each of the five video responses you submitted, and to note when you used an impression management tactic. Each of the four impression management tactics will be associated with a specific icon below:

Icon	Impression Management Tactic
Hon-Assertive	**Honest-Assertive**: Creating a positive impression by truthfully discussing skills, experiences, or values you possess.
Dec-Assertive	**Deceptive-Assertive:** Creating a positive impression by discussing skills, experiences, or values you do not possess.
Hon-Defensive	**Honest-Defensive:** Truthfully justifying and explaining past events to avoid leaving a negative impression.
Dec-Defensive	**Deceptive-Defensive:** Justifying or explaining past events by exaggerating or making up pieces of information to avoid leaving a negative impression.

Appendix F2

Shortened Task Instructions for Identification of Impression Management Behaviours

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Use the buttons below as you are watching your video to indicate when you used a specific impression management tactic. Each button click will create a **time-stamp** (e.g. 6 sec, 1 min 32 sec). **A button should be clicked each time you spot yourself using that specific tactic.**

If you wish to remove a time-stamp, click the trash can icon next to it to delete it.

Icon	Impression Management Tactic
Hon-Assertive	**Honest-Assertive**: Creating a positive impression by truthfully discussing skills, experiences, or values you possess.
Dec-Assertive	**Deceptive-Assertive:** Creating a positive impression by discussing skills, experiences, or values you do not possess.
Hon-Defensive	**Honest-Defensive:** Truthfully justifying and explaining past events to avoid leaving a negative impression.
Dec-Defensive	**Deceptive-Defensive:** Justifying or explaining past events by exaggerating or making up pieces of information to avoid leaving a negative impression.

Note. These instructions were visible to participants throughout the duration of the task.

Appendix G

Attention Check Items for Impression Management Identification Task

---

Which impression management tactic is being used in each example below?

1. Truthfully explaining mistakes I've made in the past.
2. Pretending that I have more work experience than I actually do.
3. Describing my skills accurately.
4. Changing the details of my story to hide a mistake I made.

Note. Response options for all questions were *Hon-Assertive*, *Dec-Assertive*, *Hon-Defensive*, and *Dec-Defensive*. Correct answers to each of the items are: 1) Hon-Defensive, 2) Dec-Assertive, 3) Hon-Assertive, 4) Dec-Defensive.

Appendix H

Trait Anxiety Measures (Adapted from the Short Form Test Anxiety Inventory, Taylor & Deane 2002, and the Short Form Social Interaction Anxiety Scale, Peters et al., 2012)

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1. I have difficulty making eye contact with others.
2. I find it difficult mixing comfortably with the people I work with.
3. I tense up if I meet an acquaintance on the street.
4. I feel tense if I am alone with just one person.
5. I have difficulty talking with other people.
6. I find it difficult to disagree with another's point of view.
7. During tests/assessments I feel very tense.
8. I wish examinations/tests did not bother me so much.
9. I seem to defeat myself while working on important tests/assessments.
10. I feel very panicky when I take an important test/assessment.
11. During examinations/assessments I get so nervous that I forget facts I really know.

Note. Items 1-6 are from the Short Form Social Interaction Anxiety Scale (Peters et al., 2012). Items 7-11 are from the Short Form Test Anxiety Inventory (Taylor & Deane, 2002). Items are rated on a 5-point response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*.

Appendix I

Behaviourally Anchored Rating Scales and Scoring Guides for Structured Interview Questions

Competency assessed:	**Teamwork / Collaboration**: Working with others to achieve a common objective or complete a shared task.				
Question type:	Past-behavioural				
Question:	Describe a time when you had to collaborate or partner with others to succeed at a task. What was the task you had to accomplish? What made the collaboration successful? What was your role or contribution?				
Scoring scale:	**1**	**2**	**3**	**4**	**5**

SCORING GUIDE:		
1	**3**	**5**
- Features of the task, situation and/or the individual's role/contribution are unclear or are not discussed/mentioned (i.e. parts of the question were not answered or addressed at all). - No collaboration occurred, or the individual was not collaborative (e.g. contributed very little, or completed all work without the contribution of others), or; - Collaboration was not needed for the task.	- Features of the task, situation, and/or the individual's role/contribution are somewhat clear. Most parts of the question are addressed. - The situation involved and required collaboration (i.e. the task requires some kind of co-dependency on others). - The task clearly would have been more successful if the individual was more collaborative (e.g. by increasing the frequency of communication with others, contributing more to group tasks); the individual was only partially successful at working collaboratively with others. - Briefly considered/discussed a few of the behaviours and actions that helped and/or hindered the success of the collaborative effort, but their discussion of it was not very thorough or detailed (e.g. did not provide examples to back up claims). - The individual was "passively collaborative", e.g. did what was told by other group members, but did not actively initiate or encourage other collaborative actions/behaviours.	- Features of the task, situation, and/or the individual's role/contribution are clear. All parts of the question were addressed. - The situation involved and required collaboration. - The individual actively helped create and/or sustain a collaborative environment (e.g. kept other team members informed of project-related tasks or progress, scheduled team meetings, provided feedback when requested). - The behaviours and actions that made the collaborative effort successful are thoroughly considered and clearly described (e.g. by using examples), and/or; - The behaviours and actions that would have made the collaborative effort more successful are thoroughly considered.

Rating note: Primary focus should be on the behaviours/actions they used (rather than on the nature of the task itself), and whether the individual's behaviours/actions exemplified successful collaboration. An example of a "2" score could be someone who describes a teamwork/collaborative task, but does not really mention how their behaviors or actions encouraged teamwork/collaboration. Their description of the task should be used to assess whether situation was actually a teamwork/collaborative one (some people are describing tasks/situations that seemed like it hardly involved or necessitated actual teamwork).

Competency assessed:	**Minimizing Errors/Risks**: The considerations that one makes in advance of making a decision or engaging in an action to ensure that the potential for risks, errors, or unfavourable outcomes are minimized.				
Question type:	Past-behavioural				
Question:	Describe a situation where you had to evaluate the risks, benefits, and potential outcomes associated with a decision, for instance buying something important, investing in something, starting a new project, etc. How did you handle it? And what was the outcome?				
Scoring scale:	**1**	**2**	**3**	**4**	**5**

SCORING GUIDE:		
1	**3**	**5**
- Features of the situation, actions taken, and/or outcomes are unclear or are not discussed/mentioned (i.e. parts of the question were not answered or addressed at all). - The decision was simple (lacked complexity, difficulty, or consequence) and did not require a detailed decision-making process. - The individual did not engage in an evaluative process of comparing benefits, risks, and potential outcomes (e.g. considered only the benefits). - A poor outcome was achieved.	- The consequence, importance, or difficulty of the decision is somewhat clear. - Features of the situation, actions taken, and outcomes are somewhat clear. Most parts of the question are addressed. - A few risks and potential outcomes were considered and explicitly named/stated (e.g. costs, time requirements, etc.) but the description is somewhat general and lacks details or specific examples. - The individual lacked a thorough consideration of all possible factors influencing the outcome of the decision/action (e.g. a large, obvious risk or multiple smaller risks were overlooked/not discussed). *(May require the rater to consider what other factors would have been pertinent to the decision, which the individual may have failed to mention or consider.)* - Contingency plans or failsafes were not identified to deal with potential problems if they arose. - A somewhat unfavourable or sub-optimal outcome occurred due to a lack of planning or adequate consideration of influencing factors, or; - A favourable outcome was achieved, but the individual was poorly prepared for dealing with unfavourable outcomes if they were to have occurred instead (i.e. no contingency plans)	- The consequence, importance, or difficulty of the decision is clear. - Features of the situation, actions taken, and outcomes are clear. All parts of the question were addressed. - The potential benefits, risks, outcomes, and influencing factors associated with different decisions/ courses of action were clearly identified and thoroughly considered in relation to the objectives before finalizing the decision. - If appropriate/necessary for the situation, potential counteractive measures to risks (e.g. contingency plans, failsafes) were identified. - Successfully achieved the desired/favourable outcome, and/or; - Avoided unfavourable outcomes through the plans they created and acting appropriately as situations arose.

Competency assessed:	**Leadership**: Coordinating and managing the completion of tasks or objectives among a group of people.				
Question type:	Past-behavioural				
Question:	Describe a time when you took the lead on a group project. What was the project, how did you behave as a leader, and what was the outcome?				
Scoring scale:	**1**	**2**	**3**	**4**	**5**

SCORING GUIDE:		
1	**3**	**5**
- The individual did not take a leadership position in the situation. - Features of the situation, the individual's behaviours, and/or outcomes were unclear or are not discussed/mentioned (i.e. parts of the question were not answered or addressed at all).	- The individual was in a leadership position in the situation, either formally (e.g. assigned, by job title) or informally (e.g. by taking initiative). - The behaviours used and actions taken were somewhat clear. Most parts of the question are addressed. - A few of the individual's leadership behaviours/actions were explicitly mentioned, but the description is somewhat general and lacks details or specific examples. - The individual's leadership behaviours were ineffective at times (e.g. unable to resolve problems among the team). - Given the situation and objectives, other leader behaviours or actions clearly would have been more suitable; the individual demonstrated limited ability to adapt their leader behaviours to the group or project needs (e.g. was demanding, overbearing, controlling). - The project's success was somewhat limited by the individual's leader behaviours (e.g. poor communication, poor scheduling).	- The individual was in a leadership position in the situation, either formally (e.g. assigned, by job title) or informally (e.g. by taking initiative). - The leadership behaviours used and the actions taken were clearly described. All parts of the question were addressed. - The individual demonstrated a clear understanding of what leadership behaviours would be effective for the team's success, and used leader behaviours that were appropriate and suitable given the situation and objectives (e.g., led by example, clearly communicated the goal to subordinates and motivated them to reach it, etc.). - The leader behaviours used and actions taken were effective and aided in producing a successful project outcome.

Rating note: An answer that is overly general/broad/vague or overall lacking in detail might be a 2. E.g. "I scheduled meetings, made sure tasks were being completed…"

Competency assessed:	**Planning, Prioritization**: How one manages and completes multiple different tasks and objectives within a limited time frame, based on an evaluation of each objective's relative importance.				
Question type:	Situational				
Question:	Imagine you've been hired for the position, and you are in your first week on the job. You find out that before you arrived, the Business Operations Manager's responsibilities were divided among several other department heads and members of upper management. With you now on the team, the other staff have started offloading their Business Operations tasks and unfinished projects to you. You thus already have five ongoing projects, each requiring about 4-5 hours of work to be completed, including two projects with deadlines by the end of the week. Your boss has just given you a new project today, that was described as "important". On top of this, you are still in the process of familiarizing yourself with the company's financial reporting systems, company policies, etc. and find that you have more work than you can comfortably manage. What would you do?				
Scoring scale:	**1**	**2**	**3**	**4**	**5**

SCORING GUIDE:		
1	**3**	**5**
- No clear plan of action is suggested, e.g. "Things will probably pan out or quiet down eventually," or "I'd just see how much I could get done before the deadline," and/or; - Focuses on the "easy" projects and does not consider the priority of the various projects. - Suggests deferring to the boss (or other project stakeholders) to determine the order of importance of projects, and <u>does not propose a potential plan themselves</u>, or; - Simply suggests telling the boss that it is not possible to handle all the work.	- Suggests that no work can be properly done until they have become familiarized with the company background information (i.e. seems rigid but does not consider whether this info will be necessary to complete the projects). - Next prioritizes the boss's new project and the two projects due for the end of the week; the other three ongoing projects can wait. - Communicates with project stakeholders to inform them if or why any delays or project changes are expected, if necessary/ appropriate. - Suggests delegation of tasks, and a tentative plan/prioritization of the relative importance of some of the tasks. - Outlines a tentative plan, but suggests deferring to the boss (or other project stakeholders) to determine the order of importance of projects	- Prioritizes the two projects due for the end of the week. - Communicates with the boss regarding the importance and proposed deadline of the new project. - Evaluates whether the prioritized projects can be completed with or without a greater familiarity with the company's background information, and/or whether project quality will be significantly affected by it, e.g. "If I don't have the necessary background knowledge on the company, I may not be able to do certain projects well, but there may still be some other projects I could work on first if those are more important." Prioritizes learning background info only if it is necessary to completing the prioritized projects. - Communicates with project stakeholders if or why any delays or project changes are expected, if necessary/appropriate. - Must propose a potential plan of action/prioritization themselves (the plan CAN include delegation or talking to the boss as a secondary/backup measure, but they must propose a plan for delegating or a plan that could be executed w/o the boss's input).

Competency assessed:	**Problem-Solving**: Recognizing when a problem has occurred, identifying the problem, and proposing/implementing an appropriate solution.				
Question type:	Situational				
Question:	It's been a few months since you implemented a new company-wide initiative to report the progress made in long-terms projects. You are realizing that it is not working the way you had anticipated. A lot of money was spent training employees to use the reporting system, but the compliance rate to your new procedures has been very low. Overall, you have seen no gains in project efficiency, and the top management team is becoming increasingly concerned. Additionally, you and the management team have heard a few direct complaints from employees on parts of the new system. What would you do? What would you tell the management team?				
Scoring scale:	**1**	**2**	**3**	**4**	**5**

SCORING GUIDE:		
1	**3**	**5**
- Proposes no plan of action or a plan of analysis to assess the problems. Just hopes that things will get better over time. - Does not communicate to the management team - Suggests reassuring the management team of the initiative, without any evidence to support - Suggests removing the system, without any evidence to support the decision. - Suggests deferring the decision to continue/discontinue the initiative to top management, and does not suggest any plan of action to assess the problems.	- Apologizes to the top management about the disappointing initial results. - Supports claims/reassurances with generalized statements about potential problems or lack of success with new initiatives, e.g. "Sometimes it can take several months to see results from new company initiatives," or "People can be slow to adopt new initiatives." - Suggests implementing solutions based on limited evidence/input (the complaints directly received, concerns from top management), or - Suggests an approach involving limited communication with top management. (i.e handles the work independently and informs top management later) - Suggested plan/methodology is somewhat broad, vague, or limited in scope (e.g. just says "I'd ask employees").	- Proposes a plan or potential method of assessing the problems. - Communicates with project leads to find out more about the progress of their projects, expected finish dates, recent problems, etc.; tries to determine if a lack of gains in project efficiency can be attributed to other situational reasons. - Reaches out to employees directly to try to find out why compliance rates are low (identify reasons for why the update is limited, and suggests specific methods, e.g. survey, interview). - Asks employees / project leads for input on how they think the system could be improved. - Determine what features of the new system could be modified after carefully evaluating feedback reports to address the problems identified. (*BONUS criteria [not required but good to have]:* Additionally discusses the potential costs, time, risks, and benefits associated with implementing each modification/ solution.) - Communicate the plan of action, proposed timeline, and/or analyses findings to the top management team.

Appendix J

Estimates for Main Path Model, Manipulation as Predictors, MLR as Estimator

		N = 223					N = 172				
Outcome Variable	Predictor Variable	b	*B*	*SE*	*p*	95% BCa CI	b	*B*	*SE*	*p*	95% BCa CI
Interview Performance											
	Preparation Time Condition	-.02	-.02	.11	.80	[-.24, .18]	.02	.01	.12	.87	[-.22, .26]
	Attempts Condition	***.02***	***.12***	***.11***	***.06***	***[-.01, .41]***	.20	.12	.12	.11	[-.04, .43]
	State Anxiety	-.07	-.07	.06	.30	[-.19, .06]	-.09	-.10	.07	.19	[-.22, .05]
	Honest IM	**.02**	**.25**	**.00**	**< .001**	**[.01, .02]**	**.02**	**.26**	**.01**	**< .001**	**[.01, .03]**
	Deceptive IM	.00	.02	.02	.79	[-.03, .04]	.02	.07	.02	.41	[-.02, .05]
Honest IM											
	Preparation Time Condition	1.66	.06	1.84	.37	[-1.95, 5.27]	1.81	.07	2.10	.39	[-2.31, 5.93]
	Attempts Condition	-1.18	-.04	1.86	.53	[-4.82, 2.46]	.33	.01	2.11	.88	[-3.81, 4.46]
Deceptive IM											
	Preparation Time Condition	.29	.04	.45	.52	[-.59, 1.18]	.24	.04	.53	.65	[-.79, 1.27]
	Attempts Condition	-.37	-.05	.45	.42	[-1.25, .52]	-.54	-.08	.53	.31	[-1.56, .49]
	Perceived Fairness	-.18	-.04	.24	.46	[-.64, .29]	-.23	-.05	.27	.39	[-.77, .30]
Perceived Fairness											
	Preparation Time Condition	-.18	-.11	.11	.11	[-.39, .04]	-.09	-.05	.12	.48	[-.33, .15]
	Attempts Condition	.12	.07	.11	.26	[-.09, .34]	.09	.06	.12	.46	[-.15, .33]
State Anxiety											
	Preparation Time Condition	-.09	-.05	.27	.74	[-.62, .44]	-.01	.00	.33	.98	[-.65, .64]
	Attempts Condition	.20	.11	.27	.47	[-.34, .73]	.37	.20	.33	.26	[-.28, 1.03]
	PT x Trait Anxiety Interaction	.03	.05	.10	.74	[-.16, .22]	.00	.01	.11	.97	[-.21, .22]
	Att. x Trait Anxiety Interaction	-.07	-.11	.10	.47	[-.26, .12]	-.13	-.22	.11	.24	[-.36, .09]
	Trait Anxiety	**.78**	**.70**	**.09**	**< .001**	**[.59, .96]**	**.81**	**.72**	**.10**	**< .001**	**[.61, 1.01]**

Note. MLR was used as the estimator. Model fit indices can be found in Table 5. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. SE = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. PT = Preparation Time. Att. = attempts. IM = impression management. In the *N* = 172 sample, participants who failed to correctly answer at least three out of four IM task comprehension items were removed, whereas these participants were retained in the *N* = 223 sample. Path estimates that are significant ($p < .05$) are bolded, while estimates that are approaching significance ($p \leqslant .10$) are bolded and italicized.

Appendix K

Estimates for Main Path Model, Manipulation as Predictors, N = 172

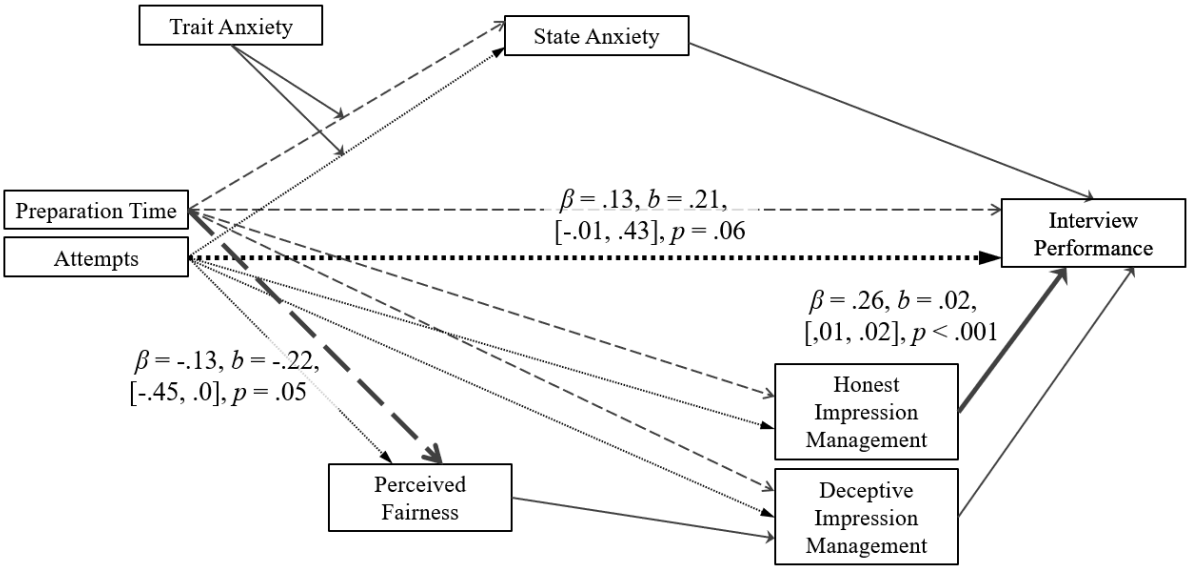
Outcome Variable	Predictor Variable	*b*	*β*	*SE*	*p*	95% BCa CI
Interview Performance						
	Preparation Time Condition	.02	.01	.13	.89	[-.24, .26]
	Attempts Condition	.19	.11	.13	.14	[-.06, .43]
	State Anxiety	-.12	-.13	.08	.14	[-.27, .04]
	Honest IM	**.02**	**.29**	**.01**	**< .001**	**[.01, .03]**
	Deceptive IM	.03	.10	.02	.17	[-.01, .06]
Honest IM						
	Preparation Time Condition	1.30	.05	2.24	.56	[-3.09, 5.68]
	Attempts Condition	-.14	-.01	2.17	.95	[-4.40, 4.12]
Deceptive IM						
	Preparation Time Condition	.43	.06	.54	.43	[-.64, 1.49]
	Attempts Condition	-.41	-.06	.54	.45	[-1.46, .65]
	Perceived Fairness	-.26	-.06	.28	.36	[-.80, .29]
Perceived Fairness						
	Preparation Time Condition	-.11	-.07	.12	.37	[-.35, .13]
	Attempts Condition	.09	.05	.12	.47	[-.15, .32]
State Anxiety						
	Preparation Time Condition	.03	.02	.33	.92	[-.62, .68]
	Attempts Condition	.25	.14	.39	.52	[-.52, 1.02]
	PT × Trait Anxiety Interaction	-.01	-.02	.12	.93	[-.24, .21]
	Att. × Trait Anxiety Interaction	-.09	-.15	.14	.50	[-.36, .18]
	Trait Anxiety	**.80**	**.72**	**.10**	**< .001**	**[.60, 1.00]**

Note. WLSMV was used as the estimator. Model fit indices: RMSEA = .05; SRMR = .05; CFI = .92; TLI = .85; $\chi^2(18, N = 223) = 29.30$, $p = .05$. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. *SE* = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. PT = Preparation Time. Att. = attempts. IM = impression management. Path estimates that are significant ($p < .05$) are bolded.

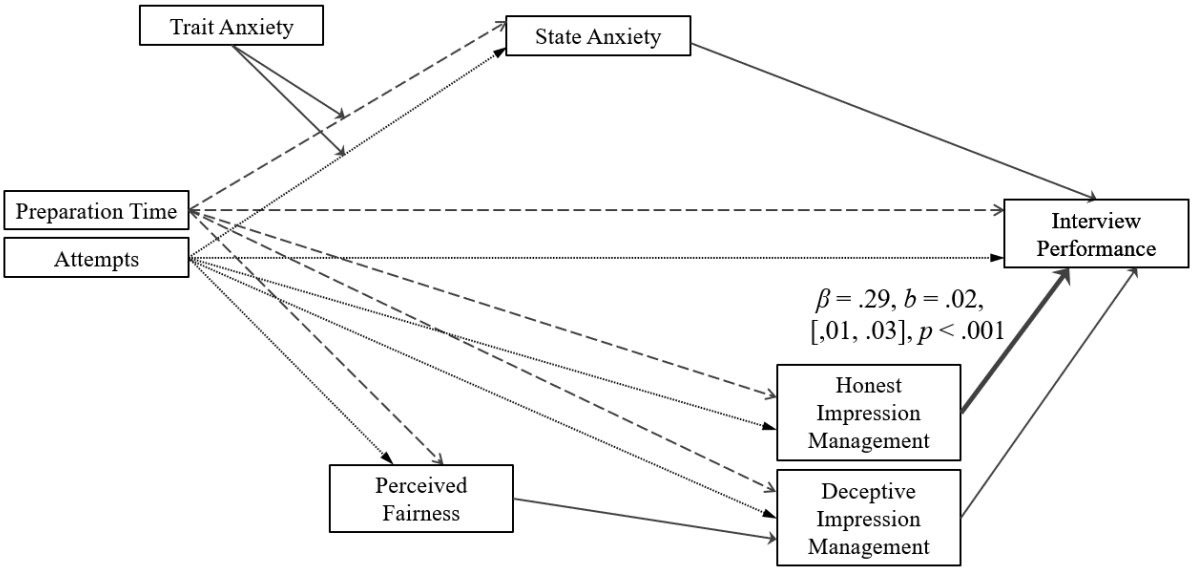
Appendix L

Diagrams of Main Path Models, With Path Estimate Results

N = 223



N = 172



Note. Differences in arrow styling were added to aid visual interpretation only. Path estimates were displayed only for estimates that were significant or approaching significance ($p \leq .10$), and are indicated by bolded arrows; this was done to ease interpretation of the figures, though estimates for all paths can be found in Table 3. 95% BCa confidence intervals are displayed in brackets. Please additionally note that in both models, state anxiety was also significantly predicted by trait anxiety (for $N = 223$, $\beta = .72$, $b = .80$, [.61, .98], $p < .001$; for $N = 172$, $\beta = .72$, $b = .80$, [.59, 1.00], $p < .001$).

Appendix M

Estimates for Alternative Path Model, Actual Use as Predictors, N = 223

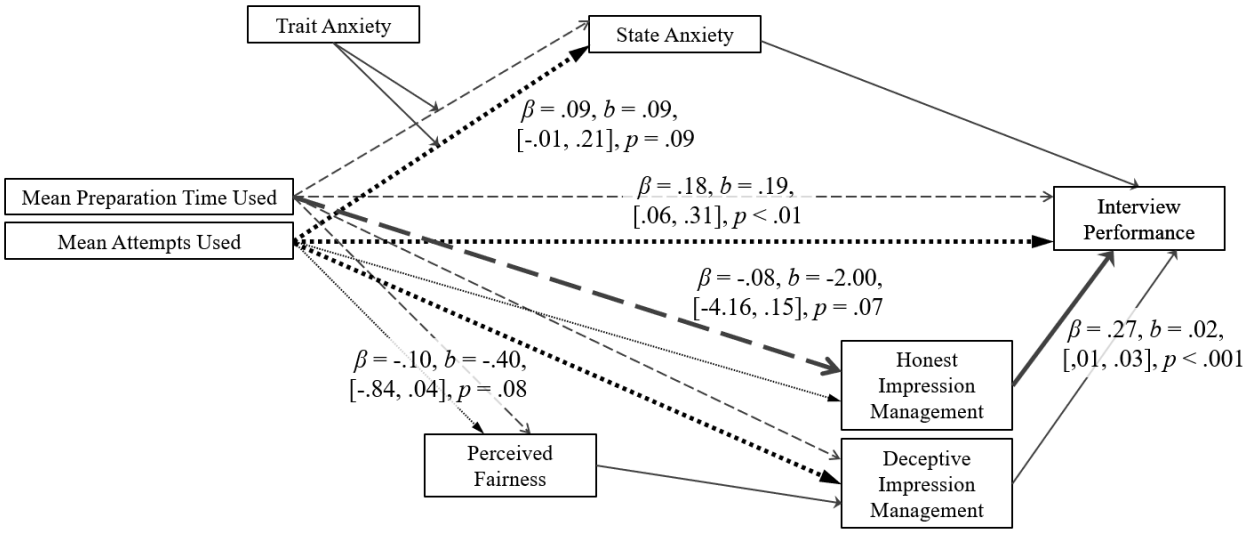
Outcome Variable	Predictor Variable	*b*	*β*	*SE*	*p*	95% BCa CI
Interview Performance						
	Average Minutes	.08	.05	.09	.38	[-.09, .24]
	Average Attempts	**.19**	**.18**	**.06**	**< .01**	**[.06, .31]**
	State Anxiety	-.10	-.10	.07	.16	[-.23, .04]
	Honest IM	**.02**	**.27**	**.00**	**< .001**	**[.01, .03]**
	Deceptive IM	.01	.04	.02	.49	[-.02, .04]
Honest IM						
	Average Minutes	***-2.00***	***-.08***	***1.10***	***.07***	***[-4.16, .15]***
	Average Attempts	-1.35	-.08	1.01	.18	[-3.28, .62]
Deceptive IM						
	Average Minutes	.41	.07	.37	.27	[-.32, 1.13]
	Average Attempts	***-.40***	***-.10***	***.23***	***.08***	***[-.84, .04]***
	Perceived Fairness	-.21	-.05	.24	.38	[-.68, .26]
Perceived Fairness						
	Average Minutes	-.06	-.04	.14	.69	[-.33, .21]
	Average Attempts	-.04	-.04	.07	.62	[-.18, .11]
State Anxiety						
	Average Minutes	.01	.01	.08	.87	[-.14, .17]
	Average Attempts	***.10***	***.09***	***.06***	***.09***	***[-.01, .21]***
	Avg. Min. × Trait Anxiety Interaction	-.03	-.02	.08	.70	[-.19, .13]
	Avg. Att. × Trait Anxiety Interaction	-.03	-.04	.05	.53	[-.12, .06]
	Trait Anxiety	**.75**	**.67**	**.05**	**< .001**	**[.65, .85]**

Note. WLSMV was used as the estimator. Model fit indices: RMSEA = .07; SRMR = .06; CFI = .87; TLI = .75; $\chi^2(18, 223) = 34.91$, $p = .01$. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. *SE* = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. IM = impression management. Path estimates that are significant ($p < .05$) are bolded, while estimates that are approaching significance ($p \leqslant .10$) are bolded and italicized.

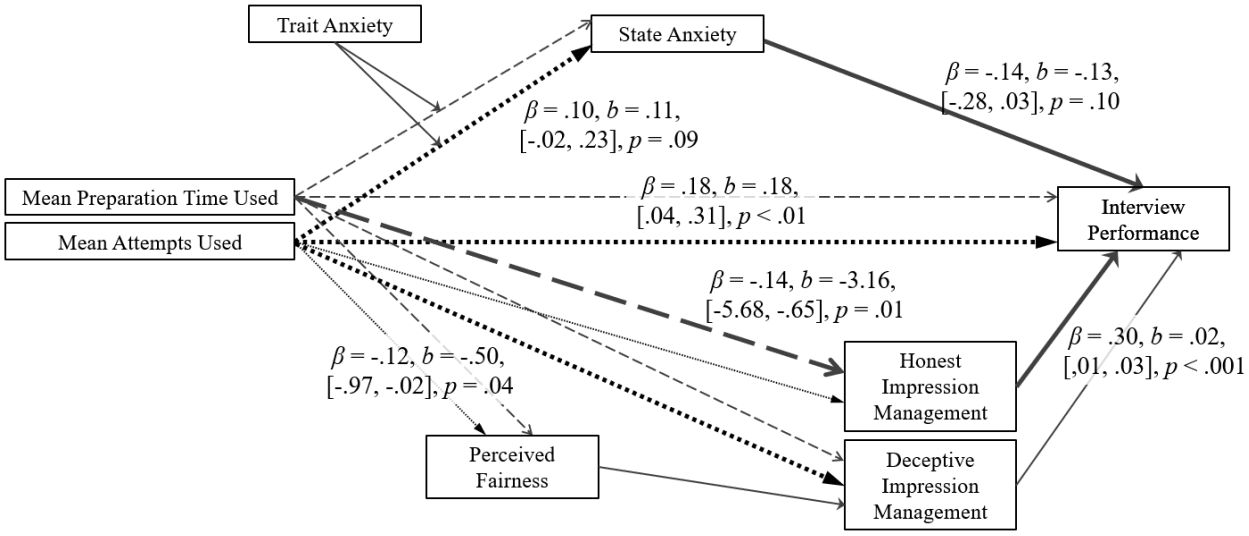
Appendix N

Diagrams of Alternative Path Models, With Path Estimate Results

N = 223



N = 172



Note. Differences in arrow styling were added to aid visual interpretation only. Path estimates were displayed only for estimates that were significant or approaching significance ($p \leq .10$), and are indicated by bolded arrows; this was done to ease interpretation of the figures, though estimates for all paths can be found in Table 3. 95% BCa confidence intervals are displayed in brackets. Please additionally note that in both models, state anxiety was also significantly predicted by trait anxiety (for $N = 223$, $\beta = .68$, $b = .75$, [.68, .85], $p < .001$; for $N = 172$, $\beta = .67$, $b = .75$, [.64, .86], $p < .001$).

Appendix O

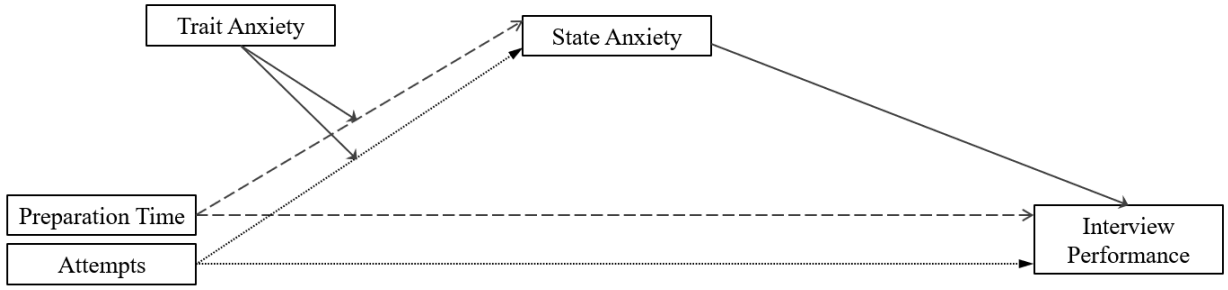
Estimates for Alternative Path Model, Actual Use as Predictors, MLR as Estimator

		N = 223					N = 172				
Outcome Variable	Predictor Variable	*b*	*β*	*SE*	*p*	95% BCa CI	*b*	*β*	*SE*	*p*	95% BCa CI
Interview Performance											
	Average Minutes	.04	.03	.08	.57	[-.10, .19]	.07	.05	.07	.35	[-.07, .21]
	Average Attempts	**.17**	**.17**	**.06**	**.01**	**[.05, .29]**	**.16**	**.16**	**.07**	**.02**	**[.03, .29]**
	State Anxiety	-.08	-.09	.06	.18	[-.20, .04]	-.11	-.12	.07	.12	[-.25, .03]
	Honest IM	**.02**	**.25**	**.00**	**< .001**	**[.01, .02]**	**.02**	**.27**	**.01**	**.001**	**[.01, .03]**
	Deceptive IM	.01	.03	.02	.67	[-.03, .04]	.02	.08	.02	.24	[-.02, .06]
Honest IM											
	Average Minutes	-.15	-.07	.99	.13	[-3.44, .45]	**-2.55**	**-.12**	**1.08**	**.02**	**[-4.67, -.42]**
	Average Attempts	-.81	-.05	1.04	.43	[-2.84, 1.22]	-.48	-.03	1.10	.66	[-2.63, 1.68]
Deceptive IM											
	Average Minutes	.34	.06	1.06	.29	[-.29, .96]	.24	.05	.33	.46	[-.40, .88]
	Average Attempts	***-.44***	***-.11***	***-1.97***	***.05***	***[-.87, .00]***	**-.53**	**-.13**	**.23**	**.02**	**[-1.00, -.07]**
	Perceived Fairness	-.20	-.05	-.82	.41	[-.66, .27]	-.25	-.06	.27	.36	[-.78, .28]
Perceived Fairness											
	Average Minutes	-.01	.00	.12	.96	[-.24, .23]	.01	.01	.13	.96	[-.24, .26]
	Average Attempts	.03	.03	.07	.70	[-.11, .17]	.02	.02	.07	.81	[-.13, .16]
State Anxiety											
	Average Minutes	.01	-.01	.07	.87	[-.15, .12]	-.03	-.02	.07	.72	[-.16, .11]
	Average Attempts	***.09***	***.09***	***.06***	***.09***	***[-.02, .20]***	***.10***	***.10***	***.06***	***.10***	***[-.02, .23]***
	Avg. Min. x Trait Anxiety Interaction	-.01	-.01	.08	.93	[-.11, .06]	.02	.01	.09	.85	[-.16, .20]
	Avg. Att. x Trait Anxiety Interaction	-.03	-.03	.04	.53	[-.11, .06]	-.04	-.05	.05	.45	[-.14, .06]
	Trait Anxiety	**.75**	**.68**	**.05**	**< .001**	**[.65, .85]**	**.75**	**.68**	**.06**	**< .001**	**[.64, .86]**

Note. MLR was used as the estimator. Model fit indices can be found in Table 5. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. SE = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. IM = impression management. In the *N* = 172 sample, participants who failed to correctly answer at least three out of four IM task comprehension items were removed, whereas these participants were retained in the *N* = 223 sample. Path estimates that are significant ($p < .05$) are bolded, while estimates that are approaching significance ($p \leqslant .10$) are bolded and italicized.

Appendix P

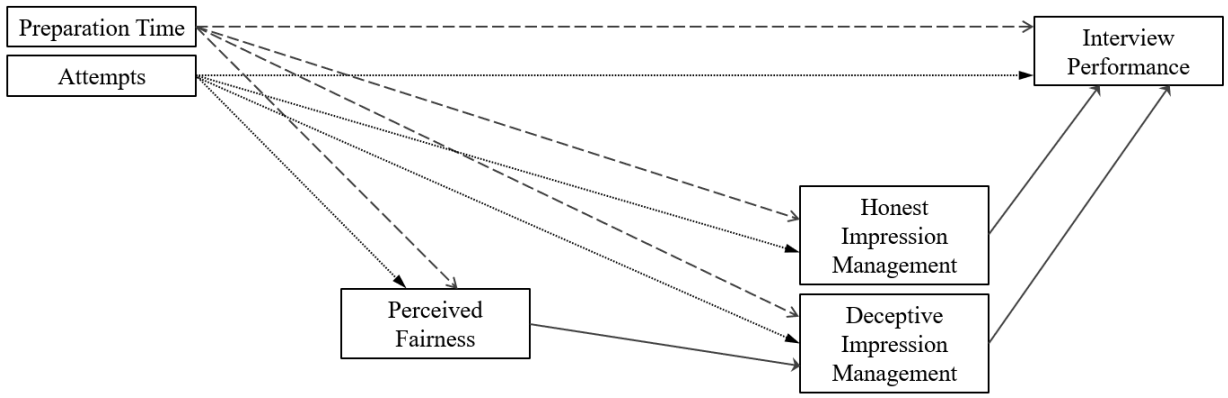
"Top Half" Model



Note. Differences in arrow styling were added to aid visual interpretation only.

Appendix Q

"Bottom Half" Model



Note. Differences in arrow styling were added to aid visual interpretation only.

Appendix R

Estimates for Main Path Model, Manipulation as Predictors, Impression Management Variables Log-Transformed

		N = 223					*N* = 172				
Outcome Variable	Predictor Variable	*b*	*β*	*SE*	*p*	95% BCa CI	*b*	*β*	*SE*	*p*	95% BCa CI
Interview Performance											
	Preparation Time Condition	.01	.01	.11	.90	[-.20, .23]	.03	.02	.13	.83	[-.22, .28]
	Attempts Condition	**.24**	**.15**	**.11**	**.03**	**[.03, .46]**	***.21***	***.12***	***.12***	***.09***	***[-.04, .45]***
	State Anxiety	-.08	-.08	.07	.27	[-.22, .06]	-.12	-.13	.08	.14	[-.27, .04]
	Log Honest IM	**.80**	**.33**	**.15**	**< .001**	**[.51, 1.08]**	**.92**	**.35**	**.19**	**< .001**	**[.54, 1.29]**
	Log Deceptive IM	.09	.04	.16	.57	[-.21, .40]	.30	.12	.18	.11	[-.06, .64]
Log Honest IM											
	Preparation Time Condition	-.01	-.01	.05	.85	[-.10, .08]	.01	.01	.05	.86	[-.09, .11]
	Attempts Condition	-.07	-.09	.05	.17	[-.16, .03]	-.02	-.03	.05	.69	[-.12, .08]
Log Deceptive IM											
	Preparation Time Condition	.06	.09	.05	.21	[-.04, .16]	.06	.08	.06	.32	[-.05, .17]
	Attempts Condition	-.05	-.07	.05	.29	[-.15, .04]	-.06	-.09	.06	.26	[-.17, .05]
	Perceived Fairness	-.01	-.03	.03	.67	[-.07, .04]	-.02	-.04	.03	.57	[-.08, .04]
Perceived Fairness											
	Preparation Time Condition	**-.23**	**-.14**	**.11**	**.04**	**[-.45, -.01]**	-.12	-.07	.12	.35	[-.36, .13]
	Attempts Condition	.09	.06	.11	.40	[-.12, .31]	.08	.05	.12	.49	[-.15, .32]
State Anxiety											
	Preparation Time Condition	.32	.18	.28	.24	[-.22, .86]	.06	.03	.32	.85	[-.56, .68]
	Attempts Condition	.13	.07	.33	.70	[-.52, .78]	.35	.19	.43	.41	[-.48, 1.18]
	PT × Trait Anxiety Interaction	-.11	-.18	.10	.28	[-.30, .09]	-.02	-.03	.11	.87	[-.23, .20]
	Att. × Trait Anxiety Interaction	-.04	-.07	.12	.73	[-.27, .19]	-.13	-.21	.15	.39	[-.42, .16]
	Trait Anxiety	**.82**	**.74**	**.10**	**< .001**	**[.63, 1.01]**	**.82**	**.73**	**.11**	**< .001**	**[.60, 1.03]**

Note. WLSMV was used as the estimator. Model fit indices can be found in Table 5. Impression management variables were transformed using a base-10 logarithm. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. SE = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. PT = Preparation Time. Att. = attempts. IM = impression management. In the *N* = 172 sample, participants who failed to correctly answer at least three out of four IM task comprehension items were removed, whereas these participants were retained in the *N* = 223 sample. Path estimates that are significant ($p < .05$) are bolded, while estimates that are approaching significance ($p \leqslant .10$) are bolded and italicized.

Appendix S

Estimates for Alternative Path Model, Actual Use as Predictors, Impression Management Variables Log-Transformed

		N = 223					*N* = 172				
Outcome Variable	Predictor Variable	*b*	*β*	*SE*	*p*	95% BCa CI	*b*	*β*	*SE*	*p*	95% BCa CI
Interview Performance											
	Average Minutes	.08	.05	.10	.40	[-.11, .27]	.13	.09	.09	.16	[-.05, .30]
	Average Attempts	**.20**	**.20**	**.06**	**.001**	**[.08, .32]**	**.19**	**.20**	**.07**	**< .01**	**[.06, .33]**
	State Anxiety	-.10	-.11	.07	.16	[-.23, .04]	-.13	-.14	.08	.11	[-.28, .03]
	Log Honest IM	**.80**	**.33**	**.15**	**< .001**	**[.53, 1.09]**	**.98**	**.37**	**.20**	**< .001**	**[.59, 1.36]**
	Log Deceptive IM	.11	.05	.16	.47	[-.20, .42]	***.32***	***.14***	***.18***	***.08***	***[-.04, .67]***
Log Honest IM											
	Average Minutes	-.04	-.07	.04	.25	[-.12, .03]	**-.08**	**-.15**	**.04**	**.04**	**[-.15, .00]**
	Average Attempts	-.04	-.10	.03	.11	[-.09, .01]	-.04	-.10	.03	.15	[-.09, .01]
Log Deceptive IM											
	Average Minutes	.08	.12	.05	.12	[-.02, .17]	.05	.09	.05	.25	[-.04, .14]
	Average Attempts	**-.06**	**-.13**	**.03**	**.02**	**[-.10, -.01]**	**-.07**	**-.16**	**.03**	**.01**	**[-.12, -.02]**
	Perceived Fairness	-.02	-.04	.03	.49	[-.07, .03]	-.02	-.05	.03	.46	[-.09, .04]
Perceived Fairness											
	Average Minutes	-.04	-.03	.15	.77	[-.34, .26]	-.04	-.03	.16	.81	[-.34, .27]
	Average Attempts	-.03	-.03	.07	.68	[-.17, .11]	-.03	-.03	.07	.71	[-.17, .12]
State Anxiety											
	Average Minutes	.02	.01	.09	.81	[-.15, .20]	.02	.01	.09	.83	[-.15, .19]
	Average Attempts	***.10***	***.09***	***.06***	***.08***	***[-.01, .22]***	***.12***	***.11***	***.07***	***.07***	***[-.01, .25]***
	Avg. Min. × Trait Anxiety Interaction	-.03	-.02	.08	.68	[-.19, .12]	-.04	-.02	.10	.71	[-.22, .15]
	Avg. Att. × Trait Anxiety Interaction	-.03	-.04	.05	.50	[-.13, .06]	-.04	-.05	.06	.47	[-.15, .07]
	Trait Anxiety	**.75**	**.67**	**.05**	**< .001**	**[.65, .85]**	**.75**	**.67**	**.06**	**< .001**	**[.64, .86]**

Note. WLSMV was used as the estimator. Model fit indices can be found in Table 5. Impression management variables were transformed using a base-10 logarithm. *b* = unstandardized coefficient estimates. *β* = standardized coefficient estimates. SE = standard error. BCa CI = bias-corrected confidence intervals for unstandardized coefficient estimates. IM = impression management. In the *N* = 172 sample, participants who failed to correctly answer at least three out of four IM task comprehension items were removed, whereas these participants were retained in the *N* = 223 sample. Path estimates that are significant ($p < .05$) are bolded, while estimates that are approaching significance ($p \leqslant .10$) are bolded and italicized.

Appendix T

Results of Main and Condition Interaction Effects from Univariate Factorial ANOVAs, N = 223

Outcome Variable	*F*	*df*	*p*
Interview Performance			
PT Condition	.00	1, 219	.99
Attempts Condition	2.53	1, 219	.11
PT × Attempts	2.57	1, 219	.11
State Anxiety			
PT Condition	.22	1, 219	.64
Attempts Condition	.33	1, 219	.57
PT × Attempts	.34	1, 219	.56
Perceived Fairness			
PT Condition	2.35	1, 219	.13
Attempts Condition	1.23	1, 219	.27
PT × Attempts	.10	1, 219	.76
Honest IM			
PT Condition	.76	1, 219	.38
Attempts Condition	.40	1, 219	.53
PT × Attempts	1.42	1, 219	.23
Deceptive IM			
PT Condition	.46	1, 219	.50
Attempts Condition	.71	1, 219	.40
PT × Attempts	.02	1, 219	.89
Log Honest IM			
PT Condition	.07	1, 219	.79
Attempts Condition	1.13	1, 219	.28
PT × Attempts	1.94	1, 219	.16
Log Deceptive IM			
PT Condition	.71	1, 219	.40
Attempts Condition	1.87	1, 219	.17
PT × Attempts	.01	1, 219	.91

Note. PT = preparation time. IM = impression management. Log-transformed variables were transformed using a base-10 logarithm.