Online recruitment in Portugal: Theories and candidate profiles

Catarina Brandão[a,*], Rita Silva[a,1], Joana Vieira dos Santos[b]

[a] *Faculdade de Psicologia e de Ciências da Educação, Universidade do Porto, Portugal*
[b] *Universidade do Algarve, Portugal*

ARTICLE INFO

ABSTRACT

Online Recruitment (OR) is a growing trend. It takes place online, using tools that enable the receipt of applications, the search for professionals, a quick triage and provision of feedback to applicants. This exploratory research aims to describe perceptions of this tool, gathering data from potential job candidates and personnel stakeholders. Data was gathered using a survey and interviews. Results show that 46% of participants had already used OR and that for 42% of the applicants it took less than a week to receive feedback from the recruiting organization. Qualitative data suggests a dominant positive appraisal of this type of recruitment. It is considered a fast method and is able to reach a wide audience. However, it is impersonal and there are doubts regarding the control over the process and the veracity of the job ads. Organizations should consider the perceptions of different stakeholders in order to optimize the process of OR.

1. Introduction

Recruitment is the process of attracting a pool of candidates to a particular position, followed by the Selection phase. Together they comprise the Recruitment and Selection process (R&S), one of the most traditional areas of Organizational Psychology intervention and research. The importance of accessing the most skilled and professional workers and the increasing organizational competition in today's complex environment has led to changes in the process of recruiting, making the process of «applicant attraction and recruitment more important than ever» ((Saks, 2005), p. 47).

One of the most complete definitions of Recruitment was presented by Saks (Saks, 2005), according to whom «Recruitment involves actions and activities taken by an organization in order to identify and attract individuals (…) who have the capabilities to help the organization realize its strategic objectives. (…) such activities should generate a pool of desirable candidates; enhance their interest in and attraction to the organization as an employer; and increase the probability that they will accept a job offer». This definition makes explicit the difference between the functions of Recruitment and of Selection (which follows Recruitment) and highlights the link between recruitment and organizational strategy (goals and objectives). Another important contribution by Saks (Saks, 2005) is the identification of three phases in the recruitment process: Application, Interaction, and Job offer.

Growing globalization and the use of new technologies, among other phenomena, have led to changes in the job market (Cascio, 2003).

In an ever-changing context where new technologies experience rapid development, Online Recruitment (OR) is an important source of recruitment (Rosoiu & Popescu, 2016; Saks, 2005). Consistent with this trend, the number of job seekers using this recruitment method is constantly growing (Petre et al., 2016), and online recruitment platforms (or employment portals) and social networking websites are experiencing substantial growth (Ouirdi et al., 2016; Roulin & Bangerter, 2013).

Despite OR still being a relatively new process, there is a visible and growing movement towards internet-based recruitment (Ouirdi et al., 2016; Petre et al., 2016). The use of Online Recruitment systems by organizations is increasing (Din et al., 2015) as well as their use by the workforce actively looking for or open to new job opportunities (Vidros et al., 2016).

Regardless of the growing attention devoted to OR in the social sciences and at the practical level (Petre et al., 2016), research on this topic in the field of personnel selection remains limited (Roulin & Bangerter, 2013). Online Recruitment remains an unknown research topic, particularly regarding the profile of Online Recruitment candidates. This is especially true when it comes to the scientific research regarding this phenomenon in Portugal. Little is known regarding the use of OR by companies and those who respond to job ads using this form of recruitment. This research aims to contribute to both these aspects. That is, (1) to shed light regarding the profile of effective and potential candidates who use online job search processes, describing these individuals; and (2) to explore and identify theories of action

---

regarding this HR method. We do so by gathering data from different stakeholder groups on the personnel selection process (integrating the suggestions of (Imus & Ryan, 2005)) – applicants, selection system administrators (i.e., HR professionals) and a manager.

The rest of the paper proceeds as follow: we first explore the concept of Online Recruitment, in its relation to the global process of Recruitment and Selection (R&S). Next, we highlight the advantages and disadvantages of OR. The concept of action theories, developed by Argyris and Schön (1974, 1978), is then presented as the conceptual framework for the study's second research goal. The subsequent section presents the study's method, followed by the obtained results, discussed according to the study's research questions. In the final section of the paper, we integrate the study's results; and consider its implications and future research.

1.1. Defining online recruitment

Online Recruitment is conducted via the internet, email or any other type of advanced communication system (Cunha et al., 2010). Its main goal is to capture the attention of the most skilled and capable workers with a suitable profile for the job advertised. It implies publishing job opportunities online, having an online fill-in form available for applicants and a computerized database available to store the curricula received. It may also imply using specialized selection tests (e.g., knowledge or personality tests), providing online feedback, and online procedures that enable the elimination of candidates who do not fit the required profile. Hence, this method tends to go beyond placing job opportunities available on the internet. The use of selection tests and procedures that eliminate candidates concerns the Selection phase of the RS process. This means that OR sometimes includes procedures that refer to the selection phase. This calls into question Saks' distinction between Recruitment and Selection, with OR integrating selection procedures. Voicu (Voicu, 2014) calls these procedures pre-selection.

The use of Online Recruitment relates to the need to maintain an up-to-date and efficient database that helps Human Resources professionals in the search for specific characteristics in candidate profiles (Mitter & Orlandini, 2005). The process of OR may take place through different platforms. Organizations may use their organizational website to inform candidates about job opportunities and they often have a permanent system for receiving applications from those interested in working for the organization, even when the organization is not hiring. In fact, organizational websites are frequently the main channel of communication between organizations and job seekers (Araújo & Ramos, 2002) and the use of these platforms by organizations is increasing (Saks, 2005). There are also several job search websites dedicated to presenting job opportunities and receiving applications. These employment portals present a variety of job opportunities to which candidates may apply, submitting their résumé and all the information requested by the recruiting organization. They are specialized in the process of supply and demand of job offers, presenting several services aimed at jobseekers and employers.

Applicants' reactions to the information on the online job ad are influenced by the perceived efficiency and ease of use, which refers to whether or not the candidate considers the job ad easy to understand and apply for (Sylva & Mol, 2009). The candidates' reaction is also influenced by the amount of information provided by the organization regarding the job position (Dipboye, 2005; Sylva & Mol, 2009), which should be specific and updated (Petre et al., 2016). Also to consider are perceptions of fairness in the process. This has to do with applicants perceiving that there are equal opportunities, specifically when OR includes stages of the Selection phase (i.e., procedures that eliminate candidates). In addition, it is necessary to consider the image that the organization portrays of itself on the internet and in the job ad. This may influence the satisfaction of a potential candidate, influencing his/her decision to apply for the job offer (Sylva & Mol, 2009).

1.2. Advantages of using online recruitment

Literature associates this form of recruitment with cost reduction and higher efficiency (Alves, 2008; Petre et al., 2016; Rosoiu & Popescu, 2016; Vidros et al., 2016). This is easy to understand given that placing ads on the internet is often cost free and the information may be edited if a mistake is noticed or a change is needed (Sylva & Mol, 2009), while publishing a job ad in a newspaper, for example, requires financial resources. Online Recruitment also allows for a considerable reduction in paper work, reducing application costs (Petre et al., 2016). Applicants' résumés can be stored and organized in digital databases, which enable selection of those who are most suited to a specific job position. This makes the work of HR professionals easier. Another advantage, this time for applicants, is the possibility to upload and renew the CV regularly when using some recruitment portals (Din et al., 2015).

Another important advantage of OR is the fact that it enables the quick provision of feedback to candidates (Alves, 2008). Some organizations use systems that provide automatic feedback, thus improving not only the recruitment process, but also the image that the organization communicates to candidates. Another advantage which is often mentioned regarding OR, when compared to traditional recruitment methods, is the ability to overcome geographical limits, making it possible for organizations to reach distinct populations, and for distinct populations to gain access to job opportunities around the world. Information reaches many people in a matter of seconds, no matter where those people are. Online Recruitment also enables candidates to have contact with more job opportunities and access a greater flow of information (Sylva & Mol, 2009). The candidate can access the job ad at any time or place (Alves, 2008), having access to information regarding the organization that is recruiting with just a click.[2]

1.3. Disadvantages of using online recruitment

Literature also informs us about disadvantages associated with OR. These may be from the perspective of the recruiters and/or the applicants. One disadvantage from the perspective of organizations is the potential high number of applications that this type of process often produces. In addition, using the Internet in recruitment processes may not be as simple as it may seem. If the organization is not technologically prepared with systems that organize information into a database, it may receive more résumés than desired, which may result in a waste of resources (Mano, 2001). Online Recruitment processes may be financially costly for an organization to implement. Developing a computer system that enables the placement of vacancies online, a database that is able to handle résumés and highlight (i.e., filter) those which are of interest to the organization, and still having a system available to give feedback to applicants may render a process expensive (Alves, 2005; Gomes, 2011). Also to consider is that the use of OR requires a prior careful analysis of the population that the organization wishes to target, since many job applicants still do not use internet or are unfamiliar with this resource (Alves, 2005). Hence, OR might even be a way of discriminating against internet non-users (Petre et al., 2016).

According to Alves (Alves, 2005) when OR processes include selection procedures, this stage of the R&S process becomes impersonal, and there may be no contact between the employer and the candidate. Hence, some characteristics of the candidate that may be important will not be explicit to the employer, given the lack of contact between the two (Alves, 2005; Gomes, 2011). This contact is guaranteed during traditional R&S processes.

Alves (Alves, 2008) considers OR a safe procedure. However, Online Recruitment Fraud is a reality (Vidros et al., 2016), with some job seekers not wanting to use the internet precisely for security reasons

---

[2] Provided one has access to an internet connection.

(Petre et al., 2016). Petre and colleagues found that when using job boards (i.e., job listing websites) applicants perceive a certain privacy risk. Their perception however did not inhibit the use of these platforms.

As previously mentioned, the first goal of this study is to identify the profile of effective and potential candidates who use online job search processes. This is an area which the scarce literature on OR has not explored to date. We wish to contribute to this by providing a first exploratory description on OR applicants.

1.4. Theories of action

The second goal of this study is to understand the underlying assumptions of behavior associated with OR. To do so, we use the concept of theories of action, as proposed by Argyris and Schön (1974, 1978), Argyris et al. (1987). Theories of action are held by human beings, as designing organisms. These theories govern individuals' actions (Argyris, 1995); shaping human action under all conditions (Argyris, 1976; Argyris & Schön, 1974, 1978; Argyris et al., 1987). They inform actors of the strategies they should use to achieve their intended consequences and are «governed by a set of values that provide the framework for the action strategies chosen» ((Argyris, 1976), p.20). According to Argyris, Schön and colleagues, all actions carried out intentionally have a cognitive basis, conditioned by norms, strategies and assumptions or models of the world that need general validity (Argyris & Schön, 1974). For this reason, theories of action constitute a kind of grid of action that includes, among others, «assumptions about the connections between action, consequence and situation» (Argyris & Schön, 1974, p.7).

Theories of action divide into "espoused theories" and "theories-in-use". Espoused theories refer to the theories that individuals are aware of and report, to which the subject refers and explicitly when questioned. Theories-in-use are those which really guide the individuals' actions (Argyris & Schön, 1974, 1978) and can be determined by observing peoples' behavior. These two types of theories are not always compatible; together they shape human behavior under all conditions (Argyris, 1976; Argyris et al., 1987).

Argyris (Argyris, 1976) uses the concept of theories of action particularly to understand and intervene in the processes of leadership and organizational change and learning. Given that this study seeks to understand what people think about OR and that theories of action «are the key to understanding the human action» (1976, p.20) we believe this is the appropriate framework to identify the beliefs, attitudes and values of different OR stakeholders. We adopt the concept of theories of action, specifically focusing on espoused theories. We seek to explore, in this study, the theories about OR, so that, while accepting the possibility of some inconsistency between espoused theories and theories-in-use, we can understand the underlying assumptions of behavior and practices regarding this specific Recruitment method.

2. Method

An exploratory descriptive and interpretative study was conducted. This design was chosen because of the lack of research on the topic, particularly in Portugal. The study has two research questions (RQ). RQ1: What is the profile of candidates who use Online Recruitment? and RQ2: What are the perceptions of potential and effective users of Online Recruitment and different organizational actors regarding this method? Given the research questions, qualitative and quantitative data was gathered.

2.1. Participants

For Research Question 1 and 2 we gathered data from 74 participants using a convenience snowball sampling. These participants had a Median age of 28.47 years (age range: 15–57 years), 68% were female

and 32% were male. For RQ2 we also gathered data from three organizational actors: two Human Resource professionals (Median organizational tenure = one year), and an owner of an organization (with 56 years), also using a convenience sample. All participants are Portuguese.

2.2. Data collection and procedures

Data was collected using an online survey on Google Docs and interviews.

The survey presented four items that assessed the use of online recruitment: three close-ended questions (RQ1; e.g., *have you ever responded to an online job ad?*), and an open-ended question (RQ2; *what is your opinion of online recruitment?*). The last three items on the survey asked sociodemographic data (RQ1; e.g., age). The survey was made available on the Google Docs platform for two weeks. The link to the survey was sent to the researchers' list of contacts.

Regarding the interviews (RQ2), two structured scripts were adapted from Gomes (Gomes, 2011), who conducted a study on recruiting using online social networks. The organization's owner script presented four open-ended questions (e.g., *in your opinion, what are the advantages of Online Recruitment?*). This interview was conducted at the participants' work organization. The Human Resources professionals' script presented nine open-ended questions (e.g., *what motivates your organization to use the internet to advertise job offers?*). Given these two participants' time constraints, we gathered data from them using electronic interview conducted offline, in asynchronous mode, through e-mail.

2.3. Data analysis

Qualitative data was subjected to qualitative thematic content analysis, following Bardin's (Bardin, 2009) principles, with the support of NVivo11 (QSR). Content analysis was used to identify implicit theories regarding Online Recruitment. The corpus of analysis is made of the interview transcripts and the survey's open-ended responses. The adopted coding unit was thematic. Quantitative data was subject to descriptive statistics and some non-parametric tests using SPSS24 (IBM).

3. Results and discussion

In this section we present and discuss the results, according to the study's Research Questions.

3.1. The profile of online recruitment candidates

Based on the Shapiro-Wilk normality test results and the size of the sample, the non-parametric Kruskal-Wallis test was selected in order to evaluate differences in mean ranks and to assess the null hypothesis that the medians were equal across the groups. A post hoc pairwise comparison was performed, which indicated significant differences across groups who used online recruitment or don't use online recruitment.

Data shows significant differences between generations, Kruskal–Wallis X (2) = 5.08, $p = 0.007$. All the variables are less than or equal to the median (2.00). Post-hoc tests reveals that the baby boomer respondents have significantly higher scores (mean rank = 54.50), compared to the millennial respondents (mean rank = 35.29). The post hoc between those groups, baby boomer and millennial, confirm this significant difference (Kolmogorov Smirnov $Z = 1.109$; $p = 0.171$; Mann-Whitney $U = 62.500$; $p = 0.028$). Regarding the post hoc between baby boomer and generation X (Kolmogorov Smirnov $Z = 0.809$; $p = 0.529$; Mann-Whitney $U = 25.000$; $p = 0.090$) there aren't significant differences. Between generation X and millennial (Kolmogorov Smirnov $Z = 0.385$; $p = 0.998$; Mann-Whitney $U = 394.500$; $p = 0.445$) the differences aren't statistically significant either.

To analyze the differences in online recruitment by levels of education we reduced the number of groups to three: high school education ($n = 23$), bachelor's degree ($n = 41$) and master's/PhD degrees ($n = 10$). Data doesn't show significant differences between levels of education, Kruskal– Wallis X (3) = 4.09, $p = 0.252$. Post hoc between high school and bachelor degree (Kolmogorov Smirnov Z = 0.985; $p = 0.286$; Mann-Whitney U = 350.500; $p = 0.050$) shows significant differences. Observing the mean ranks it is possible to see higher scores for the high school participants (mean rank = 37.76) than the bachelor's degree (mean rank = 29.55). Between the high school and master's/PhD groups there aren't significant differences (Kolmogorov Smirnov Z = 0.288; $p = 1.000$; Mann-Whitney U = 70.500; $p = 0.631$). This is similar for the results from degree and master's/PhD participants (Kolmogorov Smirnov Z = 0.324; $p = 1.000$; Mann-Whitney U = 70.500; $p = 0.631$).

Thirty-four of our participants (46%) had already used OR. Hence, we consider these participants as online recruitment candidates/applicants and consider their data to answer the first Research Question. The sample was mainly composed of females ($n = 20$; 60%), aged between 15 and 57 years old, with an average of 28.47 ($SD = 9.30$). When we look at these participants' specific demographic characteristics (Table 1) we see that 50% belong to the age group of 20–25 years and > 79% hold a high degree level of education. Seventy-nine percent are Millennials; that is, individuals born between 1982 and 2000.

Most candidates hold a bachelor's or higher degree and their mean age suggests that they may be looking for their first job position. Millennials are technologically informed and competent, thus being able to use this type of resource. Some of the cultural events associated with this generation are the use of computers as instruments for various purposes (e.g., musical instruments), the use of video games, and the use of social networks such as Facebook (Junginger, 2008). Hence, OR may be the adequate recruitment method for organizations to use when wanting to reach this population. These individuals have a self-perception of being special, are confident and team-oriented. They are also pressured, ambitious and protected (Keeling, 2003). They spend several hours with television, the internet, peer groups and alternative parenting figures (Newton, 2000) and are heavily dependent on communication through technologies and the internet (Alsop, 2008). These characteristics make them more demanding with regard to their place of work and the work itself.

Regarding these candidates' experience on the use of OR (see Table 2), data shows that 38% did not receive feedback from the recruiter. This informs us that organization that use OR do not always have an online system that provides automatic feedback to candidates, having received their application. These organizations are not making use of one of the advantages that is associated with this form of recruitment, which is fast feedback to applicants (Alves, 2008; Rosoiu & Popescu, 2016). This feedback is associated with creating a positive organizational image among the candidates (Saks, 2005). On the other

Table 1
Online recruitment candidates demographic characteristics ($N = 34$).

	n	%
Gender		
Female	20	58,8
Male	14	41,20
Generation		
Baby Boomer	0	0
Generation X	7	20,60
Generation Millennials	27	79,40
Education		
PhD	1	2,94
Master's degree	3	8,82
Bachelor's degree	23	67,65
High school	7	20,59

Table 2
Candidates' experience using online recruitment ($N = 34$).

	n	%
Received feedback		
Yes	21	61,76
No	13	38,24
Time to feedback		
< 1 week	9	42,86
1 to 4 weeks	7	33,33
> 1 month	5	23,81

hand, one may speculate if the job ads to which our participants applied were legitimate or indeed were fraudulent, which could explain the absence of feedback from the recruiters.

Considering the candidates who did receive feedback regarding their application (61,76%), nine received it in less than a week; seven had to wait one to four weeks, and for five participants it took more than one month to receive feedback.

As individuals from the millennial generation are progressively occupying the job market, it is fundamental that recruiters give rapid feedback to their applications. Millennials expect to work in an environment with a friendly culture and positive people (Society for Human Resource Management, 2001); late feedback may influence their image regarding the organization recruiting, dropping out of the recruitment process.

3.2. Perceptions regarding online recruitment

In this section we consider qualitative data collected from potential and effective OR applicants (online survey) and organizational actors (interviews).

3.2.1. Potential and effective online recruitment candidates

Data regarding the survey's participant perceptions on OR was coded at two levels: the type of appraisal underlying the discourse on OR (e.g., positive or negative); and the reasoning presented by the participant. Regarding the type of appraisal, analyses show that 36 participants gave a positive appraisal of OR; 19 gave a negative appraisal; seven did not present a position; one gave a neutral appraisal and 11 gave a two-way appraisal, that is, they gave a positive and negative appraisal simultaneously (see Fig. 1).

Table 3 presents excerpts that illustrate the different type of appraisals found in the data, enabling us to understand what participants meant.

Considering the reasoning presented by the participants, analyses show that the perceptions regarding OR reflect eight theories, which are presented next, using participants' verbal data, and considering their presence in the data (that is, how many participants hold each theory).

Online Recruitment is a facilitator of access ($n = 18$). We can identify in the data the perception that Online Recruitment facilitates the access of candidates to job opportunities («*One has easy access to the needs of the working world*», P16) and that this is a way for candidates to gain quick access to recruiting organizations. There is also the perception that this method facilitates the access of organizations to job candidates («*organizations can reach more people and have more candidates to fill a vacancy*», P36). So the advantage is considered twofold - for the candidates and for the organizations, which is coherent with what the literature on the topic refers (e.g., Petre et al., 2016; Rosoiu & Popescu, 2016). This result suggests that effective and potential applicants are aware of OR advantages not only from their side, but also considering the recruiters' perspective.

Online Recruitment is fast and practical ($n = 15$). According to this perception, OR makes the application process quicker. Online Recruitment enables job seekers to respond very quickly to job opportunities (Sylva & Mol, 2009). This time-saving opportunity for
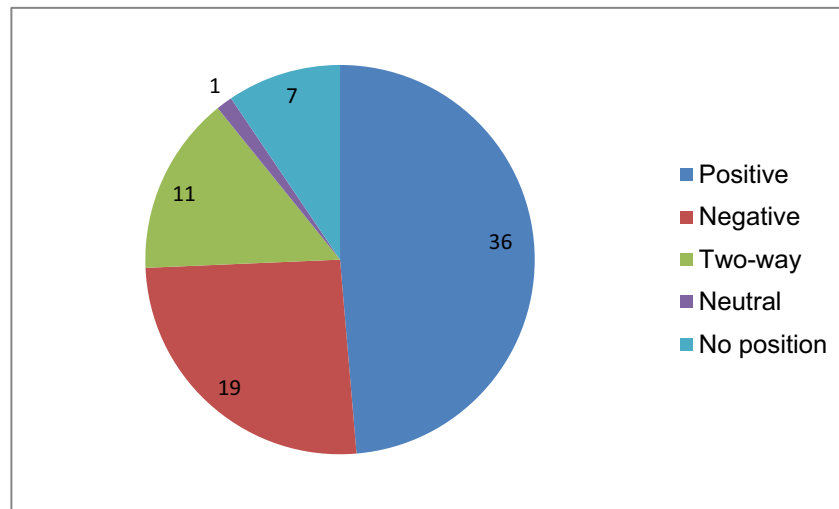
Fig. 1. Survey's participants appraisal of online recruitment (*N* = 74).

Table 3
Excerpts illustrating survey's participants appraisal of online recruitment (*N* = 74).

Type of appraisal	Excerpt
Positive	«An effective way to address as many people as possible, at lower costs» (P1)
Negative	«Its veracity is always very uncertain» (P5)
No position	«For now I have no opinion» (P19)
Neutral	«It is normal, it reflects the daily evolution» (P33)
Two-way	«Interesting and essential given the new technologies. (…) However personally delivering the CV can also be beneficial» (P27)

Note: P refers to participant.

organizations and applicants (Petre et al., 2016) is important given that literature shows that delays between recruitment stages may increase the number of dropouts from the process (Saks, 2005). Hence, resorting to OR may help to prevent skilled candidates from abandoning recruitment processes, if organizations provide them with rapid feedback. However, as demonstrated before (see Section 3.1.), 38% of OR applicants in this study did not receive feedback regarding their application.

Participants also consider OR to be practical («*it is convenient*», P16). Applicants may send their résumés via email or upload them to corporate, social networking or recruitment websites (Petre et al., 2016) from their home or any other place with an internet connection, and directly contact the recruiter or the decision maker using this channel (Rosoiu & Popescu, 2016). This makes it not only less time consuming than traditional recruitment methods, but also more convenient and comfortable for applicants. A participant also stated that OR allows him to avoid what he considers the expenditure of time of an initial interview. Regardless of whether a first interview should or should not be dismissed from an R&S process, this data shows that this participant conceptualizes OR as a process that encompasses selection procedures.

There is a specific relational dimension to Online Recruitment (*n* = 14). Participants refer to the impersonal nature of this process. They refer to the recruitment phase («*I registered on several websites (…) they never gave me feedback (…) after filling in they do not call or email you. This is awful (…) They mix technology with people management, but they have to pay more attention to people, we are not machines!*», P27), but also to the selection phase («*There will not be a physical application but an application like that of so many others, it will not be possible for me to stand out*» P32). They also consider the R&S process globally («*It may be too technological (…) we lose the human part of the process*»). This is important data given that job applicants tend to have a more positive perception of

organizations and recruiters who are pleasant and informative when meeting and interacting with job candidates (Saks, 2005).

When participants associate an impersonal dimension to OR they tend to be thinking of the job interview, which is already part of the selection phase («*It's weird doing a Skype interview*», P8). Once again, despite the process being named Online Recruitment, people tend to think of it as including more phases, some of which refer already to the selection phase. This suggests that maybe we should be talking about Online R&S instead of Online Recruitment. This becomes even more relevant when we consider that this process usually makes use of procedures that eliminate candidates. Curiously enough, the impersonal dimension of the process may also have a positive side. In the words of a participant «*the physical aspect is unfortunately taking on an increasing importance in our society, and it will be devalued through such recruitment*» (P31). Once again, we see selection procedures being included in OR. Moreover, we see that the impersonal dimension of this process may avoid the influence of the evaluator or recruiter's beliefs regarding the candidate's physical appearance. Physical attractiveness is, indeed, one of the factors consistently found to influence interviewers' judgments, with attractive applicants being more favourably evaluated than unattractive applicants (Dipboye, 2005).[3]

Fears regarding the safety of Online Recruitment (*n* = 13). Another theory present in the data has to do with the veracity of the process. Specifically, participants may doubt the veracity of the job offers made available online («*provided that the organizations involved are identified and legally authorized*», P18). Some participants seem to fear that the process becomes controlled by an organization or someone who may use the information that the candidates make available online for fraud («*it remains dangerous to share very important information on the internet regarding the candidate, which has to be used correctly by the organization*», P36). Applicants are often not aware of online fraudulent job posting, and phony job ads are becoming increasingly hard to distinguish from legitimate job ads (Vidros et al., 2016). This is indeed a major concern, and research in this area is presently scarce, since this is a relatively new phenomenon.

Online Recruitment is cheaper than traditional recruitment methods (*n* = 6). This theory states that participants consider OR a cheaper process for organizations and candidates. While it is true that organizations can make their ads available on the organization's website or on a free job website, the implementation of an online-automated system may become expensive and recruitment service providers are not cost

---

[3] This is however, a bias present in many HR decisions, beyond Recruitment and Selection.

free. It is also true that people looking for a job no longer have to buy newspapers to access job opportunities, which in the past were necessarily published there. This method also enables candidates to save money on the documentation sent to organizations («*you reduce costs since you can present everything in résumé and other documents in digital format*», P63).

Online Recruitment is effective (*n* = 5). Some participants consider this recruitment method effective. Unfortunately, participants who hold this implicit theory didn't develop their perception in depth, but one participant said something that can help us understand what it might mean here to be effective: «*It is easier to filter and organize; it is less likely to lose the CV sent by the job applicant*» (P27). Information systems used in OR are able to organize applications into databases, which allow for filtering candidates with specific profiles (Alves, 2008). This renders the process more accurate (Vidros et al., 2016).

Its functioning needs to be enhanced (*n* = 3). Some participants consider that OR still does not work to its full potential. Two participants consider this in general; a third refers specifically to Portugal «*Online recruitment is a very important tool in today's world, but here in Portugal it is still very much underutilized*» (P69).

Online Recruitment is an asset (*n* = 2). This last theory was not explained or developed by participants, but it seemed important to differentiate it from the rest. It signals that the process is useful and brings value. However, it is not clear in what terms this happens according to the study's participants.

The theories identified above reflect some of the features that the scarce literature on the subject associates to OR and contributes to the understanding of this process in Portugal. It emerges as a quicker and cheaper process when compared to traditional methods. However, it is interesting to note that there is the perception (i.e., theory) that this is an impersonal process. If the possibility to reach a large number of individuals is considered to be positive, it can also make it difficult for someone to stand out in the crowd, as seen in the discourse of participant P32, presented above. These results suggest that organizations must become aware of the theories of those looking for job or new career opportunities regarding recruitment, so they may minimize flaws in the process, optimize it, and thus find the best talent.

3.2.2. Online recruitment stakeholders

We next consider data from organizational actors who are Online Recruitment stakeholders - HR professionals and a manager, owner of an organization. First we focus on the HR professionals' perspective.

Online Recruitment is a facilitator of access. According to these stakeholders, OR is a fast way to reach people. Both refer to several online job platforms, namely platforms managed by colleges, which are contacted by companies searching for candidates, in order to post job ads on their online platforms. In this way the organizations are able to reach their target in a strategic manner. The facilitation also happens on the side of the job seeker, since he may access information from anywhere.

Online Recruitment is fast and practical. According to these HR professionals, an OR process is carried out within one to three weeks. They consider it a quicker strategy to conduct recruitment and to be "the future"; that is, that companies will increasingly use online tools. In fact, numbers show that the use of this method continues to grow.

There is a specific relational dimension to Online Recruitment. Despite the advantages associated with OR, these participants recognize the importance of personal contact and that it is absent in Online Recruitment processes. This is coherent with the perception of some of the survey participants, when referring to the impersonal dimensions of OR.

Online Recruitment is cheaper than traditional recruitment methods. These participants also consider Online Recruitment a cheaper way of recruiting when compared to traditional method of recruiting.

Finally, we have the manager's perceptions.

Traditional Recruitment methods enable strategic access. According to the manager, traditional recruitment methods, namely job ads in newspapers, enable access to the considered relevant population in a more strategic way («*we can make a selection of the people we want to reach, for example if we want a person from the north (…) we can choose to place an ad in a newspaper which is more read in the area*»). However, he acknowledges that sometimes using this method may not give access to all the relevant candidates («*We may not have access to as many people or as many people as we would like*»), particularly as people are increasingly using technological tools. It is also true that if organizations are targeting millennial applicants, then using OR may be the strategic way to gain access to them.

Traditional recruitment is not as fast as OR. The manager is aware of the restrictions regarding the number of people one may reach when using traditional recruitment strategies. He also considers that the possibility of reaching a wider public more quickly (which happens when using OR) is an advantage. Nonetheless, he believes that traditional recruitment should not be put aside, since many candidates still use traditional channels when searching for job opportunities. This brings us back to the possibility of OR discriminating against candidates who do not use the internet. Traditional recruitment methods allow these candidates to access job opportunities.

Online Recruitment is more impersonal than traditional recruitment methods. The manager considers traditional recruitment as being more personal. This is consistent with the theory identified in the data from the survey's participants regarding the interpersonal characteristics of OR, which they consider poor. It is also coherent with the perception of the HR professionals. For these last two, however, it seemed to be considered a fair price to pay considering the method's advantages.

Traditional recruitment has higher costs than Online Recruitment. Interestingly, this stakeholder considers that the fact of having costs associated with posting a job ad in a newspaper (and the longer the job ad, the higher its price) make the ad more objective, because it forces the recruiters to present only the necessary information.

All the theories presented above represent assumptions that are understood as hypotheses to be tested.

4. Conclusions

The rapid technological evolution of recent times and the increase in the numbers of people who hold a high level of technological literacy suggests it would be important to conduct this research again in the near future, so we may see if the OR candidate's profile evolves as well as the identified theories regarding this process. To our knowledge, this research is the first to shed some light on these topics in Portugal. Our exploratory results inform Human Resources professionals and recruitment managers (particularly those working in Portugal or with Portuguese populations) regarding how job candidates perceive this source of recruitment and how they relate to it. There is growing competition in the Online Recruitment strategy; this makes it necessary to «identify and adopt practices that yield competitive advantage among organizations» (Din et al., 2015, p. 857). This research presents crucial information if integrated in Recruitment and Selection processes, supporting the definition of strategies to attract the most skilled workers and avoid dropouts from these processes. Also, despite the fact that the HR professionals focused on in this research recognize that OR is more impersonal than traditional recruitment methods, they believe it to be a method to favour in R&S processes.

This research has some limitations that must be addressed. We used a convenience sample in order to answer our research questions. Future research should use a representative sample. One may also consider the implications of doing electronic interviews, which do not allow for building a strong relationship with the interviewee, which is fundamental to explore a theme in depth, and which qualitative research seeks to do. Nonetheless, the time delay in the response that is intrinsic to the use of e-mail can facilitate reflexivity in the communication, allowing a greater reflection on the presented topics (Morgan & Symon,

2004). Emerging technological advances make this kind of interview more commonplace, with the forms of communication between people changing radically. In addition, data should be gathered regarding the organization's sector to which candidates apply. It is probable that the use of OR continues to increase considerably in the private sector when compared with the public sector, where the level of bureaucracy imposes a slower pace of change, making it more difficult to adopt online procedures in R&S processes. One can speculate that the use of OR may continue to increase in the private sector, but that this will not occur in the public sector. It would also be interesting to research this topic considering the dimension of the organization (e.g., SME, large organizations). Data was not gathered regarding if the effective candidates were hired through the OR processes in which they were involved. Future research should investigate the characteristics of applicants recruited through different web-based recruitment sources and post-hire outcomes. One last reflexion has to do with the nature of the theories explored using qualitative data. As mentioned before, theories of action divide into espoused theories and theories-in-use. This research had access to the participants' espoused theories. We need now to develop designs in order to see if these match their theories-in-use. It is also necessary to use deductive designs to test the premises identified in this research.

Future research will make it possible to understand if there are changes regarding how long it takes to receive feedback from recruiting organizations and the type of feedback presented (more or less personalized). Research should also look at the specific phases that are included in OR. As our results show, participants refer to procedures included in the Recruitment stage; others refer to procedures included in the next stage of R&S, which is Selection. Hence, we should try to understand the profiles of the use of OR. By this, we mean to try to understand if organizations tend to use OR processes to do Recruitment and sometimes Selection; or if organizations increasingly use this OR processes not only to recruit but also to select candidates, hence taking advantage of the functionalities of online information systems. However, this may happen at the expense of important dimensions, as our survey's participants state, more specifically relational aspects of the process.

This research seeks to increase the literature on the topic of Recruitment as a process that should be focused in detail and not merely as a sub-discipline of selection process literature. This research is particularly relevant when considering its potential to inform selection system designers, administrators and hiring managers, and informing how the hiring process may be improved, from the applicants' perspective. These two arguments are part of the Anderson's (Anderson, 2005) proposal of a model to evaluate a research's relevance and rigor in the subject of Personnel Selection.

Considering the use of technologies and the importance of R&S process, this research suggests the need to continue focusing on this topic. It will be interesting to see the development of the use of OR and how Human Resource professionals and academics think about and research the topic. One also needs to understand the potential changes that may occur regarding the profile of online candidates. As *millennial* workers conquer the job market, one will probably witness an increase in this way of finding and managing talent.

References

Alsop, R. (2008). *The trophy kids grow up.* San Francisco: Jossey-Bass A Wiley Imprint.

Alves, N. (2008). Políticas de educação/formação de jovens: Tensões e contradições [Youth education/training policies: Tensions and contradictions. Perspective]. *Perspectiva, Revista da Universidade Federal de Santa Catarina, 26*(1), 209–230.

Alves, R. (2005). eRecruitment: Novos desafios para o Recrutamento on-line [eRecruitment: New challenges for online recruitment]. Retrieved from http://www.janelanaweb.com/reinv/rui_alves6.html, Accessed date: 31 July 2017.

Anderson, N. (2005). Relationships between practice and research in personnel selection: Does the left hand know what the right is doing? In A. Evers, N. Anderson, & O. Voskuijl (Eds.). *The Blackwell handbook of personnel selection* (pp. 1–24). UK: Blackwell Publishing, Ltd.

Araújo, S., & Ramos, A. (2002). *Recrutamento On-line: Estudo da Percepção de Utilização da Internet em Empresa de Consultoria de Recursos Humanos [Online recruitment: Study of the perception of internet use in a human resources consulting firm].* Curitibia, Brasil: ENEGEP.

Argyris, C. (1976). Leadership, learning and changing the status quo. *Organizational Dynamics, 4*(3), 29–43.

Argyris, C. (1995). Action science and organizational learning. *Journal of Managerial Psychology, 10*(6), 20–26. http://dx.doi.org/10.1108/02683949510093849.

Argyris, C., & Schön, D. A. (1974). *Theory in practice. Increasing professional effectiveness.* San Francisco, CA: Jossey-Bass Publishers.

Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective.* Reading, Massachusetts: Addison-Wesley Publishing Company.

Argyris, C., Putman, R., & Smith, D. M. (1987). *Action science. Concepts, methods, and skills for research and intervention.* California: Jossey-Bass Publishers.

Bardin, L. (2009). *Análise de conteúdo [Content analysis].* Lisboa: Edições 70: Persona.

Cascio, W. F. (2003). Changes in workers, work, and organizations. In W. Borman, D. Ilgen, & R. Klimoski (Vol. Eds.), *Handbook of psychology. 12. Handbook of psychology* (pp. 401–422). John Wiley Sons, Inc.

Cunha, M., Rego, A., Cunha, R. C., Cabral-Cardoso, C., Marques, C., & Gomes, J. (2010). *Manual de Gestão de Pessoas e do Capital Humano [Handbook of people management and human capital]* (2ª ed.). Lisboa: Sílabo.

Din, S., Anuar, R., Omar, N., Omar, H., & Dahlan, J. (2015). Discovering the use of online recruitment via social media of student internship. *Procedia Economics and Finance, 31*, 856–860. http://dx.doi.org/10.1016/S2212-5671(15)01181-8.

Dipboye, R. L. (2005). The selection/recruitment interview: Core processes and contexts? In A. Evers, N. Anderson, & O. Voskuijl (Eds.). *The Blackwell handbook of personnel selection* (pp. 121–142). UK: Blackwell Publishing, Ltd.

Gomes, A. (2011). *Recrutamento nas redes sociais on-line [Recruitment on online social networks]. Dissertação de Mestrado não publicada.* Lisboa, Portugal: Instituto Superior de Economia e Gestão da Universidade Técnica de Lisboa.

Imus, A., & Ryan, A. M. (2005). Relevance and rigor in research on the applicant's perspective: In pursuit of pragmatic science. In A. Evers, N. Anderson, & O. Voskuijl (Eds.). *The Blackwell handbook of personnel selection* (pp. 291–305). UK: Blackwell Publishing, Ltd.

Junginger, C. (2008). Who is training whom? The effect of the millennial generation. *FBI Law Enforcement Bulletin, 77*, 19–23.

Keeling, S. (2003). Advising millennial generation. *NACADA Journal, 23*(2), 30–36.

Mano, C. (2001). Pescaria on-line: Como usar a rede Para encontrar talentos [online fishing: How to use the net to find talents]. *Exame, São Paulo, 742*(12), 147–149.

Mitter, G., & Orlandini, J. (2005). Recrutamento on-line/internet [Online/internet recruitment]. *Maringá Management: Revista de Ciências Empresariais, 2*(2), 19–34.

Morgan, S. J., & Symon, G. (2004). Electronic interviews in organizational research. In C. Cassel, & G. Symon (Eds.). *Essential guide to qualitative methods in organizational research.* London: Sage.

Newton, F. B. (2000). The new student. *About Campus, 5*(5), 8–15.

Ouirdi, M. E., Pais, I., Segers, J., & Ouirdi, A. E. (2016). The relationship between recruiter characteristics and applicant assessment on social media. *Computers in Human Behavior, 62*, 415–422. http://dx.doi.org/10.1016/j.chb.2016.04.012.

Petre, A., Osoian, C., & Zaharie, M. (2016). Applicants' perceptions on online recruitment. *Managerial Challenges of the Contemporary Society, 9*(1), 63–67.

Rosoiu, O., & Popescu, C. (2016). E-recruiting platforms: Features that influence the efficiency of online recruitment systems. *Informatica Economica, 20*, 46–55.

Roulin, N., & Bangerter, A. (2013). Social networking websites in personnel selection a signaling perspective on recruiters' and applicants' perceptions. *Journal of Personnel Psychology, 12*(3), 143–151.

Saks, A. M. (2005). The impracticality of recruitment research. In A. Evers, N. Anderson, & O. Voskuijl (Eds.). *The Blackwell handbook of personnel selection* (pp. 47–72). UK: Blackwell Publishing, Ltd.

Society for Human Resource Management (2001). Generation Y's impact on the workplace. Retrieved from http://www.shrm.org/Research/FutureWorkplaceTrends/Pages/0301b.aspx.

Sylva, H., & Mol, S. T. (2009). E-recruitment: A study into applicant perceptions of an online application system. *International Journal of Selection and Assessment, 17*(3), 311–323. http://dx.doi.org/10.1111/j.1468-2389.2009.00473.x.

Vidros, S., Kolias, 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.

Voicu, M. (2014). Using online questionnaires in the employee recruitment activity. *Procedia - Social and Behavioral Sciences, 124*, 34–42. http://dx.doi.org/10.1016/j.sbspro.2014.02.457.

Catarina Brandão Assistant Professor at Faculty of Psychology and Educational Sciences (FPCEUP), University of Porto. Presently, Coordinator of the Organizational, Work and Social Psychology area of the Integrated Master course in Psychology. Founder and head of the Organizational Psychology and Human Resources Unit at FPCEUP. Has published several papers on Leadership, Human resource systems, Organizational development and Qualitative research.

Rita Silva Master's Degree in Psychology, works as an organizational psychologist and as a consultant in career management and psychological assessment at the Organizational Psychology and Human Resources Unit at FPCEP. Has authored publications focusing Innovation and Employee Involvement and Online Recruitment.

Joana Vieira dos Santos Assistant Professor at Department of Psychology and Educational Sciences, Faculty of Human and Social Sciences, at University of Algarve. Coordinator of the Master in Social, Work and Organizational Psychology. PhD in Organizational Psychology. Has published several papers on Organizational Topics, such as Organizational Culture.