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**Citation:** Zibarras, L. D., Castano, G. & Cuppello, S. (2025). Applicant Perceptions of Selection Methods: Replicating and Extending Previous Research. *International Journal of Selection and Assessment*, 33(2), e70007. doi: 10.1111/ijsa.70007

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## RESEARCH ARTICLE OPEN ACCESS

# Applicant Perceptions of Selection Methods: Replicating and Extending Previous Research

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**Received:** 14 March 2024 | **Revised:** 25 February 2025 | **Accepted:** 28 February 2025

**Funding:** This work was partially supported by Grant PRX22/00723 from Ministerio de Universidades (Spain). Senior Research Fellow at City, University of London.

## ABSTRACT

This paper presents research that both replicates and extends previous findings relating to applicant fairness perceptions of various selection methods. Using a working population ( $N = 281$ ), applicant perceptions of nine ‘traditional’ selection methods were explored, alongside eight ‘newer’ selection methods, including game-based assessment, online interviews, and situational judgement tests. Findings showed that work sample tests, knowledge tests and interviews in person were rated most positively, whilst asynchronous video interviews, personal contacts and professional social media were rated least positively. Some differences were found based on whether participants had previous experience completing the selection method, the mode of delivery for the selection method, and the country in which the participant worked. In line with previous research, selection methods appeared more acceptable and fairer to applicants when they are job-related, offer candidates the opportunity to demonstrate their skills and abilities and are based on sound scientific research. The results are discussed in terms of theoretical and practical implications and future research.

## 1 | Introduction

In the last three decades, research has increasingly focused on understanding applicants' attitudes, affect and cognitions towards selection methods and processes (Folger et al. 2021; Gilliland 1993, 1994; Hülshager and Anderson 2009). The fundamental premise underlying this research is that applicants' perceptions of selection methods and processes impact personal and organisational outcomes including applicant decision-making, organisation attractiveness, employer branding, intention to recommend the organisation to others and potential litigation (Bauer et al. 2020; Gilliland 1993; McCarthy et al. 2017).

A vast literature has examined applicant perceptions of various selection methods, much of which has focused on 10 common

selection methods (interviews, CVs, work samples, biodata, ability tests, references, personality questionnaires, honesty tests, personal contacts and graphology; e.g. Anderson and Witvliet 2008; Marcus 2003; Moscoso and Salgado 2004; Nikolaou and Judge 2007). Whilst this research provides valuable insights, our study extends this work by examining not only these traditional methods explored in previous research (Steiner and Gilliland 1996), but also newer selection methods such as game-based assessment (e.g. Ellison et al. 2020), online interviews (Proost et al. 2021), situational judgement tests (e.g. Zibarras and Patterson 2015) and the use of social networking sites (SNW) (e.g. Kluemper et al. 2016). Most studies to date have not yet incorporated ‘newer’ selection methods although there are some notable exceptions (e.g. Balcerak and Woźniak 2021).

This research was approved by the Ethics Committee of the City University of London under number ETH2223-1970.

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## Summary

- What is currently known about the topic of study.
- There is extensive literature examining applicant perceptions of 10 common selection methods.
- Increasingly research is exploring applicant perceptions of 'newer' selection methods, however more research is needed.
- What the paper adds to this.
- We replicate and expand the previous research to explore reactions to 17 selection methods.
- We include methods such as SJTs and games-based assessment to better reflect modern trends in selection.
- The implications of study findings for practitioners.
- Choose selection methods that candidates perceive as logical to use, job-related, with opportunity to perform.
- Delivery mode of interviews impacts favourability, with self-recorded interviews poorly received.
- 'Newer' methods received worse ratings than the 'traditional' methods so should be used with caution.
- To mitigate negative perceptions, information should be given to candidates about why certain methods are being used.

Furthermore, whilst a significant proportion of the existing literature focuses on university students who may not have experienced any selection process (Hausknecht et al. 2004), the present study uses a working population sample who have recently completed a selection process. Given the growing use of selection methods such as SJTs (Patterson et al. 2016), game-based assessments (Georgiou and Nikolaou 2020), SNW such as LinkedIn (Andrés et al. 2023) and asynchronous video interviews (Zibarras et al. 2018), more applicant reaction research is needed to better represent today's recruitment and selection landscape. Therefore, this study aims to fill this gap by examining a broad range of selection methods, including both traditional and newer approaches, and assesses whether prior experience with a method impacts perceptions. Using Gilliland (1993) organisational justice theory framework, we also explore which aspects of procedural justice make a method appear more favourable to candidates.

## 1.1 | Literature Review

Exploring applicant perceptions of selection methods is considered important for economic, business reputation, legal and ethical reasons (Hülsheger and Anderson 2009; Liu et al. 2016). From an economic perspective, if good applicants feel unfairly treated they may withdraw from the selection process (Patterson and Zibarras 2011) negatively impacting its utility (Murphy 1986). Or worse, since intentions to litigate are stronger for applicants with a high degree of negative reactions (Geenen et al. 2012), they may legally challenge the process, which is costly (Schmitt and Chan 1999). In addition, negative reactions can impact candidate performance once hired, which

has a knock-on effect on the organisation's productivity (McCarthy et al. 2013). From a business reputation perspective, a well-designed and fair selection process is good for a company's corporate image (Lemmink et al. 2003), however, if disgruntled, applicants may actively dissuade other applicants, or spread negative opinions about the organisation to their professional and social networks (McCarthy et al. 2009; Patterson et al. 2011). Negative comments can even impact a company's customers, with financial consequences for the company, as in the case of Virgin Media (Adams 2017). Ethically, treating people with respect and warmth is a professional responsibility (Lindsay et al. 2008) and since perceptions of unfair selection methods may negatively impact candidates' well-being (Ford et al. 2009), applicant perceptions must be considered. Finally, there are legal reasons to ensure candidates are fairly treated during a selection process relating to equal opportunities, discrimination and confidentiality (Liu et al. 2016).

### 1.1.1 | Organisational Justice Theory and Applicant Perceptions

The dominant model for research on applicant perceptions is presented by Gilliland (1993) who proposes organisational justice theory (Greenberg 1987, 1990) as a framework to consider applicant perceptions of selection processes. As with organisational justice theory, Gilliland makes a distinction between *procedural* and *distributive justice*. In a selection context, procedural justice refers to the fairness of the selection process itself, whilst distributive justice refers to the fairness of the selection outcome. Gilliland's model proposes that the extent to which applicants believe that selection processes satisfy or violate certain procedural and distributive justice rules leads to overall fairness perceptions. This, in turn, leads to individual and organisational outcomes (Gilliland 1993, 1994; Lavanchy et al. 2023; Truxillo et al. 2001). The 'selection fairness' model put forward by Gilliland (1993) has been the most widely cited framework in applicant perceptions research and has influenced much of the current debate on this topic (Truxillo et al. 2004).

The plethora of studies exploring applicant perceptions of 10 common selection methods has found variability in the perceived fairness of different methods (Anderson 2003; Anderson and Witvliet 2008; Bertolino and Steiner 2007; Elkins and Phillips 2000; Hoang et al. 2012; Ispas et al. 2010; Lievens et al. 2003; Liu et al. 2016; Marcus 2003; Moscoso and Salgado 2004; Nikolaou and Judge 2007; Phillips and Gully 2002; Steiner and Gilliland 1996; Truxillo et al. 2001; Van Vianen et al. 2004). Since these studies share a common methodological approach, several of them have compared process fairness perceptions between different countries (e.g. Anderson and Witvliet 2008; Marcus 2003; Moscoso and Salgado 2004; Nikolaou and Judge 2007; Phillips and Gully 2002; Steiner and Gilliland 1996). Findings indicate a relatively stable pattern of results with few cross-national differences. Generally, interviews, resumé/CVs and work samples are rated most favourably, whilst personal contacts, graphology and honesty tests are rated least favourably. Indeed, relatively consistent results have been found in Greece (Nikolaou and

Judge 2007), the Netherlands (Anderson and Witvliet 2008), Germany (Marcus 2003), Spain and Portugal (Moscato and Salgado 2004), Singapore and the US (Phillips and Gully 2002) and France and the US (Steiner and Gilliland 1996).

As a result, several authors (Anderson and Witvliet 2008; Hülshager and Anderson 2009) have concluded that similarities in applicant perceptions are more prevalent than differences, suggesting that findings may be generalisable internationally. Indeed, a meta-analysis (Anderson et al. 2010) supports the notion of 'reaction generalisability' due to the similarity in applicant perceptions across countries. That having been said, many of these studies were published in Western or developed nations where the legal environment and cultural conditions are similar. Later research explored applicant perceptions in Asian countries like China (Liu et al. 2016), Vietnam (Hoang et al. 2012) and Pakistan (Hassan et al. 2020). In Pakistan, findings were similar to Western countries; however, differences were found in personality and resumé/CVs in China and cognitive ability, personality and honesty tests in Vietnam. Nevertheless, there were still broadly similar findings in applicant perceptions for most of the 10 selection methods.

### 1.1.2 | Current Gaps in the Literature

Taken together, although this body of work provides a compelling case supporting the extent to which various selection methods are perceived as fair, two potential criticisms can be aimed at this research as a whole. The first is that many of the research studies have been based on student samples (Bauer et al. 2004; Elkins and Phillips 2000; Gilliland 1994; Hoang et al. 2012; Moscoso and Salgado 2004; Rynes and Connerley 1993; Schmitt et al. 2004) with relatively fewer that are field-based or studies using working population samples (Chan et al. 1998; McCarthy et al. 2009; Patterson et al. 2012; Truxillo et al. 2001; Zibarras and Patterson 2015) and so the generalisability of the findings from research on students to applicants may be questionable. Indeed, caution should be exercised when extending relationships found using student samples to nonstudent, adult and working populations. This is important because undergraduate students may not be familiar with the selection methods they are rating (Carless 2003; Hausknecht et al. 2004; Marcus 2003) and reactions may differ with real employment consequences (Truxillo et al. 2002). Additionally, an applicant's experience with specific selection methods can influence their perceptions of fairness. For example, Folger et al. (2021) found that inexperienced candidates perceived digital selection methods as less fair than candidates who had previous experience with these types of methods. In further research (Gkorezis et al. 2021), prior video gaming experience impacted organisational attractiveness and recommendation intentions. As such, some authors (Van Vianen et al. 2004) suggest replicating research based on student samples with nonstudent samples before attempting to generalise. There is a clear case for examining applicant perceptions of selection methods within nonstudent samples. Thus in the present study, we not only use a working population who have recently been through a selection process, we also examine whether prior experience of a selection method impacts perceptions of fairness.

The second critique that may be aimed at the body of research is that these methods do not necessarily reflect the selection assessment landscape in today's workplace (Bauer et al. 2020; Woods et al. 2020). Since the turn of the 21st century there have been significant changes in organisations, with the increasing globalisation of business, the Internet revolution and the proliferation of Artificial Intelligence (Zibarras 2023), there is no doubt that organisations—and their selection process—have changed since the advent of the applicant reaction literature (Nikolaou et al. 2015). Situational judgement tests have been used in finance (Wuttke et al. 2020), recruitment consultants (Wyatt et al. 2010) and the police force (de Meijer et al. 2010) and are widely used in the medical context (Patterson et al. 2009, 2015; Webster et al. 2020). The use of games-based assessments is becoming more mainstream (Georgiou et al. 2019; Woods et al. 2020) and organisations are now using different types of interviews—not just traditional in-person and face-to-face, but increasingly online synchronous methods such as Zoom (Samuk Carignani and Burchi 2022) or asynchronous video interviewing (Zibarras et al. 2018).

The research examining applicant perceptions of 'newer' and internet-based selection methods is growing. For example, Balcerak and Woźniak (2021) explored four traditional selection methods versus their Internet-based counterparts and found that fairness perceptions for the newer selection methods were lower than the Internet-based versions. Hassan et al. (2020) extended the 10 common selection methods to include job knowledge tests and situational judgement tests when they explored applicant perceptions of selection methods in Pakistan. Reactions to both of these 'newer' methods were favourable highlighting the importance of extending this list. Researchers (Hiemstra et al. 2019) found that applicants rate asynchronous video interviews lower on fairness and procedural justice dimensions, and generally negative reactions are found in other research (Basch et al. 2020; Langer et al. 2021). Despite this, there has not yet been (to the best of the authors' knowledge) a study replicating applicant reaction research, which includes both traditional and 'newer' selection methods.

There has also been a rise in the use of SNW during recruitment and selection (Andrés et al. 2023; Woods et al. 2020). From a business perspective, online sites such as Glassdoor—where you can find company reviews, approval ratings and even interview questions—have shown just how powerful word of mouth can be on an organisation's attractiveness (Van Hove et al. 2016). Applicants may share negative experiences during recruitment and selection which then harms the corporate image, can put off other applicants from applying, and even impact the bottom line (Nikolaou et al. 2015). So, despite the increasing use of SNW in recruitment and selection, there have been only a handful of studies exploring applicant perceptions of SNW. Yet the research that has been done (Balcerak et al. 2023; Stoughton et al. 2015) shows that SNW screening does indeed influence procedural justice, attractiveness and litigation intentions. Indeed, as far back as 2015, researchers such as Nikolaou et al. (2015) were calling for more research in this area and others (McCarthy et al. 2017) were discussing the lack of research on fairness perceptions for Internet-based or digital selection methods.

### 1.1.3 | The Present Study

Therefore, we believe that the present study is a timely update to this body of research. As such, the current research aims to both replicate and extend the previous research using the methodology by Steiner and Gilliland (1996). The present study includes nine of the 10 common selection methods used in previous research (interviews, CVs, work samples, biodata, ability tests, references, personality questionnaires, honesty tests, and personal contacts); however, we decided to remove graphology for several reasons. The first reason was practical. Since we were adding eight other selection methods, the time to complete the questionnaire would be over half an hour, which seemed unfeasible for a working (time-poor) population. The second reason was evidence-based. Bangerter et al. (2009) argue that the alleged use of graphology is a myth particularly because most selection processes rarely require handwritten applications or even handwriting during the selection methods. The authors also show that in cases where there are handwritten letters, these are rarely submitted for graphological analysis. Additionally, graphology has also been widely discredited as a selection method (Neter and Ben-Shakhar 1989); it is rarely used in the UK where this study takes place (Furnham 2017), and in Europe applicants rarely encounter graphology in selection (Anderson and Witvliet 2008; Bertolino and Steiner 2007; Nikolaou and Judge 2007). As such graphology was removed from the study.

In addition to the previously explored nine selection methods, we also include a further eight selection methods—online face-to-face interview (synchronous); online video interviews (asynchronous); telephone interview; professional social media profile (e.g. LinkedIn); assessment centres; SJTs; games-based assessments and job knowledge tests. All are considered to be widely used in selection processes (Nikolaou 2021).

The following research questions were posed that formed the basis of the analyses:

1. What are applicants' favourability reactions to personnel selection methods, including the eight new selection methods?
  2. Are there differences in applicant perceptions based on whether candidates have had experience with a specific selection method?
  3. Which procedural justice dimensions are most related to overall favourability perceptions of selection methods?
- Finally, since we were able to collect data from several English-speaking countries, our final research question was:
4. Are there differences in applicant perceptions based on country?

## 2 | Method

### 2.1 | Sample and Procedure

A total of 398 participants started the survey, however only 281 participants completed it, yielding a response rate of 71%. Of the 281 participants, 45.5% identified as female, 53.3% identified as

male and 1.1% identified as nonbinary/third gender. The average age was 47.19 years ( $SD = 11.52$  years). In terms of ethnicity, 84.5% were White, 6.9% Black/African/Caribbean, 4.3% Asian (Indian, Pakistani, Bangladeshi, Chinese, any other Asian background), 1.4% Mixed (two or more ethnic groups) and 1.8% Arab or Other. Participants worked in the following sectors: 10.5% in Business Services (including banking or financial services); 23.8% in Public or Voluntary; 23.5% in Manufacturing (including construction); and 42.2% in Other Services (including wholesale, retail, transport and utilities). Finally, 62.8% worked in the UK; 15.6% in South Africa, 9.2% in the USA, 6.9% in Canada and 5% 'Other'.

All the participants had taken part in a selection process within the last 2 years through a well-regarded global psychometric testing company headquartered in the UK. All had previously volunteered to be involved in further research via the psychometric test company. As such, no further information is known about the specific selection process in which the psychometric test was completed. The time between completing the psychometric test and participating in the current study was a median of 94.3 days, with a mean of 173.2 days ( $SD = 197.9$  days).

As such, this panel of potential participants was contacted via email and asked to take part in the present study. They were informed of the research, the estimated time to complete the questionnaire, that the research would be confidential and anonymous and that they could withdraw from the study at any time before they pressed the 'submit' button. Data were collected via an online questionnaire using Qualtrics software. Since previous experience is likely to influence candidates' reactions and perceptions of fairness (Bell et al. 2004), participants were asked whether or not they had previous experience with each assessment method. In our sample, participants had experienced an average of 9.62 (mode = 10) of the 17 selection methods evaluated.

### 2.2 | Measures

We followed the methodology as outlined by Steiner and Gilliland (1996) using the same questionnaire as many previous studies (Anderson and Witvliet 2008; Ispas et al. 2010; Nikolaou and Judge 2007) with some minor modifications. We included nine of the 10 commonly used selection methods (without graphology) and added eight new selection methods. This resulted in a total of 17 selection methods: 1. In-person interview; 2. [Synchronous] Online interview; 3. [Asynchronous] Self-recorded interview; 4. Telephone interview; 5. Professional social media profile (e.g. LinkedIn); 6. Résumé/CV; 7. Biographical information; 8. Reference; 9. Cognitive ability test; 10. Personality questionnaire; 11. Honesty/integrity test; 12. Personal contacts; 13. Assessment centre; 14. Situational judgement test (SJT); 15. Games-based assessment; 16. Work sample test; and 17. Job knowledge test.

In the questionnaire, each selection method was presented along with a brief description of the method (see Table 1 for a description of all the methods used in this study). For the selection methods that originated from previous research, the descriptions were the same, or very close, to those offered by



**TABLE 1** | Description of all 17 selection methods used in this study.

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<b>In person (face to face) interview:</b> Face to face interactions in which the employer asks you a variety of questions about your background, qualifications, skills and competencies related to the job role.
<b>Online (face to face) interview:</b> A virtual interaction in which the interviewer asks you a variety of questions about your background, qualification, skills and competencies related to the job role.
<b>Self-recorded video interview:</b> This is a self-recorded interview where you are asked a series of questions (relating to your background, qualification, skills and competencies related to the role) and you must record your answers in front of a phone or computer camera.
<b>Telephone interview:</b> Interaction via a telephone, in which the interviewer asks you a variety of questions about your background, qualification, skills and competencies related to the job role.
<b>Professional social media profile (e.g. LinkedIn):</b> Information is gathered from your social media profile, including your professional experience and achievements; education (degrees, courses & certifications); volunteer experience; skills; recommendations given and received; languages; awards and interests.
<b>Resumé/CV:</b> A written description of information on all your professional experiences, education, etc.
<b>Biographical information:</b> Form requesting very specific information about your work experience, education, skills. Often includes questions about your hobbies, interests and past accomplishments. The questions are frequently in multiple-choice format where you check the appropriate answer.
<b>Personal references:</b> Where you request a reference letter or provide the names of your prior employers so that the (new) employer can obtain a reference from them.
<b>Cognitive ability test:</b> Paper and pencil or computer-based test that evaluates a variety of mental abilities, such as verbal or nonverbal, numerical reasoning and reading comprehension.
<b>Personality questionnaires:</b> Paper and pencil or computer-based tests that ask you questions about your opinions and past experiences to assess your personality trait.
<b>Honesty/integrity tests:</b> Tests that ask you about your thoughts on theft and experiences related to your personal honesty, trustworthiness and dependability.
<b>Personal contacts:</b> Knowing someone influential in the company whose connections can help you get the job.
<b>Assessment centre:</b> A process where you complete several different selection methods and you are observed by a team of trained evaluators. The activities may include different job-related simulations, role-play exercises, group exercises and written exercises.
<b>Situational judgement tests:</b> Computer-based tests that present situations you might encounter on the job, followed by several different options for how you might handle the presented situations. You then select the most effective, or most and least effective ways of handling the situation from the response options provided.
<b>Games based assessments:</b> Use of games for evaluating your abilities, soft skills or competencies.
<b>Work sample test:</b> Tests in which you actually perform a part of the job, so that your success in doing that part of the job can be determined (e.g. in-tray exercise, presentation or typing test).
<b>Job Knowledge Tests:</b> Tests that ask you about critical knowledge areas that you need to know to perform a job effectively. The questions are often multiple-choice items and administered online.

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Steiner and Gilliland (1996). As an illustration, previous research explored applicant perceptions of ‘interviews’, yet in our research, we wanted to explore different types of interviews (in-person; online; asynchronous and telephone). As such description for an in-person (face-to-face) interview was: *In person (face to face) interview: face to face interactions in which the employer asks you a variety of questions about your background, qualifications, skills and competencies related to the job role.* The description for the asynchronous interview was: *Self-recorded video interview: this is a self-recorded interview where you are asked a series of questions (relating to your background, qualification, skills and competencies related to the role) and you must record your answers in front of a phone or computer camera.* Please note that we refer to the self-recorded interview as an asynchronous video interview, or AVI for the rest of the paper.

### 2.2.1 | Process Favourability

As per Steiner and Gilliland (1996), after each selection method was described, participants were first asked whether they had been evaluated by that selection method (*yes* or *no*). Then, they were asked the following two questions: ‘*Thinking about the most recent job to which you applied, how would you rate the effectiveness of this selection method for identifying qualified people for the job?*’ and ‘*If you did not get the job based on this selection method, what would you think about its fairness?*’ Both questions were rated on a 7-point Likert scale where one indicated least favourable and seven indicated most favourable. To calculate the process favourability index, we followed the methodology provided by Steiner and Gilliland (1996), where the mean of these two questions was calculated for the selection methods. Steiner and Gilliland report the coefficient  $\alpha$  for all

selection methods, and we replicate this approach, with the coefficient  $\alpha$  for the two-item process favourability measure across the 17 selection methods being 0.89. Given that we had introduced eight 'new' methods, we also calculated the  $\alpha$  coefficient for these new methods separately from the nine traditional methods present in other studies. The  $\alpha$  coefficient for the eight 'new' methods was 0.81, and for the nine methods evaluated in previous studies was 0.83. The  $\alpha$  coefficient for each selection method is reported in Table 3.

### 2.2.2 | Procedural Justice Dimensions

Next, participants were asked to rate the procedural justice dimensions of the method. They were told *Thinking about the method outlined above, please indicate your level of agreement with the following questions*, and then they were presented with seven questions rated on a 7-point Likert scale where 1 = extremely disagree and 7 = extremely agree. The questions were as follows (note that the words in square parentheses indicate which procedural justice dimension each question relates to): (a) *the method is based on solid scientific research* [scientific evidence]; (b) *the approach is logical for identifying qualified candidates for the job in question* [face validity]; (c) *the method will detect the individuals' important qualities differentiating them from others* [opportunity to perform]; (d) *the selection instrument is impersonal and cold* [reverse scored: interpersonal warmth]; (e) *employers have the right to obtain information from applicants by using the method* [employer's rights]; (f) *the method invades personal privacy* [reverse scored: respectful of

privacy], and (g) *the method is appropriate because it is widely used* [widely used].

## 3 | Results

The participants' experience of each selection method was analysed (see Table 2), and the mean number of selection methods that participants had experienced was 9.62 (SD = 3.37; mode = 10). Findings showed that resumé/CV (95.7%); in-person interview (89.4%) and references (88.3%) were the most frequently experienced selection methods whilst honesty test (27%), self-recorded (i.e. asynchronous video) interview (21.3%) and games-based assessment (14.5%) were least frequently experienced.

To answer the first two research questions, the favourability index of each method was calculated using the mean of effectiveness and perceived fairness (Steiner and Gilliland 1996). The favourability perceptions for all 17 methods are displayed in Table 3 which shows that the selection method rated as most favourable was work sample followed by knowledge test and interview-in-person. The least favourable method was an asynchronous video interview (AVI) followed by personal contacts and professional social media (such as LinkedIn). The methods rated as most favourable were the same regardless of participants' previous experience with that method. However, the favourability of all methods was lower for candidates without previous experience. The differences were statistically significant for most of the methods, except for interview-in-

**TABLE 2** | Frequency and percentage of participant's experience with each selection method (total N and N for each country).

Selection Method	Total (n = 281)		UK (n = 174)		South Africa (n = 44)		North America (n = 45)		$\chi^2$
	N	%	N	%	N	%	N	%	
Resumé/CV	270	95.7	167	96.0	42	95.5	44	97.8	0.40
Interview in person	252	89.4	156	89.7	37	84.1	44	97.8	4.80
Reference	249	88.3	15	90.8	35	79.5	40	88.9	4.41
Ability test	230	81.6	142	81.6	34	73.3	38	84.4	0.67
Online interview	219	77.7	136	78.2	32	72.7	35	77.8	0.60
Telephone interview	204	72.3	125	71.8	26	60.5	38	84.5	6.31*
Personality test	203	72.0	124	71.3	33	75.0	33	73.3	0.28
Work sample	166	58.9	101	58.4	23	56.8	33	73.3	4.44
Assessment centre	140	49.6	96	52.2	19	43.2	15	33.3	7.65*
Social media	134	47.5	72	41.4	24	54.4	27	60.0	6.26*
Knowledge test	128	45.4	67	38.5	23	59.1	27	60.0	10.52**
Biographical information	117	41.5	65	37.4	21	47.7	23	51.1	3.65
Personal contact	116	41.1	63	32.2	17	38.6	26	57.8	6.98*
SJT	110	39.0	59	33.9	20	45.5	22	48.9	0.45
Honesty test	76	27.0	31	17.8	21	47.7	18	40.0	21.06***
Self-recorded interview/AVI	60	21.3	31	17.8	12	27.3	12	26.7	2.99
Game-based assessment	41	14.5	23	13.2	11	25.0	3	6.7	6.49*

Note: North America (including participants from Canada and USA).

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .



**TABLE 3** | Descriptive statistics for selection method favourability and ANOVAs to compare previous experience versus no experience of the selection method.

Selection method	$\alpha$	Total		Previous experience		No experience		<i>F</i>	<i>Cohen's d</i>
		Mean	SD	Mean	SD	Mean	SD		
Work sample	0.76	5.04	1.20	5.26	1.20	4.72	1.13	13.82***	0.05
Job Knowledge test	0.74	4.94	1.20	5.32	1.23	4.62	1.08	25.39***	0.09
Interview in person	0.61	4.91	1.13	4.95	1.09	4.57	1.41	3.00	0.00
Assessment centre	0.83	4.70	1.46	4.94	1.39	4.46	1.48	7.77**	0.03
Situational judgement test	0.80	4.65	1.27	4.98	1.25	4.43	1.25	12.96***	0.05
Resume/CV	0.70	4.64	1.24	4.67	1.21	3.77	1.51	5.66*	0.02
Ability test	0.80	4.56	1.44	4.58	1.46	4.49	1.35	0.15	0.00
Online interview	0.73	4.39	1.32	4.50	1.38	3.99	1.01	7.23**	0.03
Personality test	0.80	4.34	1.42	4.48	1.48	3.99	1.19	6.84**	0.02
Reference	0.74	4.23	1.45	4.25	1.48	4.11	1.13	0.25	0.00
Telephone interview	0.80	4.01	1.39	4.13	1.46	3.65	1.11	6.74**	0.02
Honesty test	0.79	3.95	1.40	4.76	1.49	3.65	1.24	39.09***	0.14
Biographical information	0.89	3.95	1.38	4.22	1.46	3.76	1.29	7.87**	0.03
Game-based assessment	0.84	3.80	1.32	4.30	1.00	3.72	1.21	7.09**	0.03
Social media (LinkedIn)	0.82	3.62	1.46	4.07	1.42	3.21	1.38	26.26***	0.09
Personal contacts	0.69	3.59	1.66	4.53	1.45	2.92	1.47	82.81***	0.30
Self-recorded interview/AVI	0.79	3.36	1.33	3.44	1.73	3.34	1.20	0.29	0.00

Note: Total sample  $n = 281$ . The  $n$ -value for participants' previous experience with each method is displayed in Table 2.

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

person, ability test, reference and AVI. However, the effect size differences were small as indicated by *Cohen's d*. The highest effect size was for personal contacts  $d = 0.30$ , which is still classified as 'small' (Cohen 1988).

Two ANOVAs were conducted to test whether gender or ethnicity affected the favourability of the selection methods evaluated. We found no significant differences between genders or ethnic origin in candidates' perceptions of the 17 selection methods. These findings are similar to Ispas et al. (2010), who also found no significant gender differences for the methods evaluated, and Nikolaou and Judge (2007), who only found significant gender differences in method favourability for interview and ability testing in the employee sample and in interview and graphology in the student sample. In both studies, women perceived the method more positively than men. We also ran a correlation between age and favourability of the 17 methods, with few significant correlations found. There were two positive and significant correlations between age and resumé/CV ( $r = 0.14$ ,  $p = 0.02$ ), age and personal contacts ( $r = 0.20$ ,  $p = 0.001$ ) and one significant but negative correlation between age and games-based assessments ( $r = -0.12$ ,  $p = 0.04$ ). Although the effects of these are small (Cohen 1988).

To further explore the first two research questions, the procedural justice perceptions were also examined. Table 4 shows that the methods perceived to be most based on scientific evidence were psychometric tests (job knowledge test, cognitive ability test and personality test) followed by assessment centres.

Personal contact was perceived to be least based on scientific evidence followed by AVIs and social media. Work samples, knowledge tests and assessment centres were considered the methods with the highest face validity, whilst personal contacts, followed by the AVI and game-based assessments received the lowest ratings. In terms of opportunity to perform, work samples, assessment centres and knowledge tests had the highest ratings, whilst personal contacts followed by AVIs and social media received the lowest ratings. For interpersonal warmth, the methods with the highest ratings were interviews in person, personal contacts, and work samples; whereas AVIs, telephone interviews and professional social media received the lowest ratings. Regarding employer's right to obtain information, resumé/CV, interview in person and knowledge tests were rated most positively; whereas personal contact, social media and honesty tests were rated the lowest. For respecting personal privacy, the methods with the highest ratings were resumé/CV, work sample and interview in person, whilst honesty test, social media and biographical information had the lowest. Finally, the methods perceived to be most widely used were resumé/CV, followed by work sample and knowledge test and the least used was the AVI.

We also analysed whether there were differences in procedural justice dimensions based on previous experience with each method (see Table 4). Findings showed that applicants with previous experience differed in their perceptions for nine methods (AVI, biographical information, personality test, honesty test, social media, assessment centre, SJT, game-based

TABLE 4 | Means of procedural justice dimensions for each selection method and ANOVAs to compare previous experience vs no previous experience.

Selection method	<i>n</i>	Scientific evidence	Face validity	Opportunity to perform	Interpersonal warmth	Employer's right	Respectful of privacy	Widely used
Interview In person	281	3.70	5.04	4.73	4.89	5.51	5.43	4.46
Experience	252	3.65	5.04	4.76	4.90	5.57	5.53	4.45
No experience	29	4.03	5.07	4.53	4.75	5.00	4.55	4.57
<i>F</i>		1.53	0.016	0.92	0.23	6.37*	15.08**	0.12
<b>Work sample</b>								
Experience	281	4.61	5.42	5.24	4.81	5.28	5.50	4.69
No experience	166	4.72	5.63	5.51	5.05	5.54	5.71	4.89
<i>F</i>	111	4.44	5.10	4.83	4.48	4.89	5.18	4.38
		2.72	13.90***	18.92***	10.65**	16.80***	13.40***	8.45**
<b>Knowledge test</b>								
Experience	281	4.87	5.36	4.94	4.04	5.39	5.25	4.62
No experience	128	5.32	5.75	5.44	4.37	5.66	5.38	5.15
<i>F</i>	150	4.48	5.03	4.51	3.77	5.16	5.14	4.16
		28.56***	24.92***	27.00***	8.97**	12.21***	2.14	34.21***
<b>Resumé/CV</b>								
Experience	281	4.11	5.18	4.61	3.50	5.64	5.73	4.94
No experience	270	4.14	5.23	4.64	3.82	5.72	5.75	4.98
<i>F</i>	11	3.45	4.09	4.00	3.49	3.82	5.27	4.09
		2.01	8.05**	1.72	0.49	33.89***	1.67	3.49
<b>Assessment centre</b>								
Experience	281	4.73	5.18	5.19	4.56	5.13	5.18	4.44
No experience	140	4.94	5.50	5.46	4.74	5.37	5.28	4.68
<i>F</i>	141	4.51	4.86	4.93	4.38	4.89	5.12	4.20
		6.26*	16.08***	10.08**	3.50	8.11**	0.64	8.08**
<b>Ability test</b>								
Experience	281	4.99	4.90	4.67	3.25	5.18	5.18	4.45
No experience	230	5.07	4.98	4.73	4.78	5.25	2.71	4.48
<i>F</i>	51	4.63	4.55	4.37	4.61	4.84	2.73	4.29
		3.68	3.17	1.92	0.46	3.49	0.003	0.58
<b>SJT</b>								
Experience	281	4.72	5.01	4.89	3.90	5.12	5.14	4.38
No experience	110	5.03	5.32	5.13	3.89	5.29	5.24	4.63
<i>F</i>	171	4.51	4.81	4.74	3.91	5.02	5.09	4.22
		9.90**	9.58**	4.72*	0.01	2.96	0.77	5.53*
<b>Personality tests</b>								
	281	4.81	4.73	4.76	3.84	5.08	4.72	4.31

(Continues)

TABLE 4 | (Continued)

Selection method	<i>n</i>	Scientific evidence	Face validity	Opportunity to perform	Interpersonal warmth	Employer's right	Respectful of privacy	Widely used
Experience	203	5.03	4.91	4.88	3.76	5.22	4.78	4.45
No experience	78	4.24	4.27	4.46	4.03	4.72	4.54	3.94
<i>F</i>		16.80***	9.95**	4.14*	1.41	7.16**	1.43	6.21*
<b>Online interview</b>								
Experience	281	3.60	4.68	4.37	4.25	5.30	5.22	4.28
No experience	219	3.65	4.79	4.46	4.38	5.35	5.30	4.38
<i>F</i>	62	3.44	4.29	4.03	4.77	5.11	4.91	3.94
		0.94	5.23*	3.77	6.38*	1.79	3.76	4.02*
<b>Reference</b>								
Experience	281	3.55	4.30	4.01	4.40	5.14	4.95	4.37
No experience	249	3.57	4.32	3.99	4.38	5.18	4.96	4.38
<i>F</i>	32	3.34	4.16	4.19	4.55.	4.81	4.84	4.31
		0.57	0.26	0.32	0.16	2.16	0.17	0.05
<b>Phone interview</b>								
Experience	281	3.46	4.10	3.91	3.83	4.97	5.27	3.89
No experience	204	3.33	4.26	4.01	3.97	5.07	5.32	4.00
<i>F</i>	76	3.50	3.66	3.62	3.50	4.70	5.17	3.55
		0.75	7.95**	3.06	4.30*	3.84	0.78	4.32*
<b>Biodata</b>								
Experience	281	3.80	4.19	4.20	3.68	4.84	4.69	3.92
No experience	117	4.12	4.52	4.56	3.96	5.04	4.85	4.32
<i>F</i>	164	3.57	3.95	3.93	3.48	4.69	4.58	3.63
		9.29**	10.44**	11.38***	6.79*	4.37*	2.13	15.05***
<b>Honesty test</b>								
Experience	281	4.10	4.06	4.19	3.81	4.48	4.40	3.73
No experience	76	4.99	4.93	4.88	3.96	5.29	4.91	4.50
<i>F</i>	205	3.77	3.73	3.94	3.76	4.18	4.21	3.44
		40.77***	35.23***	21.38***	1.00	31.50***	10.55**	28.78***
<b>Games</b>								
Experience	281	4.01	3.97	4.15	4.17	4.59	4.95	3.80
No experience	41	4.73	4.83	4.88	4.39	5.20	4.90	4.37
<i>F</i>	240	3.88	3.83	4.03	4.13	4.48	4.95	3.70
		15.13***	19.30***	13.06***	1.05	9.48**	0.05	8.40**
<b>Personal contacts</b>								
Experience	281	2.44	3.18	2.98	4.89	4.00	4.85	3.14
	116	2.84	4.10	3.85	5.47	4.92	5.09	3.82

(Continues)

TABLE 4 | (Continued)

Selection method	<i>n</i>	Scientific evidence	Face validity	Opportunity to perform	Interpersonal warmth	Employer's right	Respectful of privacy	Widely used
No experience	165	2.16	2.53	2.36	4.48	3.35	4.68	2.67
<i>F</i>		12.65***	55.26***	54.63***	25.14***	56.78***	4.97*	33.83***
<b>Social media</b>								
Experience	281	3.15	4.02	3.54	3.05	4.55	4.62	3.74
No experience	147	3.43	4.56	3.88	2.99	5.21	4.30	4.18
<i>F</i>	134	2.89	3.52	3.22	3.11	3.95	4.96	3.34
<i>F</i>		8.68**	28.84***	10.27**	0.346	40.35***	9.94**	19.37***
<b>Self-recorded interview/AVI</b>								
Experience	281	3.10	3.53	3.50	2.98	4.58	4.93	3.27
No experience	60	3.40	3.87	3.65	3.02	4.87	4.83	3.47
<i>F</i>	221	3.02	3.43	3.46	2.97	4.50	4.96	3.21
<i>F</i>		3.57	3.63	0.63	0.03	3.08	0.041	1.53

\**p* > 0.05; \*\**p* > 0.01; \*\*\**p* > 0.001.

assessment and knowledge test) where higher ratings were found for those with previous experience. It seems that having performed the method means having more positive evaluations of the procedural dimensions of the method.

The third research question focused on which procedural fairness dimensions contribute the most to overall favourability perceptions. To address this question, we first calculated the bivariate correlations between process favourability and each of the procedural fairness dimensions for the 17 selection methods (see Table 5). The results showed significant correlations for all methods between the six dimensions (scientific evidence, face validity, opportunity to perform, interpersonal warmth, employer's right and widely used) and process favourability. The final row displays the average correlation of each procedural fairness dimension across all selection methods, whilst the last column shows the average correlation of all the procedural justice dimensions for each method. Results revealed that face validity ( $r = 0.67$ ) and opportunity to perform ( $r = 0.63$ ) were most highly related to process favourability, while respectful of privacy ( $r = 0.21$ ) and interpersonal warmth ( $r = 0.35$ ) were least related to process favourability.

Secondly, to determine the relative contribution of procedural justice dimensions, a multiple regression analysis was conducted where the dependent variable was process favourability and the independent variables were the seven procedural justice dimensions. Given that procedural justice dimensions are correlated, relative weights were calculated to estimate the relative importance of each procedural fairness dimension (Tonidandel et al. 2009). To calculate relative weight we applied the MIMR programme for SPSS (Lorenzo-Seva et al. 2010). Furthermore, to obtain a percentage of variance attributable to each predictor we calculated the average rescaled relative weight (RRW; computed by dividing each relative weight by  $R^2$ ). As shown in the last row of Table 5, we found that face validity (average RRW = 27.68), opportunity to perform (average RRW = 24.27) and scientific evidence (average RRW = 16.87) explained 78.82% of the overall favourability variability whilst respectful of privacy only explained 3.46%.

The final research question explored whether participants had similar selection method favourability perceptions based on the country in which they work (UK, South Africa, North America). It is acknowledged that the relative sizes of the groups are somewhat different, however pre-analysis checks noted no significant differences in demographics between the groups. A homogeneity test was also performed to analyse whether each method followed equivalent experience proportions across the sample countries (see Table 2). We found significant differences in telephone interviews, social media, assessment centres, honesty tests, knowledge tests and game-based assessments where telephone interviews, assessment centres, social media and personal contacts were more common in North America than in the UK or South Africa. AVIs and honesty tests were more frequently experienced in South Africa and North America than in the UK. Participants from North America had experienced games-based assessments less frequently than in South Africa or the UK. Despite these differences, the frequency ranking followed the same pattern across the sample countries. In addition, an ANOVA was carried out for the perceived

**TABLE 5** | Correlation and relative weights between process favourability and procedural justice dimensions for each method.

Selection method	Scientific evidence		Face validity		Opportunity to perform		Interpersonal warmth		Employer's right		Respectful of privacy		Widely used		Average <i>r</i>	Model <i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>
	<i>r</i>	( <i>w</i> )	<i>r</i>	( <i>w</i> )	<i>r</i>	( <i>w</i> )	<i>r</i>	( <i>w</i> )	<i>r</i>	( <i>w</i> )	<i>r</i>	( <i>w</i> )	<i>r</i>	( <i>w</i> )			
Interview in person	0.25***	(0.30)	0.44***	(0.02)	0.51***	(0.13)	0.35***	(0.05)	0.20***	(0.01)	0.12*	(0.01)	0.17**	(0.01)	0.29	0.30	0.29
Online interview	0.45***	(0.53)	0.66***	(0.05)	0.60***	(0.12)	0.51***	(0.10)	0.26***	(0.01)	0.18**	(0.01)	0.47***	(0.06)	0.45	0.53	.51
Self-recorded interview/AVI	0.54***	(0.59)	0.70***	(0.09)	0.65***	(0.14)	0.40***	(0.06)	0.24***	(0.01)	0.08	(0.00)	0.60***	(0.12)	0.46	0.59	0.58
Telephone interview	0.53***	(0.69)	0.74***	(0.10)	0.70***	(0.16)	0.51***	(0.10)	0.43***	(0.06)	0.11	(0.00)	0.60***	(0.10)	0.52	0.69	0.61
Social media	0.62***	(0.64)	0.72***	(0.11)	0.67***	(0.16)	0.27***	(0.02)	0.52***	(0.07)	0.25***	(0.01)	0.62***	(0.10)	0.52	0.64	0.63
Resumé/CV	0.53***	(0.53)	0.61***	(0.12)	0.55***	(0.11)	0.33***	(0.05)	0.32***	(0.03)	0.08	(0.00)	0.47***	(0.07)	0.41	0.53	0.51
Biodata	0.57***	(0.55)	0.68***	(0.09)	0.68***	(0.15)	0.33***	(0.03)	0.42***	(0.04)	0.33***	(0.02)	0.56***	(0.08)	0.51	0.55	0.54
Reference	0.57***	(0.60)	0.69***	(0.11)	0.70***	(0.18)	0.35***	(0.04)	0.30***	(0.02)	0.23***	(0.02)	0.50***	(0.06)	0.48	0.60	0.59
Ability test	0.60***	(0.59)	0.75***	(0.10)	0.64***	(0.12)	0.33***	(0.03)	0.50***	(0.06)	0.32***	(0.03)	0.54***	(0.08)	0.53	0.59	0.58
Personality test	0.62***	(0.59)	0.70***	(0.10)	0.65***	(0.14)	0.34***	(0.03)	0.44***	(0.04)	0.43***	(0.06)	0.49***	(0.06)	0.52	0.59	0.58
Honesty test	0.65***	(0.58)	0.71***	(0.12)	0.67***	(0.14)	0.31***	(0.02)	0.45***	(0.04)	0.25***	(0.01)	0.59***	(0.09)	0.52	0.58	0.57
Personal contact	0.50***	(0.54)	0.59***	(0.07)	0.66***	(0.14)	0.23***	(0.03)	0.58***	(0.10)	0.04	(0.00)	0.64***	(0.13)	0.46	0.54	0.53
Assessment centre	0.62***	(0.55)	0.71***	(0.11)	0.67***	(0.12)	0.43***	(0.05)	0.47***	(0.04)	0.38***	(0.03)	0.49***	(0.05)	0.54	0.55	0.54
SIT	0.63***	(0.55)	0.71***	(0.12)	0.61***	(0.10)	0.28***	(0.02)	0.42***	(0.04)	0.31***	(0.03)	0.51***	(0.07)	0.50	0.55	0.54
Games-based assessment	0.64***	(0.59)	0.71***	(0.14)	0.66***	(0.12)	0.44***	(0.07)	0.40***	(0.03)	0.26***	(0.02)	0.47***	(0.05)	0.51	0.59	0.58
Work sample	0.46***	(0.46)	0.65***	(0.07)	0.63***	(0.14)	0.35***	(0.03)	0.36***	(0.03)	0.34***	(0.03)	0.40***	(0.04)	0.45	0.49	0.47
Knowledge test	0.56***	(0.53)	0.70***	(0.10)	0.54***	(0.09)	0.22***	(0.01)	0.47***	(0.05)	0.28***	(0.04)	0.48***	(0.06)	0.46	0.53	0.51
Average <i>r</i>	0.55		0.67		0.63		0.35		0.40		0.21		0.51				
Average RRW%	16.87		27.68		24.27		7.90		6.86		3.46		12.96				

*Note:* *N* = 281. *Relative weights (w)* are reported in parentheses. *Average r* (average correlations between each procedural justice and favourability across all selection methods). *Average RRW%* (average rescaled relative weight, computed by dividing each relative weight by *R*<sup>2</sup> of the respective method).

\**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.



**TABLE 6** | Means, standard deviations and ANOVA for process favourability for each selection method and country.

Favourability method	UK ( <i>n</i> = 174)		South Africa ( <i>n</i> = 44)		North America ( <i>n</i> = 26)		<i>F</i>	<i>Cohen's d</i>	post hoc (Bonferroni)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Interview in person	4.86	1.13	4.94	1.21	4.98	1.07	0.22	0.00	
Online interview	4.21	1.31	4.99	1.11	4.38	1.31	6.43**	0.05	SA > UK***
Self-recorded interview/AVI	3.18	1.24	4.09	1.49	3.28	1.19	9.01***	0.07	SA > UK***
Telephone interview	3.91	1.37	4.02	1.44	4.24	1.39	1.10	0.01	
Social media	3.46	1.40	4.34	1.48	3.58	1.43	6.86***	0.05	SA > UK**; SA > NA*
Resumé/CV	4.55	1.25	4.82	1.33	4.63	1.21	0.84	0.01	
Biodata	3.86	1.32	4.44	1.42	3.67	1.38	4.27*	0.03	SA > UK*
Reference	3.95	1.42	5.03	1.15	4.40	1.44	11.27***	0.09	SA > UK***
Ability test	4.48	1.41	5.17	1.45	4.23	1.47	5.44**	0.05	SA > UK*
Personality test	4.38	1.39	4.72	1.59	3.83	1.31	4.22*	0.04	SA > NA**
Honesty test	3.79	1.35	4.76	1.41	3.73	1.28	9.73***	0.08	SA > UK***
Personal contact	3.31	1.63	4.13	1.84	3.78	1.38	5.07**	0.04	SA > UK**
Assessment Centre	4.69	1.48	5.07	1.45	4.41	1.36	2.31	0.02	
SJT	4.47	1.28	5.31	1.11	4.60	1.22	8.03***	0.06	SA > UK***
Games-based assessment	3.71	1.29	4.48	1.36	3.52	1.13	7.75***	0.06	SA > UK***; SA > NA***
Work sample	4.92	1.23	5.48	1.11	5.18	1.10	4.09*	0.03	SA > UK*
Knowledge test	4.80	1.18	5.44	1.33	4.96	1.09	5.06**	0.04	SA > UK**

\**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.

favourability of the selection method according to the country where participants work and this is displayed in Table 6. Significant differences were found for most of the methods except for interview in person, telephone interview, resumé/CV and assessment centre. The post hoc comparison using Bonferroni showed significant differences between South Africa and the UK for 13 of the 17 selection methods evaluated (online interview, AVI, professional social media profile, biodata, reference, ability test, personality test, honesty/integrity test, personal contacts, situational judgement test, games-based assessment, work sample test and knowledge test) and also between South Africa and North America, but only for social media and game-based assessment methods. Generally, South African participants tended to perceive methods more positively, however, it is important to note that since all effect sizes (Cohen's *d*) were less than 0.10 for all 17 methods evaluated, they are thought to be 'trivial' (Cohen 1988).

#### 4 | Discussion

The purpose of the present study was to provide a timely update to the growing applicant perceptions literature. To date, there has been a large body of research examining applicant perceptions of 10 common selection methods (Anderson et al. 2010; Anderson and Witvliet 2008). However, the methods examined

in this body of literature often do not include some of the selection methods currently being used in practice— such as situational judgement tests, synchronous or asynchronous video interviews and game-based assessments (Nikolaou 2021; Woods et al. 2020).

Our findings showed that resumé/CVs, in-person interviews and references were the most frequently experienced selection methods. This pattern of findings is fairly consistent across various survey studies exploring the prevalence of different selection methods (e.g. Zibarras and Woods 2010; Hodgkinson and Payne 1998). Our results are similar to previous studies carried out more than a decade ago, such as Nikolaou and Judge (2007), who found that the most commonly used methods in Greece were interviews (96%), followed by resumes (93%) and the least used were honesty tests (9.5%) and graphology (1%). However, Ispas et al. found that, in Romania, the most used method was work sample (60.8%) and the least used were again the honesty test (13.3%) and graphology (4.6%). On the other hand, honesty tests, self-recorded (i.e. asynchronous) interviews and games-based assessments appear to be the less common. This point is noteworthy because although the literature suggests that 'newer' selection methods are increasingly being used (Nikolaou 2021; Ryan and Derous 2019) they still lag behind what might be considered 'traditional' methods. That is, although methods such as online interviews and even social media are becoming more

common, other methods, such as gamification or AVIs, are relatively less common, at least in our sample

Our first two research questions explored applicant perceptions of selection methods, including eight new methods, and the extent to which findings were consistent based on whether applicants had prior experience with that selection method. Looking at favourability ratings, findings suggested that work sample tests, knowledge tests and interviews in person were considered most favourable whilst the least favourable methods were AVIs, personal contacts and professional social media (such as LinkedIn). Our findings appear to be fairly consistent with prior research (e.g. Anderson et al. 2010; Moscoso and Salgado 2004; Steiner and Gilliland 2001; Nikolaou and Judge 2007) who found that the most favourable methods were interview, resumé/CV and work sample and least favourable were graphology, personal contact and honesty test. That said, these studies focused only on the 'traditional' selection methods. When examining newer methods, our findings are also consistent with Balcerak and Woźniak (2021) who found that traditional selection methods were rated more favourably than those that were Internet-based. Indeed, many of the 'newer' selection methods examined in this study fell in the bottom section of the list including games-based assessments; social media, and AVI being 14th, 15th and 17th respectively. We also included a job knowledge test in our list of 17 methods which is not 'new' as such but had not been included in most previous research. Job knowledge tests were rated second in order of favourability which further highlights the importance of expanding the selection methods examined. This finding is consistent with Hassann et al. (2020) who found that interviews followed by knowledge tests were the most favourably perceived methods.

Also, the mode of delivery of interviews appears important. We explored favourability perceptions towards interviews that were either in person; online (but face to face); telephone or self-recorded (asynchronous) and they were rated 3rd, 8th, 11th and 17th respectively. The present study is in line with the growing research findings that asynchronous or online interviews are less liked than face-to-face interviews (Basch et al. 2020; Langer et al. 2021; Proost et al. 2021; Rizi and Roulin 2024). Taken together, our findings show how important it is to expand the list of selection methods to examine traditional and also newer (often online) methods. The difference in applicant perceptions of traditional (often face-to-face) and newer (often online) methods may directly or indirectly relate to the media richness theory (McCarthy et al. 2017; Rizi and Roulin 2024). Media richness theory suggests that the lower the richness of a selection method, the less accepted communication via it will be. This might be why there were lower favourability ratings for online, telephone and asynchronous interviews versus face-to-face. On the whole, it appears that candidates prefer traditional face-to-face methods.

When exploring the impact of prior experience, whilst the order of favourability was the same for candidates with and without prior experience of those methods, prior experience of a method meant that ratings were generally higher. Our study's findings are similar to Folger et al. (2021), who found that participants with no prior experience with a selection method are more

likely to rate them as less effective and less fair. One factor that may help us to explain the differences in ratings depending on previous experience is the concept of inferential leap. This was proposed by Lievens et al. (2004) to explain the differences between students versus subject matter experts (SME) as informants. Having previous experience in a selection method means that candidates need to make fewer inferences to assess the method because they have already experienced it. This may explain why both favourability ratings and procedural justice perceptions were rated higher by candidates with experience of a particular method.

Our research also explored which dimensions of procedural justice were most related to perceptions of favourability for each of the methods and overall. Results showed that face validity, opportunity to perform, and scientific evidence were the strongest predictors of overall favourability of selection methods whilst interpersonal and informational justice dimensions (respect for privacy, employer's right, and interpersonal warmth) were the weakest predictors. These findings are consistent with previous research (e.g. Zibarras and Patterson 2015) showing that face validity perceptions predict fairness perceptions and those of Ispas et al. (2010), who also found that, across the seven dimensions of procedural justice, scientific evidence (predictive validity), face validity and opportunity to perform were the best predictors of favourability. Furthermore, in line with other findings (Nikolaou and Judge 2007; Moscoso and Salgado 2004), interpersonal warmth and respectful of privacy are perceived as less relevant dimensions. Finally, when comparing favourability perceptions of the different selection methods across different countries, our results are similar to those found by other authors (Anderson et al. 2010, Ispas et al. 2010) in that the differences—although present—were 'trivial' (as indicated by Cohen's *d* values of less than 0.10). Our study may offer an early indication that there are also few cross-cultural differences in favourability perceptions for 'newer' online methods; however these findings should be interpreted with caution given that the numbers of international participants were small.

## 4.1 | Theoretical Implications

Our findings have several implications for research, theory and practice. First, by examining traditional and 'newer' (often internet-based) selection methods, our work extends the applicant perception literature and highlights the importance of exploring perceptions of a broader range of selection methods to capture the evolving recruitment landscape. Even the methods that were least experienced (AVI and games-based assessment) were experienced in 21.3% and 14.5% of instances, respectively. Whilst these might be comparatively low, the numbers indicate that methods are being used yet they are not very well-liked. These findings may be linked to Gilliland (1993) notion of transparency. An applicant's dislike of methods such as AVIs may stem from a lack of transparency or from a lack of understanding of the rationale behind the use of such a method, leading to perceptions of unfairness. Overall, our study's results align with the small, but growing, literature exploring applicant perceptions of 'newer' and Internet-based selection methods and highlight the need for replication and further research.

Secondly, in line with previous studies (Lievens et al. 2004) our results confirm that prior experience leads to higher favourability ratings. As noted, participants with prior experience need to make fewer inferences to evaluate the method because they have already experienced it (Lievens et al. 2004), suggesting that prior exposure to a selection method means that individuals have fewer uncertainties about what they may face.

Third, applicants place importance on Gilliland (1993) justice dimensions of opportunity to perform and face validity. Thus, the selection methods that were considered job-relevant and gave applicants a clear opportunity to demonstrate their relevant skills were more positively perceived. The opposite is true for methods such as asynchronous video interviews and games-based assessments. These methods received lower favourability ratings, possibly due to perceived discrepancies between the tasks applicants are asked to perform and the actual demands of the job. Overall, our study provides insight into what shapes an applicant's perceptions and supports Gilliland's theory of procedural justice by highlighting how dimensions like face validity, opportunity to perform, and transparency influence applicants' evaluations of selection methods.

## 4.2 | Practical Implications

Our findings also have several practical implications that might impact practitioners' choice of which selection methods to use. Findings suggested that best practice selection methods are job-related, offer candidates the opportunity to demonstrate their knowledge, skills and abilities, and are based on solid scientific research. Therefore, practitioners may benefit from choosing methods that candidates perceive as highly job-related (e.g. work sample, assessment centre and knowledge test), with high opportunity to perform (e.g. work sample, assessment centre and knowledge test) and high scientific validity (e.g. psychometric tests and assessment centre) (Bauer et al. 2020).

Second, our findings highlight that the mode of delivery of interviews is important because it impacts favourability perceptions. Different formats received different favourability ratings and procedural justice perceptions. AVIs received the worst ratings and in-person interviews received the best. So, although organisations may be increasingly using technology to save time and cost and to reach a wider applicant pool (Proost et al. 2021), this needs to be balanced with applicants still preferring face-to-face formats and should be considered when designing selection processes.

Third, the generally lower perceptions of favourability and procedural justice perceptions of some of the 'newer' or internet-based methods mean that these new selection techniques should be used with caution. Bearing in mind the potential consequence of negative perceptions, such as applicants dropping out of the selection process, rejecting job offers or spreading negative comments about an organisation (Nikolaou et al. 2015), recruitment professionals may want to consider reactions to selection methods alongside validity. Alternatively, since research has shown that negative reactions can, to some extent, be mitigated by providing information about the use of selection methods (McCarthy et al. 2017; Patterson et al. 2011), organisations can

consider using practical interventions to inform candidates about which selection methods are used and why, giving reasons behind their choice.

Finally, it's worth noting that age had little relationship with fairness perceptions in this study. It might have been anticipated that there would be more correlations between age and favourability of selection methods—such that older participants would prefer 'traditional' methods whilst younger participants would prefer 'newer' or Internet-based methods (Karácsony et al. 2020). As it turned out there were very few relationships found (a slight preference towards games-based assessments for younger participants and slight preferences towards personal contacts and resumé/CV for older participants), but these were small in effect. It is plausible that since so many professionals were forced into using more Internet-based technologies during COVID-19, people are generally more comfortable using more technology in the workplace.

## 4.3 | Limitations

Several limitations of this study should be noted, and for which we offer some avenues for further research. First, despite our best efforts, the sample may not be representative and thus our findings should be considered preliminary. Future research may consider replicating our study with larger and/or different samples. Indeed, our sample mainly focused on Western countries (although South Africa was included), so future research should be extended to other countries globally. Second, although participants had recently been through a selection process and had direct experience of (on average) 10 of the 17 selection methods, they were not active job seekers. Nevertheless, for a study such as this, using a working population who had recently completed a selection process would give a relatively accurate picture of applicant perceptions, as opposed to using University students. Whilst we acknowledge that the sample is not fully representative, a working population is likely to have had more experience of selection processes than student or graduate samples. Third, our questionnaire did not ask whether some of the assessment methods used (e.g. psychometric tests, SJTs, knowledge tests) were administered via paper and pencil, online or via mobile. It is possible that this distinction could influence participants' fairness perceptions. Additionally, we did not ask participants how often they interacted with the Internet. This might have impacted a person's perceptions of Internet-based recruitment methods. Unfortunately, the questionnaire was already long and so these nuanced questions were omitted from the questionnaire. It is also possible that since the questionnaire was long it may have resulted in some fatigue when completing it. This is indicated by the fact that about a quarter of participants who started the questionnaire did not complete it.

## 5 | Conclusion

In conclusion, the present study used a well-used methodology to explore applicant perceptions of selection methods, replicating and broadening the methods by incorporating 'newer' methods to better reflect today's selection landscape. In addition, the study

used participants who were currently working and who had recently completed a selection process. Our findings showed that traditional methods such as resumé/CV and in-person interviews are still more common than the newer, digital methods in recruitment processes. Work sample tests, knowledge tests and interviews in person were considered most favourable, whilst the least favourable methods were AVIs, personal contacts and professional social media (such as LinkedIn). Participants with previous experience of a method rated methods more favourably overall and on dimensions of procedural justice. The mode of delivery of interviews is an important consideration. We present preliminary findings that the cross-cultural differences in fairness perceptions of the methods were relatively small between countries, even for the newer methods. Findings suggest that selection methods are more acceptable to applicants when they are job-related, offer candidates the opportunity to demonstrate their knowledge, skills and abilities and are based on sound scientific research.

### Acknowledgments

The contribution by Gloria Castano was partially supported by Grant PRX22/00723 from Ministerio de Universidades (Spain). Senior Research Fellow at City, University of London.

### Ethics Statement

This research was approved by the Ethics Committee of the City University of London under number ETH2223-1970.

### Data Availability Statement

The data that support the findings of this study are openly available in Mendeley at <https://data.mendeley.com>, reference number 10.17632/22y54g3zbc.1.

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