

# Pitfalls of Digitalization: Teacher Recruitment in Malaysia International Schools

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## Abstract

Human resource practices, particularly teacher recruitment, are evolving due to digitalisation. There is a critical need for international schools to attract and select quality teaching staff to ensure the quality of learning for students and maintain their competitiveness within a dynamic market. This paper reported the findings of a study that investigated the challenges that school administrators faced during the digitalisation of teacher recruitment practices at international schools in Malaysia. A series of semi-structured interviews involving fourteen management personnel from eleven international schools revealed seven challenges highlighted by the participants: 1) a rise in competition, 2) attracting irrelevant or underqualified applicants, 3) time-consuming preparation of detailed job ads and recruitment booklets, 4) escalating recruitment costs, 5) student privacy issues, 6) managing a large number of applications, and 7) loss of important information during virtual interview. To address these challenges, the participants took four actions: 1) advanced planning before the new school term, 2) building rapport with potential candidates, 3) selecting a suitable online recruitment platform, and 4) integrating online and offline recruitment. The findings of the study contribute to the growing literature on talent acquisition at international schools by providing empirical evidence of the existing challenges faced at a sample of international schools in Malaysia.

*Keywords:* Human resource, International School, administrators, challenges

## Abstrak

Pendigitalan mengubah amalan sumber manusia, terutamanya pengambilan guru. Terdapat keperluan kritikal bagi sekolah antarabangsa untuk menarik dan memilih tenaga pengajar yang berkualiti bagi memastikan kualiti pembelajaran untuk pelajar dan mengekalkan daya saing mereka dalam pasaran yang dinamik. Kajian ini melaporkan dapatan kajian yang menyiasat cabaran yang dihadapi oleh pentadbir sekolah semasa pendigitalan amalan pengambilan guru di sekolah antarabangsa di Malaysia. Satu siri temu bual separa berstruktur yang melibatkan empat belas kakitangan pengurusan dari sebelas sekolah antarabangsa mendedahkan tujuh cabaran yang diketengahkan oleh peserta: 1) peningkatan dalam persaingan, 2) menarik pemohon yang tidak relevan atau kurang berkelayakan, 3) penyediaan iklan pekerjaan terperinci dan pengambilan yang memakan masa, 4) peningkatan kos pengambilan, 5) isu privasi pelajar, 6) mengurus sejumlah besar permohonan, dan 7) kehilangan maklumat penting dalam temu duga maya. Untuk menangani cabaran ini, para peserta telah mengambil empat tindakan: 1) perancangan lanjutan sebelum penggal persekolahan baharu, 2) membina hubungan yang baik dengan bakal calon, 3) memilih platform pengambilan dalam talian yang sesuai, dan 4) menyepadukan pengambilan dalam talian dan luar talian. Dapatan kajian menyumbang kepada literatur yang semakin berkembang tentang pemerolehan bakat di sekolah antarabangsa dengan menyediakan bukti empirikal tentang cabaran sedia ada yang dihadapi pada sampel sekolah antarabangsa di Malaysia.

*Kata kunci:* Sumber manusia, Sekolah Antarabangsa, pentadbir, cabaran

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## 1.0 INTRODUCTION

The increasing dominance of digital technologies has resulted in far-reaching cultural, sociological, and economic transformations worldwide. These innovations have led to the contemporary epoch being dubbed the "digital age." Following these changes, digital technologies play an increasingly important role in employees' lives and human resource management (HRM), which appears to be impacted in various ways. Technology improvements, notably digitisation, have transformed human resource management (HRM) processes. HRM digitalisation assists schools in updating human resource operations and gives them a competitive advantage (Mazurchenko & Marková, 2019). Furthermore, it speeds up communication regardless of location or time, which is essential, especially during the COVID-19 outbreak. Lumi (2020), who examined the impact of digitisation on human resources, stated that HRM practices have experienced significant and continuous changes. For example, the recruitment and selection procedure have developed. Digital platforms, worldwide connections, globalisation, social networks, and many other variables have altered how people communicate. Virtual job fairs and online interviews are becoming standard practices for most international schools (ISC research, 2021). Organisations have embraced online recruitment because of its benefits since its introduction to the labour market. According to the Bureau of Statistics Research, more than 95% of businesses had Internet connectivity and used some form of online recruitment in 2011 (Wozniak, 2013).

Organisations prefer online recruiting because it streamlines hiring processes, reduces expenses, and provides access to a larger pool of candidates (Malhotra & Sharma, 2015).

According to Armstrong (2009), the benefits of Internet recruitment are accompanied by various problems. Although online recruitment is an effective tool for human resource management, many studies have revealed drawbacks such as difficulty in scrutinising applications, a lack of internet awareness, high access fee, and a preference for face-to-face interaction with candidates (Hada & Gairola, 2015; Kapse et al., 2012; Okolie & Irabor, 2017). Furthermore, it becomes more complicated when online recruitment is combined with international school recruitment because it involves foreign and local candidates. Cox (2012) addressed a few issues in international school teacher recruitment, such as limited recruiting resources, challenges for schools to differentiate themselves from competitors, school location, and school leaders who cannot conduct recruiting from the perspective of international teachers. Unfortunately, there has been little research into the digitalisation problems that international school administrators face in teacher recruitment.

This paper provided an overview of a study that explored the obstacles international schools face in attracting and selecting teachers as well as specific interventions to be implemented. By improving the teacher recruitment process at international schools, school administrators can ensure the long-term viability of their institutions' in various areas, including student recruitment, student performance, school reputation, and overall business performance.

## ■2.0 LITERATURE REVIEW

More and more firms worldwide are adapting to the new normal of working virtually. However, they should pay attention to the potential drawbacks of e-recruitment, which can reduce the effectiveness of the recruitment process. Both traditional and e-recruitment attract different types of job seekers. For example, e-recruitment may be an inappropriate for job seekers who are unfamiliar with the internet. According to Wozniak (2013), adults above the age of 60, either do not use or have difficulty using the internet. As a result, this group of people may prefer traditional recruitment approaches. Jobseekers aged 18 to 54, with the bulk of users aged 25 to 35, tend to choose e-recruitment platforms (Melanthiou et al., 2015). This category of people is preferred for online recruitment because they are familiar with and have been trained to use technical devices. Consequently, recruiting through e-recruitment may exclude candidates with little online literacy but extensive teaching experience.

E-recruitment is an online process in which people apply for employment by uploading resumes or filling out required information online. This action raises concerns about privacy. According to empirical studies, collecting applicant information is considered intrusive and a violation privacy, leading to negative reactions from applicants (Bauer et al., 2006; Cascio & Aguinis, 2011; Stone-Romero & Stone, 2005). Candidates become more anxious due to e-recruitment because they are concerned that their personal information may be used by third parties without permission, potentially resulting in legal troubles (Ismail et al., 2021). Therefore, recruiters should address the privacy issue by safeguarding data privacy. Besides, e-recruitment relies heavily on internet connectivity. A poor internet connection can be negatively impact the quality of the recruitment process. For example, potential job hopefuls may fail to upload all required documentation and the recruiters may have difficulty hearing candidates' explanations, resulting in incomplete information being conveyed to both parties and potential misunderstandings (Ismail et al., 2021; Okolie & Irabor, 2017).

Some candidates may hesitate or feel uneasy about presenting themselves via video communication tools. These fear and lack of confidence can directly impact their interview score (Van Esch et al., 2019) because recruiters may assume the candidates lack the requisite abilities. Social anxiety among candidates can lead to poor performance, influencing the recruiters' judgment and potentially causing the organization to missed out on exceptional candidates. Furthermore, e-recruitment allows job seekers to apply for employment with just a click of a button. The process is rapid and lacks constraints. While this convenience is highly beneficial, it can also encourage people to apply for jobs without first assessing their qualifications, resulting in a large number of candidates for each job vacancy (Barber, 2006). As a result, recruiters may overlook promising candidates, especially on well-known e-recruitment portals with millions of resumes (Cappelli, 2001). Furthermore, compared to other job search methods, applicants are less likely to be noticed, shortlisted, interviewed and hired (Tong, 2009). Employers must identify and address these challenges to surpass competitors and gain a competitive advantage. As a result, there is a need to analyse the challenges that recruiters faced during the outbreak and look for solutions to use as a guideline if a similar situation develops.

## ■3.0 METHODOLOGY

This study employed a qualitative research design to investigate the challenges school administrators face in recruitment and interventions to overcome these challenges. A qualitative research design was chosen for this study because it could be used to explore the school administrators' perspectives, feelings, and experiences regarding e-recruitment practices and challenges (Mohajan, 2018). The qualitative approach enabled the researchers to gain insight from the participants through their descriptions and helped in making sense of their experiences with educational issues (Lucas et al., 2018). This study was conducted online through in-depth interviews. Purposive sampling is particularly useful when researchers intend to recruit participants with specific information based on their professional experiences (Etikan et al., 2016; Palinkas et al., 2015). In this study, fourteen participants were purposefully selected based on the following criteria: a) currently employed in one of the international schools in Malaysia, b) direct involved in recruitment processes, c) having a high teacher retention rate, and d) expressing a high willingness to participate. Table 1 shows the demographics of the participants from eleven schools in the qualitative study which is categorised according to their gender and position in the school.

Table 1 Demographics of the participants

Participant	Gender	Position	Participant	Gender	Position
P1	Male	Principal	P8	Female	HR Officer
P2	Male	Principal	P9	Male	Head of Department
P3	Female	H.R Officer	P10	Male	Principal
P4	Male	Principal	P11	male	Principal
P5	Female	Principal	P12	Female	Principal
P6	Female	Principal	P13	Female	Principal
P7	Female	HR Officer	P14	Male	H.R Manager

This study adhered to Piaw's (2016) principles of ethical research practices throughout its implementation, including justice, humanistic treatment or compassion, freedom of participation, confidentiality, anonymity, participant's original condition, integrity, and avoidance of plagiarism. Before the data collection phase, the researchers ensured that the participants were informed about their rights. Initially, the participants were presented with informed consent letters to inform them about the details of this study and their rights. As the interview was conducted during various lockdown iterations and movement control orders throughout 2021 to 2022, Sah et al. (2020) recommended virtual tools as alternative platforms for participant recruitment and interview processes. The interviews were conducted via Zoom, which offers several advantages that enhance the utility of qualitative research, such as secure recording and storing of interview sessions without the need for third-party software, real-time communication with geographically dispersed individuals using various devices, and user-specific authentication (Archibald et al., 2019). The interview sessions were recorded, transcribed verbatim, and provided to each participant for review. The transcribed interviews were then analysed using a hybrid approach, which involved generating initial codes based on the literature while allowing for themes to emerge directly from the data as part of the thematic analysis process. The identified themes were subsequently presented in the next section of the study.

Member checking is a method used to validate, verify, or assess the trustworthiness of qualitative results (Candela, 2019). The validation of the interviews was conducted through the member-checking technique to minimise researchers' bias. Besides, methodological triangulation was employed by collecting data from interviews and other data sources, including job advertisements posted by schools, written documents, audio or video materials related to recruitment provided by the interviewees, school websites, and school social media. Besides, all the interviews were recorded with using the recording feature in Zoom, which adds to the reliability of this study.

## 4.0 RESULTS

### 4.1 The Drawbacks Of Digitalization In Recruitment

The participants highlighted seven key themes related to the drawbacks of e-recruitment in international school teacher recruitment. Each of these themes was briefly presented as follows:

#### 4.1.1 A Rise In Competition

Schools compete with rival schools for time and resources at each level of the hiring process, and if they do not act quickly to secure their chosen applicants, they may lose them (Moynihan et al., 2003). Participant P13 highlighted this competition by stating '*Recruitment can be hurt because people are interviewing across, and you want time to think, and you want time to do reference checks, but then another school might reach out and grab them. It could be a very tiring process because .... I had so many interviews, and I got really excited about a candidate. And then they decide not to come, and it's like you put so much time and energy into the recruitment process. So excited about somebody. And then they just decide for it.*'

#### 4.1.2 Attract Irrelevant Or Underqualified Applicants

According to the participants' opinion, recruiters may experience heightened stress when most candidates in the candidate pool, lack the competencies they seek. Participant P3 expressed this challenge by stating, '*The challenge is if we can't find the right fit for the positions, because yes, we will have like 50, 60, 70 applications, but then we still don't find the right fit for the position, that is my challenge.*' This result aligned with Okolie and Irabor's (2017) research which reported that many organisations receive a substantial number of applications from ineligible individuals during e-recruitment process. People can quickly submit their resumes using web technologies.

#### 4.1.3 Time-Consuming Preparation Of Detailed Job Ads And Recruitment Booklets

Due to restricted ad space, traditional adverts may only require recruiters to submit a few lines of job postings. However, online hiring platforms compel recruiters to include as much information as possible to remain appealing to job seekers. As a result, recruiters must invest significant effort in creating online job advertisements that provides additional information about the schools and their locations to attract more applications for a single position. One of the principals mentioned that he spent time producing job advertisements and a guide

to help expatriate teachers in appreciating the beauty of Malaysia and the school, convincing them to apply for the position. Participant P4 explained, *'Once we've decided what we need, I write a recruitment booklet. So, it's typically a 12-14 pages booklet for each job, which attracts people... I wanted to tell the story of living in Malaysia as well as (school), and to attract people, either in Malaysia or from other countries into Malaysia.'* While most of the past findings assert that the time-consuming challenge in e-recruitment is primarily associated with managing a large volume of resumes (Islam, 2016; Singh, 2017), these studies often overlook the time spent on job ad preparation.

#### 4.1.4 Escalating Recruitment Costs

Most studies have concluded that online recruiting is less expensive than traditional recruitment platforms (Petre et al., 2016; Rosoiu & Popescu, 2016; Vidros et al., 2016). However, if online recruitment techniques prove ineffective, hiring costs can increase. According to a principal, some employment platforms may attract unsuitable candidates, thus resulting in wasted time and money because most online recruitment platforms require a subscription fee. Participant P6 stated, *'I think for JobStreet for teachers it's not very useful, quite honestly. So we have actually been using the candidates that we get are actually non-teachers... So it's not very suitable, and we did a premium account with them also. So we had that for a year. But, because all the candidates were not teachers (who were) applying for teaching positions. For that point, we decided to stop our subscription with them.'* Furthermore, recruiting cost can become high if recruiters use multiple recruitment platforms for a single vacancy in an attempt to establish a wide pool of prospects. Recruiters frequently pay subscription fees for various online recruitment platforms, which can increase recruitment costs. Participant P7 mentioned a few platforms she has used by saying, *'Job platforms such as Jobstreet / LinkedIn / Indeed / JORA, and university partnerships are some of the main sources to create our pool of potential candidates.'*

#### 4.1.5 Student Privacy Issue

Administrators need to consider virtual recruitment while respecting individuals' right to privacy. According to Braggs (2004), the use of webcams in the classroom can create a climate of mistrust and may violate students' privacy rights by photographing and recording them without their knowledge or consent. One of the participants expressed concerns about personal privacy when participating in simulated teaching during virtual recruitment. Participant P4 mentioned, *'COVID-19 has been a real catalyst for progress in using technology, and I can interview people in other countries very easily... A lot of schools will not permit a camera in lessons for people outside the school.'*

#### 4.1.6 Managing A Large Number Of Applications

Even though an online recruitment platform can yield many candidates, participants reported that an excessive volume of applications is often the source of recruiting challenges (Sajid et al., 2022), especially during pandemics, when time become even more precious. Recruiters must spend several hours everyday screening applications for a single vacancy. This time is dedicated to weeding out entirely unqualified individuals, screening potential job candidates, conducting basic phone checks, and revisiting basic background checks on individuals. Here is an example of a response: *"There are too many candidates for each ad is coming. Every time we post an ad or when we are looking for someone, one of the challenges is that I have to go through many resumes (P6).'*

#### 4.1.7 Loss Of Important Information During The Virtual Interview

Communication through nonverbal means such as, eye contact, and body language can significantly influence interviewers' impressions of interviewees, especially during initial encounters. According to Bull and Frederikson (2019), nonverbal communication has often been regarded as a form of emotional expression and a means of establishing interpersonal relationships, both of which are important for individuals to present themselves effectively. A principal noted that during digital interviews, where only the upper body of the interviewee is visible, certain nonverbal communication cues, such as body language, can be overlooked. This oversight can impact decision-making during the selection process. Participant P4 remarked, *'(During virtual interview) at the very least, we can see faces and a little bit more unspoken communication online... But it's really nice to be able to see people's faces when you're going to an interview; I think quite important.'*

### 4.2 Institutional Response to Challenges

The participants highlighted a total of four key themes. Each of them is briefly presented as follows:

#### 4.2.1 Advanced Planning Before The New School Term

One participant, P11, shared his strategy of initiating the recruitment process as early as possible to avoid time constraints. He explained, *'We start advertising and screening candidates in October because that's when we talk to our teachers about 'Will you be coming back? Are you gonna retire? Are you going to go to another school? What are you going to do?'* So we start getting a group of candidates going in October, and usually, most of our hiring happens closer to December, and then we try to finish by January.'

Based on this statement, the participant anticipated that by advancing the recruitment plan by at least three months, his team would have enough time to estimate the number of vacancies to be filled. This proactive approach resulted in a shorter gap period and attracted more possible candidates to the vacancies. Furthermore, early human resource planning can assist administrators in predicting workforce shortages or surpluses, allowing them to secure additional funding to retain current teachers (Jacobson, 2010; Noe, 2012).

#### 4.2.2 Building Rapport With Potential Candidates

Some respondents attempted to ensure that the interview process was a positive experience for potential applicants by providing all the necessary information and establishing a positive rapport during the interview process. Participant P11 suggested, *'Having about two to three meetings with a potential candidate... by the time you are finished with that, there is a good relationship, and some process has been built, and they're probably not going to turn you down.'* Organisations can improve their acceptance rates among new hires by introducing them to the organisation as early as feasible (Harold et al., 2016). This practice has the potential to reduce the competitiveness for talent in the marketplace, which has intensified due to increase online visibility.

#### 4.2.3 Selecting A Suitable Online Recruitment Platform

There are numerous online recruitment platforms available on the market. Selecting a suitable online recruitment tool is crucial for enhancing the efficiency of the recruitment process. It can help increase the visibility of job postings and assist schools in targeting the most relevant channels attract the best candidates for each position (Sharone, 2017). According to one of the participants, P6, the effectiveness of an attraction strategy depends on selecting an appropriate online platform based on the specific job requirements and the objective of the school. She highlighted that, *'Job Street, but somehow it's just not suited for us... Actually, I use indeed... So far, it has proven to be quite OK. I think this is because it tends to appeal to, some observation, to a younger crowd... The positions that apply to the candidates that we get tend to be most suitable also. Meaning actual teachers. And also with the requirements that we actually put in... of course, it's (Indeed) more non-traditional also means of communication that are so very different if compared to the Job Street... I find that the application that comes in from Job Street tends to be older and maybe more corporate, so the communication is more professional and proper.'*

#### 4.2.4 Integrating Online And Offline Recruitment

Due to several drawbacks of online recruitment, it is quite likely that some components of the hiring process, such as mock teaching and interviews, will be conducted in person rather than online (Isson & Harriott, 2016). A human resource manager, P14, illustrated how the school integrates online and offline recruitment processes. His school used an online recruitment approach for attraction and communication but opted for an offline selection procedure. He explained, *'Once they submit the task (by email). We will then have a panel to review the task...So, we will share a Google doc. We will give the link of the task, the person like the resume... then you provide the feedback in the Google sheet. If I am the HR manager, I provide the feedback. I just shared the doc. So we use a lot of technology...(oversea teachers), Zoom... Face-to-face for Malaysian candidates.'*

### 5.0 DISCUSSION AND RECOMMENDATION

Despite the small sample size, the themes highlighted in the semi-structured interviews aligned with articles found in the existing literature. The most significant point was that participants recognised the importance of rethinking the overall recruitment process to address the limitations of online recruitment techniques, particularly in terms of process effectiveness and talent accessibility (Karimi et al., 2019). According to the findings of the study, human resource personnel have limited control over the downsides of online recruitment discovered by this study due to social and technological concerns. Online recruitment can lead to a loss of personal touch and a lack of nonverbal communication cues for recruiters, potentially diminishing the effectiveness of the selection process. Crawshaw et al. (2020) noted that some online and video-enabled selection media options are not designed to capture the nuances of applicants and their interactions with the selection panel. While most previous research on digitalisation in recruitment has focused on preventing unauthorized access to confidential personnel records (Akila et al., 2020; Cherukri & Doguparthi, 2017; Zafar, 2013). The findings of the study shed light on concerns related to using webcams during virtual teaching, potentially intruding upon students' privacy. Rajab and Soheib (2021) conducted a quantitative survey with 319 students and discovered that the top concern among participants was internet privacy when using a webcam in class.

Additionally, participants acknowledged the importance of the information offered to job seekers in job postings for attracting high-quality applicants, even though it demands a significant amount of time to create. This finding aligned with the findings of Chapman and Webster (2006), who discovered that recruitment practices have the most influence on stronger applicants. Specifically, weaker applicants are more likely to apply to all available positions to maximise their employment prospects. In contrast, strong applicants can afford to carefully consider the merits of each organisation before submitting any applications. These findings underscore the importance of evaluating recruitment strategies and messages to attract the best candidates.

Given the uncontrolled constraints in online recruiting highlighted in this study, it highlights the importance of two aspects of staffing planning when rethinking the entire online recruitment process for international school teachers. First, organisation should conduct periodic reviews of the online recruitment tool to assess its effectiveness. According to Carlson and his colleagues (2002), organisations can evaluate attraction outcomes by estimating each applicant's job performance potential (i.e. quality) and then use utility analysis to convert differences in attraction outcomes to a dollar metric that can be directly compared to costs. This ensures that the current recruitment system is efficient. Second, despite the increasing use of technology in the recruiting process, most employers and applicants still value the opportunity for face-to-face interaction at some point during the process (Lievens & Chapman, 2019). To effectively harness the benefits of flexibility, which can significantly offset the drawbacks of online recruitment, the recruiting process should be aligned with the concept of "Internet plus thinking" (Gao, 2021).



## 6.0 CONCLUSION

This study investigated issues and responses from international schools to these challenges. As a result, the researchers propose that recruiting managers reconsider their current practices in the following five areas. First, they should stay updated on the latest innovations in online recruitment technology. Second, administrators should consider integrating offline recruitment practices with online platforms, particularly social media, to reach passive talent who are not actively job hunting (Muduli & Trivedi, 2020). Third, schools should invest in or establish an e-recruitment portal/system to improve access to a wider pool of applicants and improve the efficiency of the recruitment process (Vashisthaa et al., 2021). Fourth, they should implement procedures to ensure that online recruitment processes are secure and protect the privacy of applicants and all parties involved in the recruitment process. Finally, they should be aware of job seekers' job search behaviours. Potential candidates, for example, will monitor school websites and social media platforms such as LinkedIn and Facebook to discover job openings. They will also look for information beyond school websites, such as employee reviews on internet job boards.

The limitations of this study were recognised. The findings were exclusively based on the perspectives of a small sample of participants and may not be representative of Malaysia's broader international school population. Further research with a larger sample size and more diverse representation from different geographical regions of the country is required to gain a more comprehensive understanding of the challenges and solutions related to digitalisation in recruitment procedures.

In summary, the findings of this study contribute to the growing literature on international school talent acquisition by providing empirical data on the drawbacks of digitalisation in recruiting, as explored within a sample of international schools in Malaysia. This study is quickly establishing itself as a prominent authority on the effects of digitalisation on recruitment practices. In addition to the previous remarks, there is a strong recommendation to continuously enhance recruitment digitalisation.

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## References

- Akila, B., Vasantha, S., & Thirumagal, P. G. (2020). Effectiveness of E-recruitment for man power selection process. *Journal of Critical Reviews*, 7(5), 306-310. <https://doi.org/10.31838/jcr.07.05.57>
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods*, 18, 1- 8. <https://doi.org/10.1177/1609406919874596>
- Armstrong, M. (2009). *Armstrong's Handbook Of Human Resource Management Practice* (11th Edition). Kogan page.
- Barber, L. (2006). *E-recruitment Developments*. Institute for Employment Studies. Institute for Employment Studies
- Bauer, T. N., Truxillo, D. M., Tucker, J. S., Weathers, V., Bertolino, M. & Erdogan, B. (2006). Selection in the information age: The impact of privacy concerns and computer experience on applicant reactions. *Journal of Management*, 32, 601–621. <https://doi.org/10.1177/0149206306289829>
- Braggs, D. (2004). Webcams in classrooms: How far is too far? *Journal of Law and Education*, 33, 275-282. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/jle33&div=27&id=&page=>
- Bull, P., & Frederikson, L. (2019). Non-verbal communication. In A. M. Colman (Ed), *Companion encyclopedia of psychology*. 852-872. Routledge.
- Candela, A. G. (2019). Exploring the function of member checking. *The qualitative report*, 24(3), 619-628. <https://doi.org/10.46743/2160-3715/2019.3726>
- Cappelli, P. (2001). Making the most of online recruiting. *Harvard Business Review*, 79(3), 139-146. <https://hbr.org/2001/03/making-the-most-of-on-line-recruiting>
- Carlson, K. D., Connerley, M. L., & Mecham III, R. L. (2002). Recruitment evaluation: The case for assessing the quality of applicants attracted. *Personnel Psychology*, 55(2), 461–490. <https://doi.org/10.1111/j.1744-6570.2002.tb00118.x>
- Cascio, W.F. & Aguinis, H. (2011). *Applied psychology in human resource management* (7th ed.). Pearson Prentice Hall
- Cherukri, A., & Doguparthi, M. (2017). Comprehensive analysis of various rough set tools for data mining. *International Journal of Advances in Electronics and Computer Science*, 4(4), 37-44. [http://www.ijae.in/journal/journal\\_file/journal\\_pdf/12-362-149819855137-42.pdf](http://www.ijae.in/journal/journal_file/journal_pdf/12-362-149819855137-42.pdf)
- Cox, D. S. (2012). *A global study of international teacher recruitment* [Unpublished doctoral dissertation]. Lehigh University
- Etikan, I., Musa, S.A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Gao, Y. (2021). Challenges and countermeasures of human resource management in the post-epidemic period. *International Journal of Management and Education in Human Development*, 1(4), 36-40. <https://ijmehd.com/index.php/ijmehd/article/view/174>
- Hada, B., & Gairola, S. (2015). Opportunities & challenges of E-recruitment. *Journal of Management Engineering and Information Technology*, 2(2), 1-4. [https://www.scirp.org/\(S\(lz5mqp453edsnp55rjgct55\)\)/reference/ReferencesPapers.aspx?ReferenceID=2544209](https://www.scirp.org/(S(lz5mqp453edsnp55rjgct55))/reference/ReferencesPapers.aspx?ReferenceID=2544209)
- Harold, C. M., Holtz, Brian C., Griepentrog, B. K., Brewer, L. M., & Marsh, S. M. (2016). Investigating the effects of applicant justice perceptions on job offer acceptance. *Personnel Psychology*, 69(1), 199–227. <https://doi.org/10.1111/peps.12101>
- ISC Research. (2021). *Recruitment and CPD in international schools: The 2021 Report*. [https://www.britishchambershanghai.cn/content/media/2022/02/recruitment\\_and\\_cpd\\_in\\_international\\_schools\\_2021\\_report-copy.pdf](https://www.britishchambershanghai.cn/content/media/2022/02/recruitment_and_cpd_in_international_schools_2021_report-copy.pdf)
- Islam, M. M. (2016). Analysis of E-recruitment Trend and Effectiveness: A case study on some companies in Bangladesh. *Management Development*, 30(1), 54-73. [https://bim.portal.gov.bd/sites/default/files/files/bim.portal.gov.bd/page/09f3e9a8\\_0cca\\_4a71\\_adb5\\_ec7082521b3a/Vol%2030%20No%201%26%2C%20Januar%20y-June%202016 Article 06.pdf](https://bim.portal.gov.bd/sites/default/files/files/bim.portal.gov.bd/page/09f3e9a8_0cca_4a71_adb5_ec7082521b3a/Vol%2030%20No%201%26%2C%20Januar%20y-June%202016 Article 06.pdf)
- Ismail, F., Salleh, S. H., & Wei, C. S. (2021). *Virtual Recruitment Challenges According To Employer Perspective*. *Jurnal Penyelidikan Sains Sosial*, 4(11), 31 – 39. <http://www.jossr.com/PDF/JOSSR-2021-11-06-05.pdf>
- Isson, J. P., & Harriott, J. S. (2016). *People Analytics In The Era Of Big Data: Changing The Way You Attract, Acquire, Develop, And Retain Talent*. John Wiley & Sons Inc.
- Jacobson, W. (2010). Preparing for tomorrow: A case study of workforce planning in North Carolina municipal governments. *Public Personnel Management*, 39(4), 1-21. <https://doi.org/10.1177/009102601003900404>
- Kapse, A. S., Patil, V. S., & Patil, N. V. (2012). E-Recruitment. *International Journal of Engineering and Advanced Technology*, 1(4), 82-86. <https://www.ijeat.org/wp-content/uploads/papers/v1i4/D0273041412.pdf>
- Lievens, F., & Chapman, D. (2019). Recruitment and selection. In A. Wilkinson, N. Bacon, S. Snell, & D. Lepak (Eds.), *SAGE handbook of human resource management*. 123-150. SAGE Publications Ltd.

- Lumi, A. (2020). The impact of digitalisation on human resources development. *Prizren Social Science Journal*, 4(3), 39-46. <https://doi.org/10.32936/pssj.v4i3.178>
- Malhotra, R. S., & Sharma, S. (2015). Effect of E-Recruitment on recruitment. *International Journal of Management and Commerce Innovations*, 3(2), 1047-1050. [www.researchpublish.com](http://www.researchpublish.com)
- Mazurchenko, A., & Maršiková, K. (2019). Digitally-powered human resource management: Skills and roles in the digital era. *Acta Informatica Pragensia*, 2019(2), 72-87. <https://doi.org/10.18267/j.aip.125>
- Melanthiou, Y., Pavlou, F., & Constantinou, E. (2015). The use of social network sites as an e-recruitment tool. *Journal of Transnational Management*, 20(1), 31-49. <https://doi.org/10.1080/15475778.2015.998141>
- Moynihan, L. M., Roehling, M. V., LePine, M. A., & Boswell, W. R. (2003). A longitudinal study of the relationships among job search self-efficacy, job interviews, and employment outcomes. *Journal of Business and Psychology*, 18, 207-233. <https://doi.org/10.1023/A:1027349115277>
- Muduli, A., & Trivedi, J. J. (2020). Social media recruitment: The role of credibility and satisfaction. *Evidence-based HRM: A Global Forum for Empirical Scholarship*, 8(2), 237-251. <https://doi.org/10.1108/EBHRM-08-2019-0069>
- Noe, R. A. (2012). *Human Resource Management: Gaining A Competitive Advantage*. McGraw-Hill.
- Okolie, U. C., & Irabor, I. E. (2017). E-recruitment: practices, opportunities and challenges. *European Journal of Business and Management*, 9(11), 116-122. <https://core.ac.uk/download/pdf/234627826.pdf>
- Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4012002/>
- Petre, A., Osoian, C., & Zaharie, M. (2016). Applicants' perceptions on online recruitment. *Managerial Challenges of the Contemporary Society*, 9(1), 63-67. <https://www.proquest.com/docview/1888983879?pq-origsite=gscholar>
- Piaw, C. Y. (2016). *Mastering research methods* (2nd Ed.). McGraw-Hill.
- Rajab, M. H., & Soheib, M. (2021). Privacy concerns over the use of webcams in online medical education during the COVID-19 pandemic. *Cureus*, 13(2). <https://doi.org/10.7759/cureus.13536>
- Rosoiu, O., & Popescu, C. (2016). E-recruiting platforms: Features that influence the efficiency of online recruitment systems. *Informatica Economica*, 20, 46-55. <https://doi.org/10.12948/issn14531305/20.2.2016.05>
- Sajid, H., Kanwal, J., Bhatti, S. U. R., Qureshi, S. A., Basharat, A., Hussain, S., & Khan, K. U. (2022, January). *Resume parsing framework for e-recruitment*. In 2022 16th International Conference on Ubiquitous Information Management and Communication (IMCOM), 1-8. IEEE.
- Sharone, O. (2017). LinkedIn or LinkedOut? How social networking sites are reshaping the labor market. In S. Vallas (Ed), *Emerging conceptions of work, management and the labor market*. 30, 1-31. Emerald Publishing Limited.
- Singh, S. (2017). E-Recruitment: a new dimension of human resource management in India. *International Journal of Advance Research in Computer Science and Management Studies*, 5(3), 99-105. [https://www.academia.edu/35039067/E\\_Recruitment\\_A\\_New\\_Dimension\\_of\\_Human\\_Resource\\_Management\\_in\\_India](https://www.academia.edu/35039067/E_Recruitment_A_New_Dimension_of_Human_Resource_Management_in_India)
- Stone-Romero, E.F. and Stone, D.L. (2005). How do organizational justice concepts relate to discrimination and prejudice? In Greenberg, J. and Colquitt, J.A. (Eds.), *Handbook of organizational justice*. 439-467. Lawrence Erlbaum.
- Tong, D. Y. K. (2009). A study of e-recruitment technology adoption in Malaysia. *Industrial Management & Data Systems*, 109(2), 281-300. <https://doi.org/10.1108/02635570910930145>
- Van Esch, P., Black, J. S., & Ferolie, J. (2019). Marketing AI recruitment: The next phase in job application and selection. *Computers in Human Behavior*, 90, 215-222. <https://doi.org/10.1016/j.chb.2018.09.009>
- Vashisthaa, N., Goelb, A., & Dhiman, A. (2021). A study on the impact of COVID-19 pandemic in the recruitment process: With special reference to IT companies of Noida Region. *Turkish Online Journal of Qualitative Inquiry*, 12(7), 12024-12043. <https://www.tojqi.net/index.php/journal/article/download/6297/4484/6805>
- Vidros, S., Koliass, C., & Kambourakis, G. (2016). Online recruitment services: Another playground for fraudsters. *Computer Fraud & Security*, 2016(3), 8-13. [http://dx.doi.org/10.1016/S1361-3723\(16\)30025-2](http://dx.doi.org/10.1016/S1361-3723(16)30025-2)
- Wozniak, J. (2013). E-learning in HRM. *Progress in E-education*, 335-400.
- Zafar, H. (2013). Human resource information systems: Information security concerns for organizations. *Human Resource Management Review*, 23(1), 105-113. <https://doi.org/10.1016/j.hrmr.2012.06.010>