



Article

# Challenges in Recruitment and Selection Process: An Empirical Study

Sophia Diana Rozario <sup>1</sup>, Sitalakshmi Venkatraman <sup>2,\*</sup> and Adil Abbas <sup>3</sup>

- La Trobe Business School, La Trobe University, Melbourne 3086, Australia
- Department of Information Technology, Melbourne Polytechnic, Melbourne 3072, Australia
- <sup>3</sup> Holmesglen Institute, Southbank VIC 3006, Australia
- \* Correspondence: SitaVenkat@melbournepolytechnic.edu.au

Received: 30 June 2019; Accepted: 30 July 2019; Published: 5 August 2019



Abstract: Today's knowledge economy very much depends on the value created by the human resource of an organisation. In such a highly competitive environment, organisations have started to pay much attention to the recruitment and selection process, as employees form their main asset. However, the critical factors involved in the employee selection process is not well studied. Previous studies on the recruitment and selection process have been performed mainly to study the performance of the employees and the criteria attracting the right talent leading to employee retention and organizational efficiency. The distinction of this paper is that it studies the existing recruitment and selection process adopted by tertiary and dual education sectors in both urban and regional areas within Australia. The purpose of this research is to conduct an empirical study to identify the critical aspects of the employee selection process that can influence the decision based on different perspectives of the participants such as, hiring members, successful applicants as well as unsuccessful applicants. Various factors such as feedback provision, interview panel participation and preparations, relevance of interview questions, duration and bias were analysed and their correlations were studied to gain insights in providing suitable recommendations for enhancing the process.

**Keywords:** human resource; recruitment and selection process; critical factors; interview bias; feedback; stakeholder perspectives; education sector

#### 1. Introduction

The recruitment and selection process is a dynamic, complex and an important part of human resource management in organisations [1]. All the more critically, those in charge of selecting the successful applicant ought to have sufficient data whereupon to base their choices [2]. Due to these characteristic features listed above, it has caught the attention of both practitioners and researchers over the last century [3,4] with efforts for continuous improvements and research for best practices in interview and selection processes being explored [5,6]. There are different dimensions and perspectives to study, analyse and understand the selection process [7]. Some of which are: Research to study the connection between the selected applicant and their performance rate on the job [8], the efficiency of making the selection decision with assistance from technology [9,10], improving the selection process by training the interviewers [11], building recruitment strategies to increase the predictability of the right applicant [12], applicants trying to fake their personalities and resumes to get selected in the interview process [13,14].

While these studies have contributed to the body of knowledge in understanding the selection process to greater depths, not much research or practical headway has been made with regards to establishing a common measurable and objective interview structure focusing on standardised constructs and consistent labelling [15]. Nonetheless, researchers have identified this knowledge gap in

theory and practise and have recommended immediate further research on this front [15–19]. However, that is a bigger problem that has to be addressed by first understanding more in detail the existing selection practice with reasons, if any, for preference in a particular approach. Existing literature demonstrates that employers continue to trust their intuition and 'gut-feel', thereby unconsciously adopting a very subjective approach in employee selection [11].

A study in 2008 in USA involving more than two hundred hiring professionals reported that 3:1 hiring managers supported and followed subjective hiring decisions, as they believed that it allowed them to get more information from the applicant enabling them to read in-between the lines of the applicant's response to the interview questions [20]. On the other hand, there is an ongoing debate on following objective hiring decisions [15,19,21,22]. The purpose of this paper is to discuss and present the possible critical aspects of the selection process, one that is studied from the perspective of a hiring member and an applicant and to actively promote the awareness of the stakeholders to consider these aspects in their attempts to enhancing the selection process. This research work forms the foundation of our ongoing research and the objective of this empirical study is to identify and understand the critical aspects of the employee selection process. This is the first research question that sets the stage to launch the subsequent research investigations. We adopt an appropriate statistical technique to meet the research objective set out.

This paper is organised around the overarching thoughts of the employee selection process that can influence the decision based on different perspectives of the participants such as, hiring members, successful applicants as well as unsuccessful applicants. Section 2 provides the research background and approach and introduces the case study participants selected for this investigation, namely the Technical and Further Education (TAFE)/Dual education (Higher Education & Vocational Education) sector members of the Victorian TAFE Association (VTA). In this section, we also present an analysis of the demographics of the data collected to outline the percentage of participants for each participant perspective along with the distribution of their locations and levels of employment. In Section 3, we describe the empirical study design that maps the research questions with the survey questions and sets the platform for the analysis conducted in Section 4. Section 4 presents the analysis in two parts with the hiring members perspective and the applicant perspective portrayed independently. Section 5 summaries the findings from these analyses and presents the relationships established between all the critical aspects collectively. Finally, Section 6 provides the conclusions with recommendation for future research.

#### 2. Study Background and Approach

Identifying the right applicant for the job "is like searching for the sharpest needles—in a pile of needles. Without a good process, you'll likely get poked a few times." [18]. This paper will particularly identify the critical aspects of the selection decision based on existing processes reported from the personal experience of applicants and hiring members of the TAFE/Dual education sectors operating in Urban and Regional Victoria Australia. Understanding the critical aspects of the selection process can in turn contribute to the study on the potential of improving the selection process by proposing enhancements for an efficient process appreciated by hiring members and applicants alike.

This study adopts closed ended survey questions for the quantitative aspect and combines the open-ended face-to-face detailed interview questions and observations to form the qualitative design to collectively be presented as a mixed method with convergent parallel or concurrent design technique employed. Bell, Bryman [23] note that convergent parallel design technique, the data obtained from quantitative and qualitative sets are interpreted concurrently to provide a more comprehensive and multi-dimensional richer understanding and response to the research questions. In doing so, the concurrent triangulation design is enabled whereby the data obtained in the same research phase from the qualitative and quantitative sets begin to compare and contrast and thereby support one another bringing about a complete picture to the question posed [24]. This method also assists in off-setting

the limitations of both the qualitative and quantitative research methods individually and instead capitalises on the strength of both methods collectively [25].

In this study, both the probability and nonprobability techniques of sampling was used. The stratified sampling method which uses some known characteristics of the participant was utilised for this study. This was in the form of identifying human resources professionals and executives who represent their institutes in the VTA forums as their subject knowledge and practical exposure is associated to have a direct impact in this study. Additionally, under the nonprobability technique the snowball sampling and homogeneous purposive sampling was used. Some participants were requested to forward the survey link to other similar profiled participants and to recommend more participants to be contacted for the interviews, thereby following the snowball effect. One of the main criteria for shortlisting participants for this study involved the capacity of the participant to contribute to the research finding which is possible only if they have been through the employee selection process of a TAFE. By implementing this judgemental step along with ensuring only the current and past employees of a TAFE where included in the study the homogeneous purposive sampling technique was used. The overall sample size, even after using these sampling techniques, would be very large to manage and therefore the quota sampling was also implemented, where the participants for the interviewers from the urban region was fixed at five members and the regional region was set at two members from each institution. This resulted in 50 participants from the urban region and 14 participants from the regional region with the total 64+ few more interest participants for the face-to-face qualitative interviews. Likewise, for the survey the number was fixed and a minimum of ten members per institution to enable representability and generalisability of the population.

## 2.1. Applicant Attributional-Reaction Theory (AART) Based Frameework

This study adopts the Applicant Attribution-Reaction Theory (AART) based framework. AART coined by Ployhart and Harold [26] is a model integrating attribution theory into applicant reactions. Literature studies have demonstrated some promise in the empirical applications of the attributional framework to applicant reactions. AART has the central idea that the employee selection process is determined by an attributional process in the form of the applicant's reaction. This research revolves predominately around the reactions of applicants on the four major elements in selection decisions that has been delineated earlier in this paper and illustrated in Figure 1 below. In addition, since the research questions are posed to the interview applicants to study their perspectives for improvement, AART appears to be a fitting theoretical framework.

Using such a theory-driven approach, researchers have developed multidimensional improvement measures [27,28] and Silva [29] suggests the six-step guidelines as given below:

- 1. start with the applicant's perception from the process, such as their experience and emotions during the selection process, such as being 'stressful', 'positive', 'unfavourable', or 'surprising' [30]
- 2. gather the applicants' interpretation of the emotion seeking the cause for that feeling
- 3. compare the applicants' experience with their rules of justice
- 4. explore whether justice was maintained or not [31]
- 5. gather the applicants' response to the outcome along with reasons
- 6. lastly, determine the applicants' reactions to the actions in the course of the selection process in accepting or rejecting the job offer or rejection [26]

Challenges 2019, 10, 35 4 of 22

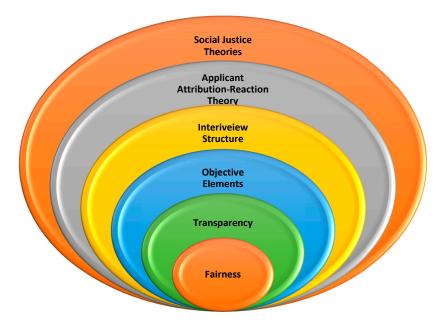


Figure 1. Applicant Attribution-Reaction Theory (AART) covering some major selection elements.

## 2.2. Demographics of the Data Collected

This section presents the cross section of the quantitative data collected from 17 TAFEs/Dual sector organisations listed with the VTA using an anonymous online survey instrument. The data was collected from 204 individual participants recollecting their personal interview experience of being associated with one or more organization as a current or previous employee of that organisation. Based on personal experience, the participants were requested to share their perspective as a successful applicant, an unsuccessful applicant and/or a hiring member of that organisation resulting in 553 different experiences captured from these participants. Most participants have been employed by more than one organisation, therefore, additional data was collected from participants reflecting their selection interview experience at more than one organisation. This distribution is depicted in Figure 2 as participants' personal experiences followed by the participant's distribution on the location between urban (68%) and regional organisations (32%) illustrated in Figure 3 below.

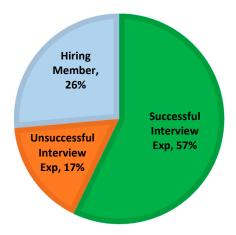


Figure 2. Distribution of Personal Experiences.

Challenges **2019**, 10, 35 5 of 22

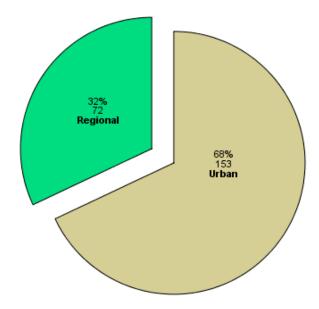


Figure 3. Distribution in Victoria by region.

The data collected has representation across multiple levels in the organisation. These are broadly categorised as the Top, Middle, Lower Management and the Frontier levels. The data portrayed in Figure 4 shows there is some representation across all the levels in this investigation.

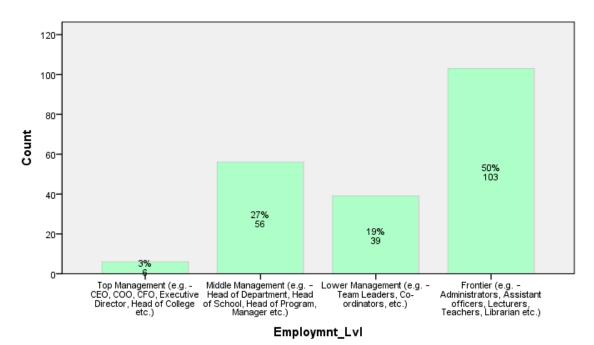


Figure 4. Employment Level Distribution.

## 3. Empirical Study Design

In order to explore the possible critical aspects of the employee selection, the survey instrument is analysed and questions for the hiring member and applicant that addresses characteristics of their personal interview experiences is identified and enlisted in Table 1 below. These aspects are correlated with the participants response to the fundamental question 'The hiring process requires many improvements' and investigated further using hypotheses to determine if it is a critical aspect.

**Table 1.** Research Question Mapped with Survey Questions.

#	Research Question	Quantitative Analysis—Survey Questions
1	What are the critical aspects with the existing selection process in identifying the most suitable candidate?	<ul> <li>Did you have any professional training before conducting the job interviews?</li> <li>Does your organisation use any recruitment management applications for hiring?</li> <li>Do you use a scoring or rating system to assist in the hiring process?</li> <li>Do you or your organisation provide detailed feedback to all interview applicants?</li> <li>Has your hiring decision ever been overridden by other dominant panel members?</li> <li>All interviewers participated equally in the interview</li> <li>Overall, I was satisfied with the entire hiring process</li> <li>The hiring process requires many improvements</li> </ul> Applicant: <ul> <li>Constructive interview feedback was provided</li> </ul>
		Applicant:
		<ul> <li>Constructive interview feedback was provided</li> <li>All interviewers in the panel participated equally in the interview</li> <li>All interview questions were relevant to the job</li> <li>The interview process was well organised</li> <li>The interviewers were well prepared for the interview</li> <li>There was no bias of any sort in the hiring decision</li> <li>The hiring process requires many improvements</li> </ul>

Using the information from Table 1 and testing against the consideration related to the participant's response on the selection process requiring improvements, Table 2 below is prepared for the hypothesis testing where the Pearson's Chi Square testing with Kendall's tau-b and Gamma's Ordinal Symmetric Measures will be used to further investigate these aspects and establish if it is critical in the selection process.

Table 2. Enlisting Aspects for Hypothesis Test.

Hiring Member Perspective	Applicant Perspective (Successful & Unsuccessful)		
1. Interviewer Training—Prior becoming a panel member	1. Request for interview performance feedback		
2. Implementing Technological	2. Require Equal Panel Participation—from all		
Assistance—Recruitment management systems	Interviewers		
3. Employing Interview Strategies—Scoring and	3. Ensure Relevant Interview Questions are		
Ranking applicant performance	posed		
4. Provide Constructive Applicant feedback	4. Establish an organised interview process		
**	5. Present Prepared Interviewers		
5. Enable Structured Interviews	<b>6.</b> Duration of the Interview		
	7. Bias in the hiring process—from interviewers		

#### 4. Analysis of Critical Aspects of the Recruitment and Selection Process

#### 4.1. Hiring Member Perspective

This information is pertinent to the selection process from the perspective of the hiring member based on their responses to the survey questions. Figure 5 illustrates that there is conclusive evidence that there is not enough professional interview training provided by the organisations to the hiring member prior conducting a selection interview.

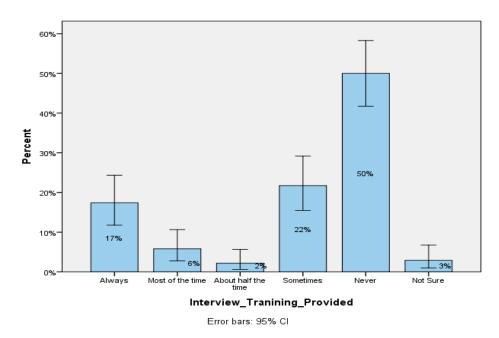


Figure 5. Interview Training by organisation.

Along with training another common aspect that came about requiring attention in the category of critical issue is the use of technology and information systems such as recruitment management systems etc. that can assist the hiring member in tracking, monitoring progress and recording discussions and decisions related to the applicant in a centralised and advanced format. In this regard, hiring members were asked the question if their organisation used any recruitment management applications as an aid in the hiring process to which below was the response.

Similar to the training aspect, the illustration above Figure 6 demonstrates a conclusive evidence that the use of technology such as recruitment management systems are not popularly used in this sector as identified by the hiring members. Only 31% of the hiring members have said they use recruitment management systems, however during the qualitative data collection it was identified that some participants misunderstood the online application system for recruitment which is merely a data collection mechanism as a recruitment management system which tracks, monitors progress and provides an analysis of all the applicants at every stage of the interview process. Therefore, there is a strong possibility that the value of 31% could be lower than portrayed in the illustration.

The use of scoring and rating systems in the interview for the selection process was discussed under the objective and mixed methods of employee selection in recruitment and selection related literature and therefore was incorporated in the survey question to check if hiring members use such strategies as assistance in the hiring process. Figure 7 below illustrates that most of the organisations are using such techniques as an aid in the hiring decision process. In the TAFE/dual sector organisations shortlisted for this study most participants associated the hiring process with the use of key selection criteria (KSC) as a fundamental requirement for the selection process. They also noted that most of the scoring and rating systems revolved around the key selection criteria. Figure 7 demonstrates conclusive evidence for the use of scoring and rating systems in the hiring process by the various organisations.

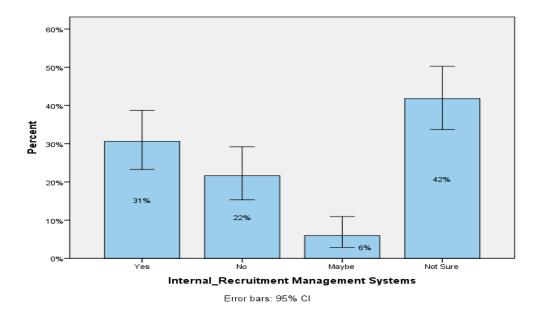
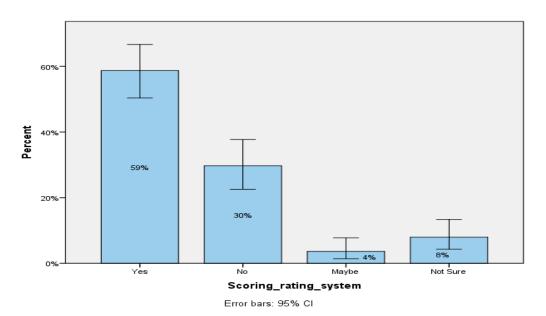


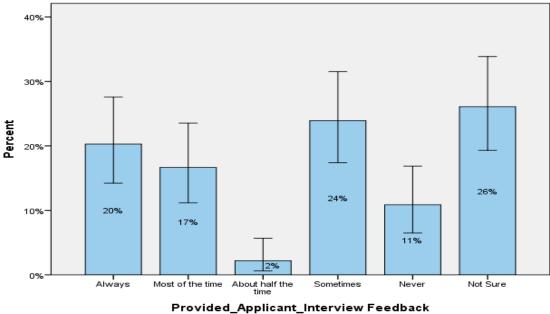
Figure 6. Use of IT Systems.



**Figure 7.** Use of metrics.

Applicant feedback after the interview selection process is mostly covered in detail in the existing literature. In that context hiring members were asked if their organisation or if them as hiring members provided a detailed feedback to all interview applicants irrespective of the applicant requesting for feedback on their performance at the interview. Figure 8 provides the illustration of the responses from the hiring members in this regard.

Challenges 2019, 10, 35 9 of 22



Error bars: 95% CI

Figure 8. Interview feedback to all applicants.

Figure 8 illustrates that the data is spread across the various options provided, however the error bars assist in understanding that this is not a common practice of the organisations in this study. Approximately 20–37% of the hiring members have denoted providing feedback as a process followed by their organisation while the rest of the participants are either not sure or do not provide feedback to all applicants.

The following hypothesis test is conducted to understand the significance of structured interviews which means it follows a standard set of questions with some flexibility for branching of questions within the stipulated time of the interview. Hiring members responded that in this sector most of them were provided with a set of questions as part of the structured interview. This response is correlated with their response to the question which appeals for improvements to the existing hiring process that their organisation is currently following:

Variables Used:

- HM\_Intrwr\_ProvidedwithQuestion—Interviewers are provided a set of questions for structured interviews
- HM\_HP\_requires\_Imp—The existing hiring process we follow requires improvements

**Hypothesis 0 (H0).** *Structured interview is not a critical aspect in identifying the most suitable candidate.* 

**Hypothesis 1 (H1).** *Structured interview is a critical aspect in identifying the most suitable candidate.* 

## 4.2. Test Result Outcome

Pearson's chi square test reported a p-value that is statistically significant p = 0.005 < 0.05, where we can now reject the null hypothesis and thereby establish that hiring members feel that structured interviews with a set of questions provided to the interviewers is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a weak strength of relationship between structured interviews and improvement to the interview process.

#### Interpretation of the Findings

This test establishes that for the data distribution illustrated in Figure 9, there is sufficient statistical significance to state that Structured interviews is a critical aspect in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's tau-b and Gamma's test results have indicated that interviewers would appreciate a set of questions provided as part of a structured interview. Also, according to the Spearman's rho correlation test results, those interviewers who followed the structured interview were less likely to request for the need for improvements in the selection interview process than those interviewers who did not follow the structured interview process.

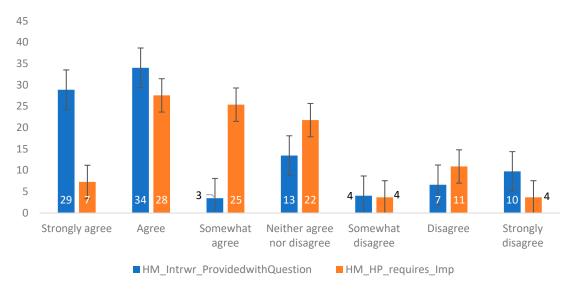


Figure 9. Questions for structured interviews.

The above section analysed the data collected from the perspective of the hiring member, the next section presents some aspects of the employee selection process from the perspective of the applicant under two scenarios, once when the applicant was successful and when the applicant was unsuccessful to establish if it is a critical aspect.

## 4.3. Applicant Perspective

From the applicant's perspective, seven different aspects related to the hiring process as presented earlier in Table 2 are processed through the hypothesis technique and the results are presented below. Each hypothesis is tested individually for the successful (HS) and unsuccessful (UNS) participant's perspective by defining the Null and Alternate Hypothesis with the confidence level set at 95% and the variables under consideration outlined for each perspective.

As depicted in Table 3, this test establishes that for the data distribution illustrated in Figure 10, there is sufficient statistical significance to state that providing detailed feedback is a critical aspect in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's tau-b and Gamma's test results have indicated that irrespective of the applicant being successful or unsuccessful in the interview process, they would appreciate constructive feedback. Also, according to the Spearman's rho correlation test results, those applicants who did not get constructive feedback have urged for the need for improvements in the selection interview process more than those applicants who got constructive feedback. Furthermore, it is noteworthy that there appears to be a comparatively stronger correlation between detailed feedback and the unsuccessful applicants more than the successful applicants. Figure 9 also highlights similar information that unsuccessful applicants were not provided with feedback as much as the successful applicants.

<b>Table 3.</b> Applicant 1 erspective ray potnesis 1—reedba	Table 3. Applicant Perspective I	Hypothesis 1—Feedback
--------------------------------------------------------------	----------------------------------	-----------------------

	Successful Applicant			
Null Hypothesis—H0	a critical aspect in identifying the			
Alternate Hypothesis—H1	Providing detailed feedback is a critical aspect in identifying the most suitable candidate			
Questions Used	<ul> <li>Constructive interview feedback was provided after the interview</li> <li>The hiring process requires many improvements</li> </ul>			
Test Result	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that for successful applicants providing detailed feedback is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a weak relationship between feedback provided and improvement to the interview process.	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that providing detailed feedback for unsuccessful applicant is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between feedback provided and improvement to the interview process.		

Notes: Interpretation consolidating the findings from both successful and unsuccessful applicants.

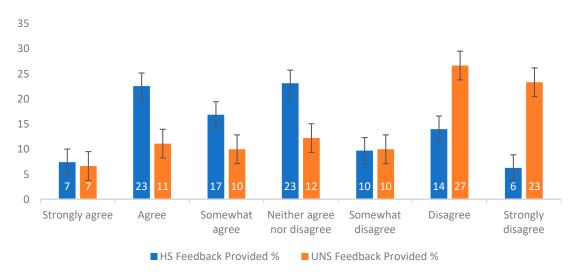


Figure 10. Constructive interview feedback.

Panel interview seems to be the commonly adopted method for the employee selection interview process in this sector. In this context, the following hypothesis test is conducted to understand if ensuring equal panel participation during the interview process is a critical aspect or not.

As depicted in Table 4, this test establishes that for the data distribution illustrated in Figure 11, there is sufficient statistical significance to state that even participation by panel members during the interview is a critical aspect in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's tau-b and Gamma's test results have indicated that irrespective of the applicant being successful or unsuccessful in the interview process, they would appreciate equal

participation from all panel members. Also, according to the Spearman's rho correlation test results, those applicants who did not experience equal participation from panel members have urged for the need for improvements in the selection interview process more than those applicants who experienced equal participation from panel members. Organisations may conduct interview training sessions for the panel members to ensure this is addressed.

Table 4. Applicant Perspective Hypothesis 2—Panel Participation.

	Successful Applicant	Unsuccessful Applicant		
Null Hypothesis—H0	Ensuring even participation by panel members during interview is not a critical aspect in identifying the most suitable candidate			
Alternate Hypothesis—H1	Ensuring even participation by pan critical aspect in identifying the mo			
Questions Used	<ul> <li>All interviewers in the panel participated equally in the interview</li> <li>The hiring process requires many improvements</li> </ul>			
Test Result	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that successful applicants feel that even participation by panel members during interview is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between even panel participation and improvement to the interview process.	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.001 < 0.05$ , where we can now reject the null hypothesis and thereby establish that successful applicants feel that even participation by panel members during interview is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between even panel participation and improvement to the interview process.		

Notes: Interpretation consolidating the findings from both successful and unsuccessful applicants.

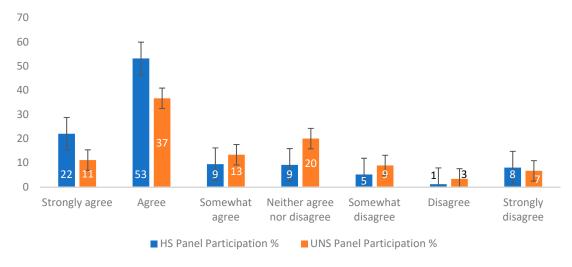


Figure 11. Panel participated equally in the interview.

Asking relevant interview questions ensures time management during the interview and more importantly assists with identifying the applicant most suited for that particular position for which the

interviews are conducted. In this context, the following hypothesis test is conducted to understand if all interview questions were relevant to the job according to the responses collected from the participants and the information is correlated with the participant's response to the employee selection process requiring improvements.

As depicted in Table 5, this test establishes that for the data distribution illustrated in Figure 12, there is sufficient statistical significance to state that asking relevant interview questions is a critical aspect in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's tau-b and Gamma's test results have indicated that irrespective of the applicant being successful or unsuccessful in the interview process, they would appreciate being asked interview questions relevant to the job. Also, according to the Spearman's rho correlation test results, those applicants who did not find all interview questions to be relevant to the job have urged for the need for improvements in the selection interview process more than those applicants who had all relevant questions in the interview.

Table 5. Applicant Perspective Hypothesis 3—Relevant Interview Questions.

	Successful Applicant	Unsuccessful Applicant		
Null Hypothesis—H0	Asking relevant interview questions is not a critical aspect in identifying the most suitable candidate			
Alternate Hypothesis—H1	Asking relevant interview questions most suitable candidate	s is a critical aspect in identifying the		
Questions Used	<ul> <li>All interview questions were relevant to the job</li> <li>The hiring process requires many improvements</li> </ul>			
Test Result	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that successful applicants feel that asking relevant interview questions is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between relevant interview questions and improvement to the interview process.	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.004 < 0.05$ , where we can now reject the null hypothesis and thereby establish that unsuccessful applicants feel that asking relevant interview questions is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between relevant interview questions and improvement to the interview process.		

Notes: Interpretation of results consolidating the findings from both successful and unsuccessful applicants.

Establishing an organised selection interview process helps the applicant and the hiring manager to go through the employee selection process smoothly and thereby obtain desirable outcomes. In this regard, the following hypothesis test is conducted to understand if establishing an organised selection process is a critical aspect according to the responses collected from the successful and unsuccessful participants.

As depicted in Table 6, this test establishes that for the data distribution illustrated in Figure 13, there is sufficient statistical significance to state that asking relevant interview questions is a critical aspect in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's tau-b and Gamma's test results have indicated that irrespective of the applicant being successful or unsuccessful in the interview process, they would appreciate attending an organised

interview selection process. Also, according to the Spearman's rho correlation test results, those applicants who did not find interview process organised have urged for the need for improvements in the selection interview process more than those applicants who had organised interview process.

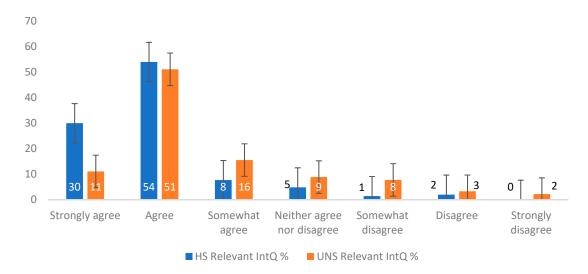


Figure 12. Relevant interview questions.

 $\textbf{Table 6.} \ \ \textbf{Applicant Perspective Hypothesis 4--Organised selection interview process.}$ 

	Successful Applicant	Unsuccessful Applicant		
Null Hypothesis—H0	Establishing an organised selection process is not a critical aspect in identifying the most suitable candidate			
Alternate Hypothesis—H1	Establishing an organised selection identifying the most suitable candidates.			
Questions Used	<ul> <li>The interview process was well organised</li> <li>The hiring process requires many improvements</li> </ul>			
Test Result	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that successful applicants feel that an organised interview process is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between organised interview process and improvement to the interview process.	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.003 < 0.05$ , where we can now reject the null hypothesis and thereby establish that unsuccessful applicants feel that an organised interview process is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between organised interview process and improvement to the interview process.		

Notes: Interpretation consolidating the findings from both successful and unsuccessful applicants.

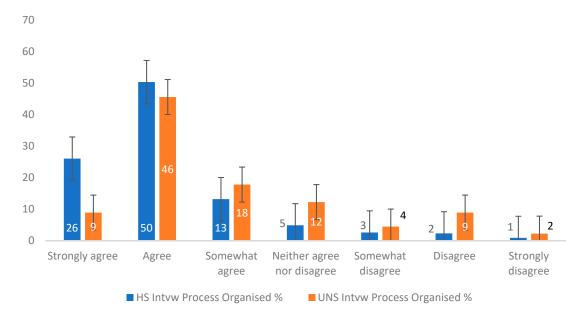


Figure 13. Process was well organised.

As with any important process preparation is fundamental in ensuring that the execution and the outcome meets the desire and expectation. In that background, applicants have responded relating to their interview process of being successful and unsuccessful, if the interviewers were well prepared for the interview.

As depicted in Table 7, this test establishes that for the data distribution illustrated in Figure 14, there is sufficient statistical significance to state that preparing interviewers for the interview is a critical aspect in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's tau-b and Gamma's test results have indicated that irrespective of the applicant being successful or unsuccessful in the interview process, they would appreciate having prepared interviewers on the panel. Also, according to the Spearman's rho correlation test results, those applicants who did not find the interviewers prepared have urged for the need for improvements in the selection interview process more than those applicants who found the interviewers prepared.

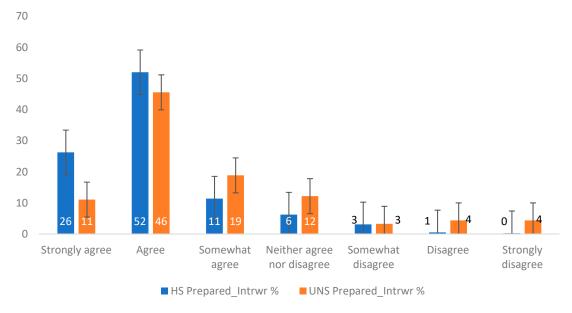


Figure 14. Interviewers prepared for interview.

Table 7.	Applicant	Perspective	e Hypothe	esis 5—In	terviewer's	s preparation.
	F F		,			F F

	Successful Applicant	Unsuccessful Applicant		
Null Hypothesis—H0	Interviewer's preparation for conducting interviews is not a critical aspect in identifying the most suitable candidate			
Alternate Hypothesis—H <sub>1</sub>	Interviewer's preparation for conducti identifying the most suitable candidate			
Questions Used	<ul> <li>The interviewers were well prepared for the interview</li> <li>The hiring process requires many improvements</li> </ul>			
Test Result	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that successful applicants feel that prepared interviewers are a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between prepared interviewers and improvement to the interview process.	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.004 < 0.05$ , where we can now reject the null hypothesis and thereby establish that unsuccessful applicants feel that prepared interviewers are a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between prepared interviewers and improvement to the interview process		

Notes: Interpretation consolidating the findings from both successful and unsuccessful applicants.

The length of the selection interview is expected to be offered decent duration, which is neither too long and stressful nor too short and dismissible. In that light, applicants have responded relating to the length of the interview process being of an agreeable and reasonable duration.

As depicted in Table 8, this test establishes that for the data distribution illustrated in Figure 15, there is sufficient statistical significance to state that the duration of the interview is a critical aspect in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's tau-b and Gamma's test results have indicated that irrespective of the applicant being successful or unsuccessful in the interview process, they would appreciate a reasonable length for the interview process. Also, according to the Spearman's rho correlation test results, those applicants who did not have a reasonable length for the interview process have urged for the need for improvements in the selection interview process more than those applicants who did have a reasonable length for the interview process.

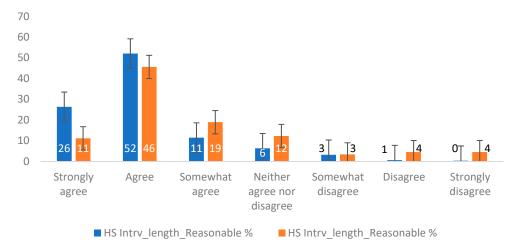


Figure 15. Reasonable Interview Duration.

**Table 8.** Applicant Perspective Hypothesis 6—Duration of the interview.

	Successful Applicant	Unsuccessful Applicant		
Null Hypothesis—H0	Duration of the interview is not a critical aspect in identifying the most suitable candidate			
Alternate Hypothesis—H1	Duration of the interview is a critic suitable candidate	al aspect in identifying the most		
Questions Used	<ul> <li>The length of the interview was reasonable</li> <li>The hiring process requires many improvements</li> </ul>			
Test Result	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that successful applicants feel the duration of the interview is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between duration of the interview and improvement to the interview process.	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.004 < 0.05$ , where we can now reject the null hypothesis and thereby establish that unsuccessful applicants feel the duration of the interview is a critical aspect in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between duration of the interview and improvement to the interview process.		

Notes: Interpretation consolidating the findings from both successful and unsuccessful applicants.

Applicants were asked to respond on bias associated with some form in the hiring decision process such as bias based on gender, religion, race or ethnicity. Additionally, applicants were given the option to respond to the situation when there was no bias of any sort in their hiring process. With the information obtained for that question, the following hypothesis testing is conducted to understand the significance and correlation of bias being present in some form during the hiring decision process and the need for employee interview selection process improvement accordingly.

As depicted in Table 9, this test establishes that for the data distribution illustrated in Figure 16, there is sufficient statistical significance to state that bias of some form during the interview is a critical issue in identifying the most suitable candidate. A Pearson's Chi Square test results along with a Kendall's taub and Gamma's test results have indicated that irrespective of the applicant being successful or unsuccessful in the interview process, they would appreciate removing bias in any form during the interview process. Also, according to the Spearman's rho correlation test results, those applicants who encountered bias during the interview process have urged for the need for improvements in the selection interview process more than those applicants who did not encounter bias during the interview process. Furthermore, it is noteworthy that there appears to be a comparatively stronger correlation between the impact of bias in interview with the unsuccessful applicants more than the successful applicants.

Table 9	Applicant Per	enective Hyr	othesis 7_	_Rias in som	e form	during the interview	,
Table 9.	Applicant i en	spective rryp	-	-Dias iii soii	ie ioiiii	during the interview	

	Successful Applicant	Unsuccessful Applicant		
Null Hypothesis—H0	Bias of some form during the interview is not a critical issue in identifying the most suitable candidate			
Alternate Hypothesis—H1	Bias of some form during the intervented the most suitable candidate	riew is a critical issue in identifying		
Questions Used	<ul> <li>There was no bias of any sort in the hiring decision</li> <li>The hiring process requires many improvements</li> </ul>			
Test Result	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that successful applicants feel bias of some form during the interview is a critical issue in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a weak strength of relationship between bias in the hiring decision and improvement to the interview process.	Pearson's chi square test reported a $p$ -value that is statistically significant $p = 0.000 < 0.05$ , where we can now reject the null hypothesis and thereby establish that unsuccessful applicants feel bias of some form during the interview is a critical issue in identifying the most suitable candidate. Additionally, the Spearman's rho test has established a negative correlation with a moderate strength of relationship between bias in the hiring decision and improvement to the interview process.		

Notes: Interpretation consolidating the findings from both successful and unsuccessful applicants.

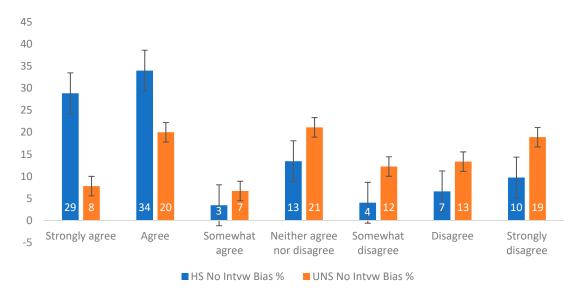


Figure 16. No bias of any sort in the hiring decision.

## 5. Summary of Findings and Discussion

Using the test results conducted above for the various critical aspects, the summary of the findings is presented below as the established critical aspects for this sector

The current study finds that there are seven items from the applicant perspective and five items from the hiring member's perspective that are enlisted in Figure 16 that have statistically significant values to be accepted as critical aspects of the selection process. In order to improve or enhance an

existing process a thorough understanding of the fundamental or the critical aspects of the process is essential to make informed and useful improvements.

Interviews differ on many dimensions however the real purpose of the interview for an organisation is selecting the applicant most suited for the position advertised. Graves and Karren [32] indicate that employee interviewing requires proper preparation, including full knowledge on the job description and detailed information of the interview questions that are appropriate and legally abiding. Effective interviewing relies upon the progressive ability of the interviewer team to obtain factual and intangible details related to the applicant and use the information obtained in a well synthesised manner [33].

The critical aspects listed in Figure 17 appears to be consistent with the discussion in the literature review presented earlier. These findings suggest that based on the participant's own individual personal selection experiences in this sector which involves a wide range of experiences since 1974–2018 (focusing predominantly on those experiences since 2000) their overall expectation of the selection process in this sector is along the lines of what talent acquisition theories and literature has outlined as good practices for identifying the most suitable applicant for an organisation. This reflects, to a certain degree, the steady and ongoing importance given to this process by applicants and hiring members of an organisation. There is always attention being focused on selection criteria predictors and employee performance linkage, alongside validity and utility of assessment measures [34,35].

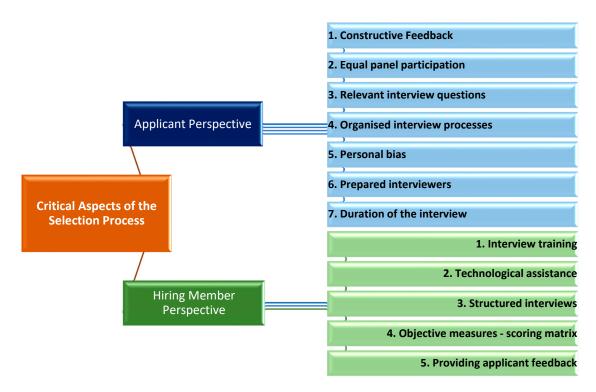


Figure 17. Critical Aspects of the employee selection process.

The findings suggest that the processes in the surveyed organisations are conscious and building a commitment towards the enhancement of the workforce selection process. From the consistent use of panel interviews across all organisations to the introduction of the key selection criteria in the early 2000s and the current high dependency on addressing the KSC by the applicant to the reliance on the submitted KSC by the hiring members there is a trail of evidence presented in the previous chapter with regards to the consciousness of the stakeholders of the selection process in emphasising and maximising the process quality to obtain the best results possible. Wilhelmy, Kleinmann [36] note that regardless of the type of interview and the duration, it is a renowned fact that interviewers are the central and crucial part of the selection process and thereby the TA process as well [37]. Interviews serve as a platform for both the interviewer and the applicant to get more information about each

other. Summing up the experiences encountered by the interviewer and the applicant and taking into consideration their perspective of the selection process, Whitacre [38] has mentioned that both parties are currently involved in hurdling the changing employment landscapes.

This current study also finds that there are no apparent statistically significant differences in the thoughts and opinion between a successful and unsuccessful applicant in the context of identifying the critical aspects of the selection process. These results to some extent conflicts with the discussions presented in the literature which highlights that based on the situation and outcome of the process there will be a change in the opinion and views of the applicants in the selection process [39]. However, these findings also demonstrate in accordance to the above literature that there may be difference in the strength of the correlation based on the outcome of the process. More specifically, the overall satisfaction of the selection process by a successful applicant has a rank with a mean score of '2-Agree' which was better than unsuccessful applicant's rank with the mean score of '4-neither agree nor disagree'. In the case of constructive applicant feedback, the findings reported that both successful and unsuccessful applicants identify this element as a critical aspect of the selection process, however, the unsuccessful applicants report the need for such an aspect more than the successful applicants. Another possible critical aspect based on the results of this study from the hiring member's perspective is the interviewer was training. All 50% of the hiring members mentioned they did not get any formal interview training however most of these organisations have clear policies and procedures documented some of which are furnished in the appendix for reference. This is a case of having it in theory and not in practice, where a new interviewer is left to rely on their own judgement and common sense in making selection decisions. All other elements that resulted as critical aspects have been furnished summative in Figure 16 above. These results are supported by talent acquisition associated literature that demonstrates the importance of the employee selection process in an organisation [40].

Overall, based on the engagement with the overarching research aim mentioned previously, this study has provided key contributions to knowledge related to the employee selection in the TAFE/Dual sector of the VTA members. A key challenge faced at the beginning of this research was the dearth of Representative research on the TAFE/Dual sector's talent acquisition and employee selection decision processes, particularly in the case of regional campuses.

## 6. Conclusions and Future Research

This empirical study investigated the critical aspects of recruitment and selection process in the TAFE/Dual education sector covering both urban and regional Victoria in Australia. In addressing the first research question of this study, an important contribution is made through providing descriptive empirical evidence on the various dimensions of the employee selection process followed by the VTA members operating in Australia. In addition, it has provided an agenda depiction of the process involving the critical aspects from the perspective of the hiring member and an applicant. This research contributes importantly to the growing literature on talent acquisition's employee selection processes by providing empirical evidence on existing selection operations amongst the VTA members in Australia.

The following limitations of this study are being acknowledged and these pave way for future research. The first limitation concerns the cross-sectional nature of this study which describes the feelings and thoughts of the participants on the selection process at a given time only. Therefore, the results are based on the emotions of the participant for that period only rather than evidence over a period of time for all the VTA members. Another limitation is that the findings are presented solely on the insights of only the participants of this study and therefore represents a partial perspective on the review of the selection process when taking into consideration all the other employees of the organisation who did not participate in the study. In this context another limitation is the sample size were additional data could always enhance and facilitate engaging with the research questions in a more full-bodied manner. Building on the results of this research, an important implication is to provide a comprehensive and representative research by involving a greater number of participants

from each organisation of that sector. This will greatly enhance the empirical knowledge base on employee selection as well as provide valuable insights and comparisons into the conceptualisations of talent acquisition amongst various sectors. Additionally, while increasing the number of participants, attention can be given to ensuring multilevel key informants from across the various levels of the organisation is involved to obtain an all-rounded multidimensional information on initiatives and practices associated with employee selection. This will provide a valuable contribution to the development of a more comprehensive understanding of talent acquisition and employee selection in the recruitment process. This paper is an outcome of the first phase of the ongoing research investigations and would extend further to discuss the dominant factors based on the critical aspects of the employee selection process identified in this study. Future work will use Exploratory Factor Analysis for identifying the dominant factors that could contribute towards improving the employee selection process.

**Author Contributions:** Conceptualization, S.D.R., S.V. and A.A.; methodology, S.D.R. and S.V.; software, S.D.R.; validation, S.D.R., S.V. and A.A.; formal analysis, S.D.R.; investigation, S.D.R.; writing—original draft preparation, S.D.R.; writing—review and editing, S.V.; visualization, S.D.R.; supervision, S.V. and A.A.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

#### References

- 1. Ma, R.; Allen, D.G. Recruiting across cultures: A value-based model of recruitment. *Hum. Resour. Manag. Rev.* **2009**, *19*, 334–346. [CrossRef]
- 2. Okusanya, A.O.; Oseji, A.S. Empirical Analysis of Sound Recruitment and Selection Criteria as a Tool of Organizational Efficiency. *J. Res. Natl. Dev.* **2012**, *14*, 1.
- 3. Ehrenfried, F.; Holzner, C. Dynamics and Endogeneity of Firms' Recruitment Behaviour. *Labour Econ.* **2019**, 57, 63–84. [CrossRef]
- 4. Ryan, A.M.; Ployhart, R.E. A century of selection. Annu. Rev. Psychol. 2014, 65, 693–717. [CrossRef] [PubMed]
- 5. Buckley, M.R.; Norris, A.C.; Wiese, D.S. A brief history of the selection interview: May the next 100 years be more fruitful. *J. Manag. Hist.* **2000**, *6*, 113–126. [CrossRef]
- 6. Acikgoz, Y. Employee recruitment and job search: Towards a multi-level integration. *Hum. Resour. Manag. Rev.* **2019**, 29, 1–13. [CrossRef]
- 7. Breaugh, J.A. Employee recruitment: Current knowledge and important areas for future research. *Hum. Resour. Manag. Rev.* **2008**, *18*, 103–118. [CrossRef]
- 8. Ekwoaba, J.O.; Ikeije, U.U.; Ufoma, N. The impact of recruitment and selection criteria on organizational performance. *Glob. J. Hum. Resour. Manag.* **2015**, *3*, 22–23.
- Wyatt, D.; Jamieson, R. Improving Recruitment And Selection Decision Processes With An Expert System. In Proceedings of the Second Americas Conference on Information Systems, Phoenix, AZ, USA, 16–18 August 1996.
- 10. van Esch, P.; Black, J.S.; Ferolie, J. Marketing AI recruitment: The next phase in job application and selection. *Comput. Hum. Behav.* **2019**, *90*, 215–222. [CrossRef]
- 11. Fink, S.B. Removing "Gut Feel" from Hiring Decisions; Baseline: New York, NY, USA, 2011; p. 13.
- 12. Ones, D.S.; Viswesvaran, C. Integrity tests and other criterion—Focused occupational personality scales (COPS) used in personnel selection. *Int. J. Sel. Assess.* **2001**, *9*, 31–39. [CrossRef]
- 13. Morgeson, F.P.; Campion, M.A.; Dipboye, R.L.; Hollenbeck, J.R.; Murphy, K.; Schmitt, N. Reconsidering the use of personality tests in personnel selection contexts. *Pers. Psychol.* **2007**, *60*, 683–729. [CrossRef]
- 14. Morgeson, F.P.; Campion, M.A.; Dipboye, R.L.; Hollenbeck, J.R.; Murphy, K.; Schmitt, N. Are we getting fooled again? Coming to terms with limitations in the use of personality tests for personnel selection. *Pers. Psychol.* **2007**, *60*, 1029–1049. [CrossRef]
- 15. Macan, T. The employment interview: A review of current studies and directions for future research. *Hum. Resour. Manag. Rev.* **2009**, *19*, 203–218. [CrossRef]
- 16. Harris, M.M. Reconsidering the employment interview: A review of recent literature and suggestions for future research. *Pers. Psychol.* **1989**, 42, 691–726. [CrossRef]

17. Huffcutt, A. From Science to Practice: Seven Principles for Conducting Employment Interviews. *Appl. HRM Res.* **2010**, *12*, 121–136.

- 18. Dan, B. Commentary: Use Objective Measures When Hiring Salespeople; Idaho Business Review; BridgeTower Media Holding Company: Boise, ID, USA, 2012.
- 19. Dehli, K.; Krogstad, G.-A. *Training, Faking and Recruitment Strategy: A Critical Review of the Job Interview's Value as a Strategigic Recruitment Tool*; Nord Universitet: Bode, Norway, 2016.
- 20. Highhouse, S. Stubborn Reliance on Intuition and Subjectivity in Employee Selection. *Ind. Organ. Psychol.* **2008**, *1*, 333–342. [CrossRef]
- 21. Barclay, J.M. Improving selection interviews with structure: Organisations' use of "behavioural" interviews. *Pers. Rev.* **2001**, *30*, 81–101. [CrossRef]
- 22. Campion, M.A.; Palmer, D.K.; Campion, J.E. A review of structure in the selection interview. *Pers. Psychol.* **1997**, *50*, 655–702. [CrossRef]
- 23. Bell, E.; Bryman, A.; Harley, B. Business Research Methods; Oxford University Press: Oxford, UK, 2018.
- 24. Saunders, M. *Research Methods for Business Students*, 7th ed.; Lewis, P., Thornhill, A., Eds.; Pearson Education: Harlow, UK, 2016.
- 25. Creswell, J.W. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 3rd ed.; SAGE: Los Angeles, CA, USA, 2013.
- 26. Ployhart, R.; Harold, C. The Applicant Attribution-Reaction Theory (AART): An. Integrative Theory of Applicant Attributional Processing. *Int. J. Sel. Assess.* **2004**, *12*, 84–98. [CrossRef]
- 27. Sackett, P.R.; Lievens, F. Personnel selection. Annu. Rev. Psychol. 2008, 59, 419–450. [CrossRef]
- 28. Auer, E.M.L. Detecting Deceptive Impression Management Behaviors in Interviews Using Natural Language Processing; Psychology. Master's Thesis, Old Dominion University, Norfolk, VA, USA, 2018.
- 29. Silva, K.T. *Let's be Clear: The Effects of Interview Transparency on Applicant Reactions;* University of Houston: Houston, TX, USA, 2016.
- 30. Schmitt, N.; Dipboye, R.L.; Macan, T.; Shahani-Denning, C. *The Selection Interview from the Interviewer and Applicant Perspectives: Can't Have One without the Other*; Oxford University Press: Oxford, UK, 2012.
- 31. Colquitt, J.A.; Kozlowski, S.W.J. Organizational Justice; Oxford University Press: Oxford, UK, 2012.
- 32. Graves, L.; Karren, R. The Employee Selection Interview: A Fresh Look at an Old Problem. *Hum. Resour. Manag.* **1996**, *35*, 163–180. [CrossRef]
- 33. Maurer, T.J.; Solamon, J.M. The Science And Practice Of A Structured Employment Interview Coaching Program. *Pers. Psychol.* **2006**, *59*, 433–456. [CrossRef]
- 34. Borman, W.C.; Hanson, M.A.; Hedge, J.W. Personnel selection. *Annu. Rev. Psychol.* 1997, 48, 299–337. [CrossRef] [PubMed]
- 35. Mohapatra, M.; Sahu, P. Optimizing the Recruitment Funnel in an ITES Company: An Analytics Approach. *Procedia Comput. Sci.* **2017**, *122*, 706–714. [CrossRef]
- 36. Wilhelmy, A.; Kleinmann, M.; König, C.J.; Melchers, K.G.; Truxillo, D.M.; König, C.J. How and why do interviewers try to make impressions on applicants? A qualitative study. *J. Appl. Psychol.* **2016**, *101*, 313–332. [CrossRef] [PubMed]
- 37. Bradley-Adams, K. Face to face with success: Keith Bradley-Adams offers advice on how to behave in interviews and how to answer tricky questions(CAREER DEVELOPMENT) (Brief. Article). *Nurs. Stand.* **2011**, *25*, 63.
- 38. Whitacre, T. The Rules Have Changed. Qual. Prog. 2018, 51, 16.
- 39. Buzzanell, P.M. Tensions and burdens in employment interviewing processes: Perspectives of non-dominant group applicants. *J. Bus. Commun.* **1999**, *36*, 134–162. [CrossRef]
- 40. Karanja, K.; Namusonge, G.; Kireru, C.J.I. Role of Talent Acquisition Processes on Competitive Advantage of Telecommunication Firms in Nairobi City County, Kenya. *Int. J. Adv. Soc. Sci. Hum.* **2017**, *5*, 10–21.



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).