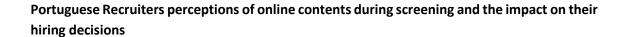


INSTITUTO UNIVERSITÁRIO DE LISBOA



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Master in Human Resources Management and Organizational Consultancy

# Supervisor:

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October, 2020



Portuguese Recruiters perceptions of online content during screening and the impact on their hiring decisions

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#### **ABSTRACT**

Although verifying information and running backgrounds checks are common practices in most companies, the inclusion of practices such as social media screen or cibervetting, in the recruiting process, is still an unexplored theme, especially in Portugal. Therefore, this study aims to uncover if screening is a current practice in Portugal and which were the Social Media contents dimensions (Behaviours, Connections, Personal information, Textual and Visual information, Professional information and SNS presence), and characteristics of the applicants, which impacts the most, recruiters perceptions. Additionally, the hypothesis was tested with age, level of education and size of the company. We resorted to a quantitative method to gather the data and to IBM - SPSS, to analyse it. The results were obtained resorting to Spearman's correlation coefficient, which showed that online contents dimensions, has different influences on recruiter's perceptions. On the overall, the dimension "Behaviours" proved to negatively influence perceptions, while "Connections", "Personal information", "Textual and Visual information" and "SNS presence" displayed, on the majority, neither positively or negatively influence decisions, while "Professional information" was proved to positively influence recruiter's perceptions. When analysing the impact of the characteristics of the judge, "Age" showed statistically significant correlations with several dimensions of applicant's online contents (Behaviours and Textual and Visual information) and characteristics (Race, Nationality and Marital Status), while recruiter's "Level of education" showed a correlation with applicants' online content dimensions (Connections, Textual and Visual information, Professional information and SNS presence), and applicant's characteristics (religion) and lastly, a correlation between recruiter's "Company size", and applicants' online content dimensions (Connections, Personal information, Textual and visual information and SNS presence) and characteristics (Gender).

In sum, Recruiter's perceptions of Candidates during the screening process can be influenced by their online content, their characteristics and by the specific characteristics of the recruiters. This research is significant to understand the perceptions and discrimination existing in companies who make hiring decisions based only on perceptions regarding applicants and to aware reader of the importance of managing their digital footprint online image.

**Keywords:** Social media Screening, Recruitment, Screening perceptions, Facebook, LinkedIn, Characteristics of the judge

## JEL classification

J24 – Human Capital

O15 – Human Resources

#### **RESUMO**

Embora verificar os antecedentes e a informação dada pelos candidatos sejam práticas comuns na maioria das empresas durante o processo de recrutamento, a inclusão de práticas como o screening das redes sociais, ainda é um tema inexplorado, principalmente em Portugal. Dado isto, este estudo pretende desvendar se o screening é uma prática corrente em Portugal e quais são as dimensões dos conteúdos online presentes nas redes sociais, (Comportamentos, Conexões, Informações pessoais, Informações Visuais e Textuais, Informações profissionais e Presença nas redes sociais), e as características dos candidatos, que maior influência têm nas perceções dos recrutadores. Adicionalmente, testámos as hipóteses com as caraterísticas do recrutador (idade, nível de educação e tamanho da empresa). Recorremos a métodos quantitativos para recolher os dados, posteriormente analisados no IBM-SPSS, e que analisámos através do coeficiente de Spearman. Os resultados provaram que as diversas dimensões de conteúdos online provocam perceções diferentes nos recrutadores. No geral a dimensão "Comportamentos" provou influenciar negativamente as perceções, enquanto as "Conexões", "Informações pessoais", "Informações Textuais e Visuais" e a "Presença nas redes sociais", na sua maioria, não demonstraram alterar positivamente ou negativamente as perceções, no entanto, as "Informações profissionais" demonstraram influenciar positivamente as perceções dos recrutadores. Ao analisar o impacto das caraterísticas do "juiz", a "idade" demonstrou correlações estatisticamente significativas com várias dimensões dos conteúdos online dos candidatos (" Comportamentos" e "Informações Textuais e Visuais), e com a ("Raça", "Nacionalidade" e "Estado civil") dos candidatos, enquanto o "Nível de educação", mostrou correlações com as dimensões (" Conexões, "Informações profissionais" e "Presença nas redes sociais") e a "Religião" dos candidatos, e por último, o "tamanho da empresa" onde o recrutador trabalha provou estar relacionado com as dimensões ("Conexões", "Informações Pessoais", "Informações Textuais e visuais" e "Presença nas redes sociais") e a suas caraterísticas (género).

Em suma, as perceções do recrutador sobre os candidatos, durante o processo de seleção, podem ser influencias pelos seus conteúdos online, as caraterísticas dos candidatos e as caraterísticas do recrutador. Esta pesquisa é significativa para entender a perceção que os recrutadores obtêm, dos conteúdos online das redes sociais dos candidatos e da discriminação existente nesta prática. Adicionalmente também para conscientizar o leitor sobre a importância de gerir a sua pegada digital. **Palavras-chave:** Screening, Recrutamento, screening perceções, Facebook, Linkedin, caraterísticas do juiz

# Classificação JEL

J24 – Capital Humano

O15 – Recursos Humanos

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# Glossary

APIs - Application Programming Interface

FB - Facebook

GDPR - General Data Protection Regulations

HR – Human resources

RAM - Realistic Accuracy Model

WLB – Work-Life balance

WOM – Word-of- Mouth

WWW – World Wide Web

SNS – Social Networking Sites

SM – Social Media

# I Introduction

The "war for talent" by McKinsey and Company (1997) and Chambers, Foulon, Handfield-Jones, Hankin, and Michaels (1998) has changed in recent years since companies started to recognize that, to be able to compete in new markets, they need to engage in new recruiting methods and resort to tools, such as Social Media screen, to optimize their processes. As result, it generated divergent opinions about the validity and usefulness of the tool, such as several debates about the weight and the repercussions it has on recruiter's online content perceptions and hiring decisions.

Currently, Social media networks are crucial for both individuals, to connect and express themselves, as for companies, as *Root and McKay* (2014) mentioned: who see the opportunity to "not only resort to social networks to market their companies and brand, but also to use it as a tool to optimize their processes".

Resorting to online tools such as checking online sources, in some countries, is a normal HR process (Peluchette & Karl, 2009) and is even identified as a formal requirement, in some companies. These methods, unlike traditional ones, allow companies to engage with broader audiences and find the right fit for the available places, by analysing candidates' online profiles, in the hope of locating signals of misalignment with the organisation (Peluchette & Karl, 2009), job fit or professionalism (Henderson, 2019), inappropriate behaviours (Boudlaie, Nargesian, & Keshavarz Nik, 2019), or, on the other hand, to discover unknown and positive information that confirm jobseeker's trustworthiness and qualifications (Reppler, 2011; RiskAware, 2017; Gil, 2019; Hartwell & Campion, 2020).

One the other hand, apart from its benefits, the use of this tool also accounts several disadvantages such as its legality, in the sense that companies can use this tool to screen candidates private information; its validity, the accuracy of the information and judgements based on the information collected (Jeske & Shultz, 2019); its reliability, if the sources of information allow to make fair judgements regarding how the person is and will perform at the job (Becton, Walker, Gilstrap, & Schwager, 2019), and its optimization, as if it brings value to the company and streamlines the process. Besides, since most companies do not verify the accuracy of the information collected, making judgements based on these contents, even if contextualized, can induce discriminatory behaviours and negative bias, which will then be reflected on hiring decisions.

Given the constraints associated with using this practice to optimize candidate's process selection, and, the fact that has this process only been recognized by Portuguese companies in recent years (Gil, 2019), it highlights the lack of empirical evidence of this theme and the necessity of further exploration.

Therefore, this research aims to answer four main goals. The first is to identify on the Portuguese context, if this practice is recurrent, secondly, to understand which kind of contents are recruiters searching for, as well as the weight - positive and negative - that each type of content has on recruiter's

perceptions, thirdly, to identify if the characteristics of the applicants are able to affect perceptions and lastly, to uncover if recruiter's characteristics are related with online contents.

#### II Literature review

#### 1. Digital footprint

Over the years, the task of collecting private information about a person it has been described as laborious and time-consuming, however, with the appearance of the internet, this process has undergone changes, making it easier, faster, and more efficient. This premiss can be based on the fact that, as the emergence of social networks (SN) (Muhammad, Dey, & Weerakkody, 2018) and more sophisticated systems, all data left by users, during their online connections, start to be registered in their online virtual spheres (Bohmova & Pavlicek, 2015), what makes people "not just findable but also knowable" (Willmer, 2009). The names given to all these record left behind are denominated as digital footprints (Boudlaie et al., 2019).

The digital footprint can say much about a person since it entails detailed qualitative and quantitate data about them (Beyvers & Herbrich, 2016). That information do not only includes characteristics such as their identity but also their memories, moments and behaviours (Muhammad et al., 2018). For example as Willmer (2009) mentioned, their pictures and videos, social media networking profiles as well as interests, hobbies and, friends and family connections.

While practically everyone, nowadays, has a digital footprint, this varies from person to person, mainly due to its composition of active and passive records (Buchanan, Southgate, Smith, Murray, & Noble, 2017). The passive registers encompass information that most users are unaware, such as internet browser cookies and IP addresses, while active data entails all content that has been deliberately disclosed by users such as their social media (SM) interactions, their pictures posted on Facebook and their email and webpages accesses. Although most authors only recognize these two types of records, Willmer (2009) recognized a third digital footprint, which he designated as "second-hand digital footprint", and covers all information that has been posted by third parties, including those released without recognition of the person in question and who may or may not mirror the truth about that person.

One the other hand, the term "digital footprint" can, accordingly with Feher (2019) be separated into two diverge dimensions: digital identity and online representation. The differences between those two concepts are complex since there is a clear distinction between digital identity and online representation, which requires the mandatory control of both aspects. The first-dimension referrers to the digital data corpus constructed by users and digital systems while the second dimension refers to how the person expresses themselves, presents their self-reflection, and self-control of the person present on social media networks and digital information's.

#### 1.1 Digital footprint Characteristics

Users can leave records behind for a variety of reasons, but among the most common reasons are intrinsic psychological behaviours, such as the convenience of using technological advances such as the internet, for social reasons, like interactions, support or ties development. Understanding the motivations that lead these users to leave these records behind provides valuable insights into the characteristics which composes it, such as the size, the relevance, the weight, and the repercussions.

Firstly, getting acquainted the with the *size* of the digital footprint and understanding the type of content that makes it grow, will aware users for the importance of managing not only their online presence but also their offline one. Secondly, understanding its relevance and weight will be crucial to provide users capabilities and tools to control and manage it, while knowing its repercussions will be important to alert users, who shows a willingness to leave records behind, that factors such as the lack of security, privacy and control over their data, may have several consequences in their lives. (Muhammad et al., 2018).

#### 1.1.1 Size – How big is your digital footprint?

Everyone that has ever been connected to the internet has a digital footprint. However, although the size varies among users, there are three substantial reasons, why their size changes.

Firstly, there is internet access. Despite the continued growth of mobile phones (Sharma, 2017), cloud computing, 4G and 5G networks and other devices, there are still people in several countries, mainly from third world countries, who are unable to connect "to the web", as Muhammad et al. (2018), which may explain some on the small, and non-existent digital footprints.

Secondly, the size of the records is also related to individuals' self-disclosure intentions. Peluchette and Karl (2009) have highlighted that young generations are more associated with the term "self-discloser", due to their levels of literacy, digital skills, comfort and capabilities to navigate as "digital natives" (Jacobson & Gruzd, 2020). Furthermore, individuals seem to feel comfortable having records before even being born, being monitored since birth (Beyvers & Herbrich, 2016; Willmer, 2009) and don't seem to mind bothering to broadcast sensitive information about themselves and others, such as photographs, personal experiences, thoughts, feelings and concerns (Jeske, Lippke, & Shultz, 2019; Peluchette & Karl, 2009), to the overall public. In addition, Chen and Cheung (2018) report that digital footprints have also undergone several extensions, due to the constant involvement of these generations in new technologies and social media activities, such as posting, liking, sharing, and commenting, given that type of data, considerably increases the size.

Thirdly, the digital footprint can grow irregularly due to the intentional and non-intentional liberation of information. On one side, the size of the records can augment when the information is

intentional released, that occurs when there is a deliberated effort in sharing it with others. This occurs, first of all, when users share across multiple platforms, what appears to be unimportant information (such as gender, sexual orientation, age, names, home addresses, phone numbers, birthday data's, allergies, and payment information's provided on day-cares, schools, sports camps, extracurricular activities) and more specific and detailed information such as bank accounts, social media accounts, emails accounts and cell phones (Beyvers & Herbrich, 2016)); and secondly, when individuals are aware of their digital footprint and deliberately share content, which will portrait them as smart, intelligent and hard-working individuals, increasing their chances of being hired in the future (Peluchette & Karl, 2009).

On the other hand, digital records can increase their proportions due to unintentionally shares. This group includes all the information that was shared, without the majority of people know, such as geographic location (resulting from the geographical position, based on restaurants searches in the area), websites data or searching engines research, as well online shopping preferences. In addition, and according to what was previous mentioned, it is also possible to increase due to the testimonials, posts and publications of others (Willmer, 2009).

Lastly, it is important to note that the importance given to privacy and information control is also associated with is size. The lack of consideration for "digital Privacy", which Jacobson and Gruzd (2020) refer to the lack of concern about the benefits and risks added to the constant social media obsession, like tweets, posts and snap-chats, and consequent exposition of their private life events on the internet. In this sense, it is important to alert users to take action on this topic, preventing their most private information from being shared with others and that, the amount of publicly available information also increases the size of the digital footprints.

## 1.1.2 Relevance - How important are digital footprints?

Nowadays there is the constant necessity in sharing every moment of their lives and expressing themselves without prejudice, it is due to intrinsic and extrinsic motives, such as self-presentation self-clarification, entertainment, relationship management and development, peer pressure or desire of showing off (Peluchette & Karl, 2009). However, every time someone uses the internet be for accessing SM, reading emails or shopping online, their traces become recorded, which leave us to ask, are that information important? The answer lies on the lack of awareness regarding the relevance of their online digital footprints.

Most users do not realize the importance that their data, which characterizes their political, economic, religious, and social preferences have, for departments such as Marketing, Communication, and Human resources. They get crucial insights from this data, about which, they make decisions. In

addition, companies use this knowledge, not only to increase their brand awareness, engage with customers and build relationships with potential buyers (Pongpaew, Speece, & Tiangsoongnern, 2017) but also to promote their products, share promotions and spread positive word-of-mouth (WOM) (Pongpaew et al., 2017).

The benefits of detaining a digital footprint, in addition to companies, also extended to their users, facilitating their social interactions, developing new friendships and connections, through suggestions, as well as obtaining personalized services and products based on their current online behaviours.

## 1.1.3 Weight - How valuable is your digital footprint?

Individuals are not only unaware of the size and relevance of the information provided as they are of their value. Previous studies have pointed out that and individual's footprint begins at an earlier stage of his life. This premiss is corroborated by Willmer (2009), who showed that 81% of the children in America of 2 years old and under, already have an online presence and that it is possible to track it with simple searching engines, as Google. These results about a person include simple information that they have disclosed on websites, stores and social media sites, such as race, age, sex, weight, height, marital status and education level, vacation dreams and buying habits. The ease of finding this type of information has lead authors such as Beyvers and Herbrich (2016), to mention that digital footprints have a low perceived value and are usually "offered it out like candies".

On the contrary, the opinion of Jacobson and Gruzd (2020) clarifies that, for companies, private information such as birthday dates and likes and dislikes, are quite meaningful. The "real value", of the information left behind, in various places by its users (most without even noticing or remembering it), lies not only on the analysis of their posts or photos but in the ability to collect, study and process the information. These thousands of small pieces about consumers, not only helps the retailing sector to forecast needs (predictive retailing), as it helps companies to target their customers, by manipulating their purchases and uses, and consequently increase their economic value.

For that matter, although the value of each information is different according to the point of view, it is important that internet users, keep in mind that simple information's provided, such as phone numbers and email address, can be entryways to much more valuable information's. Moreover, Beyvers and Herbrich (2016) recognizes that the value of information that users considered to be "not very relevant", is greater than that the one which is recognized by users

# 1.1.4 Repercussions and awareness? – Which are the consequences of these records?

Every individual presented on the "internet of things" leaves records behind. These traits capture their online identities generated by their multiple actions on the web and become part of their online

identity forever (Beyvers & Herbrich, 2016). "Always" seem like a long time, but several studies such as Buchanan et al. (2017) corroborate this statement by suggesting that it is not uncommon, for digital footprints, to go back at least 10 to 15 years, which raises severe concerns about the type of content that will still be available, when people apply for their first job positions. Besides, this author also has expressed several doubts regarding this subject, such as, whether people understand the implications that their online records left behind can have on their lives, whether young generations (the most related with social media world and self-discloser) are being taught about the possible benefits and liabilities of leaving a digital footprint, and, how to manage their online records (Buchanan et al., 2017; Pongpaew et al., 2017).

Answering those questions requires careful consideration with the term *self-discloser* (Buchanan et al., 2017), which is often coupled with concerns such as trust and security, and which be considered primarily matters for all online users. However, not all users share the same concerns, Jacobson and Gruzd (2020) illustrates this premiss by describing the three different types of users: a), the fundamentalists, who have high privacy concerns regarding the type, amount and relevance of their online records, then b), the pragmatists or image controllers, who show moderation concern regarding their exposition online and less strong privacy expectations but, meanwhile recognizing that some specific information (such as the one present on Facebook) is meant to be shared and c), the unconcern users or relaxed displayers, who do not show any concern regarding their privacy, have normally low privacy settings and are not worried about their impacts, underlining that, at each level, users intentions in controlling their online registers, decreases.

The level of which individual are concern with its privacy, can be associated with generational and age characteristics since previous studies have highlighted the significant nuances related with younger individuals regarding this matter (Chang, Liu, & Shen, 2017; Jacobson & Gruzd, 2020). This is supported by Root and McKay (2014) and Bundhe, Samadhan Ashok and Kulkarni (2020) who mentioned that young generations seem to be aware and perfectly understand the risks exposed, since their generation, as Muhammad et al. (2018) explained, is marked by relaxation towards sharing personal information. However, Miller (2020) showed contrary opinions by declaring that "many students do not appear to understand the risks that they are taking".

To conclude this chapter, the lack of awareness about security and privacy matters, and the consequent failure to activate measures to protect their privacy it may be due to the ignorance of Willmer's (2009) Model of publication and exponential transmission. This defends that there is no going back, once online, the information will be like a tattoo, even if deleted will never completely disappear, continuing to remain in the system for many years to come (George, Navarro, Stazyk, Clark, & Green, 2014; Machado & Bettencourt, 2018). The impossibility in erasing those records leads Pongpaew et al. (2017) to pinpoint the necessity in learning how to managing it properly to avoid

professional reputation to become affected (George, Green, Navarro, Stazyk, & Clark, 2014) and which can be accomplished by rethinking the spread of the big data analytics (its relevance, size and weight), adopting and implement the best privacy option (Jacobson & Gruzd, 2020), controlling and managing the information that was already released and establishing a separation between professional and personal accounts (Koch, Gerber, & De Klerk, 2018).

## 2. Social media networking sites

The development of the World Wide Web (WWW), as Feher (2019) referred, have provided users the possibility of creating a secure and congruent data set to connect and communicate with others, reducing the social distance between friends and family members, across the globe.

Pedroso (2016) referred that online communications advancement also had significative changes in the internal and external company's environment, encouraging industries to search platforms that meet their new needs. The evolution and development of the internet lead to the creation of Social media, an umbrella term which designates the "media" (like videos, texts, pictures and podcasts) being shared on social web-based services, allowing users to interact with others by posting, sharing, and commenting (Breaugh, 2016).

Social media networks are a specific type of social media granting users to communicate and connect (Buchanan et al., 2017). Today, they are among the most used websites on the web due to its functionalities (Gil, 2019), such as the permission to construct their own public and semi-public profiles without a bounded system, publish private and public information's about their lives and increase one's social capital. Moreover, Social media platforms are costless and easy "meeting place" (Breaugh, 2016), which increases the convenience of the relationships and communications (Bohmova & Pavlicek, 2015; Machado & Bettencourt, 2018), allow their users to connect with old friends and make new ones as well as see other's people interests, life events and connections (Chang et al., 2017). These SNS are also recognized by its practicability, since materials become available with a simple click (Melanthiou, Pavlou, & Constantinou, 2015; Boudlaie et al., 2019) to all the users on the same network, although these platforms have been highlighted as being one of the biggest addictions of this century since young generations are used to be monitored since birth.

Social media platforms are the ultimate place for users to express themselves and find compatible friends (Peluchette & Karl, 2009; Boudlaie et al., 2019), however, most people commonly have a profile in more than one social media, which may occur depending on the mission, purpose and objectives of each social media as well as the degree of self-presentation, openness and randomness (van Dijck, 2013).

# 2.1 The most recognized social media networks

Social media networks have gained prominence in recent years, being considered the most popular online activity. According to European Union (EU) statistics, SM has registered in 2019, 2.95 billion users registrations, a trend that is expected to grow until 2023, encouraged by market development, the growth of less powerful economies and the ease of accessing devices and internet connections. Since the primary objective of the SNS is to connect people, the total number of hours individuals spent connected to the networks can be a good indicator of its importance. Although the time connected varies from one country to another, according to American statistics, the average use is 1 hour and 57 minutes, a value that Portugal surpasses by registering a connection time of 2 hours and 16 mints (Statista, 2019), while in other places like the Philippines, this average is almost twice as high (4 hours and 1 minute).

The digitalized world is always expanding its offerings, so the list of platforms available is 2020 is extensive and expected to grow, in the coming years. Statista (April, 2020) showed that among the most relevant SM in the world, based on the largest number of users, are 15 popular applications such as Facebook, YouTube, WhatsApp, Facebook Messenger, WeChat, Instagram, TikTok, Snapchat, Twitter and Pinterest. LinkedIn is also an important and recognized network, however, it is not accounted on that list, as is considered more as a professional tool than as a social one.

Although there are similarities between the platform LinkedIn and Facebook, they can be distinguished based on their different objectives, purposes, features and functionalities, and Target users and Demographics. Even though all the previous platforms presented are crucial on the day to day, being the focus of this study merely based on Facebook and LinkedIn, we underline the most significant differences between them:

#### 2.1.1 Facebook

Facebook is a social media, whose' mission is delivering people the power to share and make the world more open and connected (Facebook, 2016). The main objective of Facebook is to connect with others, exchange thoughts and share content. Moreover, this SNS is generally associated with social and personal interactions, such as posting and sharing content (like photography's and videos), regarding their lives experience and actions, mainly to locate others with the same interests and communicate with other people.

Facebook is described as being a "place to discover what is going on in the world and to share and express what matters" ( <a href="www.facebook.com/facebook">www.facebook.com/facebook</a>). This SNW is accepted as a personal SNW and a social tool since it provides their users, as Hedenus and Backman (2017) stated, the opportunity to freely express themselves while, accordingly with Feher (2019), engaging in storytelling and personal

narratives. In addiction, is considered the most recognized social media network in the world, registering, according to Statistica (2020), the biggest number of users, over 2.6 billion monthly active users mainly due to its multiple functions. In one hand, a study from Adecco (2015) revealed that 75% of the companies and 80% of job seekers believe that the most popular social networks for personal use are Facebook.

This tool allows creating an online life, providing their users standardized models and templates, to fulfil, entailing details such as names, photographs, personal interests, and personal contact details such as cell phone numbers and email, as well as other personal information that they find relevant, to present themselves. Options such as favourite quotes and music, political affiliation, education can also be included to allow people to get involved with others by joining groups and forums based on the same interests. Furthermore, this nonprofessional SNS offers the opportunity to establish new friendships (Peluchette & Karl, 2009), as well as to keep in touch with close friends (Adecco, 2015; Feher, 2019).

On Facebook, people share the most private moments and events of their lives with others, sharing, posting, commenting and "tagging "other people. It also allows friendships to be established by virtual invitation and once accepted, access to all posted information becomes irreversible. The possibility of posting messages on other people's wall, as well as identifying the location of life events and, through "tags", allowing to invite other users to become social friends (Smith & Kidder, 2010).

Even though is mostly recognized by its personal use, this SM is also used as a professional business tool, as Bartakova, Brtkova, Gubiniova, and Hitka (2017) mentioned, not only crucial to reach wider public, sell products and engage with the community, but also represents an important to tool to receive information about updates, jobs, and internships.

Hartwell and Campion (2020) have pointed out, this non-professional network as an ambiguous purpose and a broad audience. Based on Statistica (2020), Facebook registers a balance between genders using the service, even if man is slightly more represented then women (56% on Facebook). Furthermore, the age groups more represented is between 18 and 24, and between 25 and 34 years old (thus representing 23,8% and 32,5% correspondently, of the public), even though this networks is one of the unique SNSW which age of application is under 18 years old (13). Is important to highlight that in the last few months, the most represented age groups, however, are migrating to emerging SM such as Instagram and Twitter for their facilitated use, leaving this network for older generations, due to the lack security towards privacy

To finish, Facebook is extremely recognized among companies. The data of user's online research and their and likes and dislikes offer companies important insight regarding products, promotions, and trends. In addition to its advantages in the development of social ties, it also has other benefits such informal learning, social media literacy, the strengthening of interpersonal relationships, the

development of individual identity and the feeling of belonging as, Machado and Bettencourt (2018) has described it, that in most societies is extremely important, to combat social isolation.

#### 2.1.2 LinkedIn

Linkedin is a professional network, aiming to connect professionals all over the world aiming to make them more productive and successful. Even though some authors, refer to Linkedin as a social tool since there are social interactions between users, most recognizes it as a professional network, since it is more prone to the business environment and has little personal information.

A study from Adecco (2015) revealed that opinions from both recruiters (61% vs 32% Facebook) and job seekers (34% vs 24% Facebook) agree that this should be considered the elected tool for professional purposes.

Has being drawn as professionally relevant by UE statistics, this network facilitates business networks and career developments, by allowing, as Chang et al. (2017) recognizes, to create self-promotion profiles, engage in job-related group activities while searching information related with other institutions and jobs positions and, to build strong businesses networks as Hartwell and Campion (2020) adds. Additionally, also offers their users the possibility to create a professional profile, with detailed information's regarding their work experience and education. Induces their users to share goals, professional challenges, conquers and knowledge, increasing the connection with other professionals.

In the last years, this SNS has under covered prominent gaining, launching new resources, allowing users to promote actions and associations, to communicate with professionals about other sources such as publications of relevant information and articles, news, and documents. Additional, features allow users to search for jobs, positions as well as for companies and people and additionally includes the possibility of identifying which professionals and companies have been seeing their profiles.

LinkedIn has only registered 58.5 million users Statistica (2020) registered, however, is the most recognized network in the business area. The legally allowed age to enter is at 18 years old, however, even though this public is more specific that social networks as Facebook, there is a balance between gender however, man is slightly more represented than women (57%), and the most represented age group is between 25 and 34 years old and represents 63,6% of the overall public, This age groups can be explained by all the users who completed the studies and search for first job opportunities or, as several authors have pointed down, all the users who are more permeable to changes and while employed, search for better job opportunities.

#### 2.2. Companies and the new environment created by SNS presence

Internet innovations and SNS development (Bohmova & Pavlicek, 2015) brought several challenges for companies that want to remain in the market, lead them to take measures to optimize their processes, ditching obsolete methods and modernizing their ways of communication to keep up with new customers, which brought several advantages, such as:

Firstly, since customers are more digitally savvy, companies have engaged in new procedures, responsibilities and roles, using different metrics and strategies (Bohmova & Pavlicek, 2015). Creating an online presence, according with to Smith and Kidder (2010) gave companies "the ability to connect with customers through new technologies" building relationships with existing and potential customers (Pongpaew et al., 2017). This helped to create brand awareness, spread positive word-of-mouth (WOM), to be recognized and trusted, while publicizing and promoted greater exposure for advertisements for new (Pongpaew et al., 2017). Additionally, also created the opportunity to develop multi-retailing channels and improve the productivity between enterprise and customers (Chang et al., 2017), offering them testimonials regarding their products and services.

Secondly, it provided the opportunity to publish their offers directly online in their web pages as well as on job boards (Bohmova & Pavlicek, 2015) allowing companies to reach wider publics and build brand communities in other segments (Pongpaew et al., 2017) such as the IT field, customer service, marketing and management (Bohmova & Pavlicek, 2015), which are the areas where employees spend the most time connected and where it is necessary to know how to work effectively on these platforms.

Thirdly, the information obtained on the internet, especially on social media is normally recorded and analysed by multiples disciplines, such as product research, sales, marketing, customer services and human resources (Chang et al., 2017) sectors. These online records have a vital value for these areas as they help them to get insights (Baur, 2017) and, as Azucar, Marengo, and Settanni (2018) mentioned, to predict psychological characterises and behaviours, based on which they customize and sell, accordingly with the necessities of the market (Pongpaew et al., 2017; Muhammad et al., 2018).

For companies Facebook is being considered the most prominent social network in the world due to holding a bigger number of users that any other platform (such as Twitter and Instagram) and since it dominates the digital advertising market in American, alongside with Google, that is why, is considered by companies and Feher (2019), the right place to advertise, allowing to analyse scores to then target different users dimensions.

On the other hand, Root and McKay (2014) have pointed out that companies are not only resorting to social networks to market their companies and brands, but are also using them as a tool to optimize their processes. This premiss is sustained by the Human Resources department which allows companies to avoid resorting only to traditional methods, such as engaging with applicants through personal contact, newspaper advertises, word-of-mouth and, started to computerize their processes,

engaging in new methods such as online recruitment (E-recruitment), and *headhunting*, the purchase of databases from external sources (Bohmova & Pavlicek, 2015). This decision was based on an attempt to optimize the recruitment of employees (Koch et al., 2018), requiring minimal costs (which provided even small companies the opportunity to engage on the same methods (Brown & Vaughn, 2011)), which lowered the hiring costs and made it possible to find the best fits for the vacancies available.

## 3. Conceptualization of the Model of Accurate Signalling perceptions

The Realistic Accuracy Model (RAM) and the Signalling theory are relevant to the construction of the framework which conceptualizes the drivers of the information emitted or made available by the sender to be perceived and judged by a receiver influencing their decisions. Both perceptions are relevant to understand how the message is send and received although the main difference between both arguments rely on the steps undertaken by the information and the point of view of the process.

# 3.1 Signalling theory

The signally theory mentioned by Connelly, Certo, Ireland, and Reutzel (2011) and Mavlanova, Benbunan-Fich, Koufaris, and Lang (2015) and Brooks (2019), shed some light on how the signaller, to be able to communicate with the receiver, chooses to send a signal, and how this is interpreted by the receiver. Due to the importance given to sender's signals communication and receivers ways to interpret the signal, the Realistic Accuracy Model (RAM) provides additionally insight regarding how the information is considered and judged.

Mavlanova et al. (2015) mentioned that, the signals sent are not normally isolated but represent positive deliberations, however, the environment where the information is inserted is able to distort the way those signalling actions are perceived, becoming recognized as negatives. Although most of the previous literature ignores unintended signs, this framework requires careful consideration to evaluate the lack of awareness towards negative perceptions. Moreover, in accordance with Michael Spences (1973) point of view to increase the probability of the message being accurate interpreted by the receiver, the signaller requires to be honest and reliable while sending a frequent, costly, consistent, observable, and fit signal. Furthermore, Connelly et al. (2011) stated that *honesty* is crucial in the interest competing relationship between signallers and receivers. Signallers are used to produce false signals to be selected by receivers, however, sometimes is easy to identify discrepancies on the message. Therefore, the signaller requires to be *reliable* and *credible*, and this only occurs when the signaller has an unobservable quality, and it signals it in an accurately and genuinely way.

Signs are costly transfers, which value depends on the type and frequency of the signal send, for example, the Human resources (HR) reputation has *signal costs*, such as the investment in the HR

functions and penalty costs, such as potential lawsuits and organizational inefficiencies. Thus, is important the existence of the *signal fit*, thus defining how much the signal is correlated with unobservable qualities of the signaller that are being communicated. The strongest and most accurate signals have three characteristics: Are *observable*, which depending on the strength of the signal it might suffer distortions and deceptions; *frequent*, are related with the number of signals that are transmitted and that as more observable signals are send, there is less information asymmetry between signallers and receivers in dynamic environment, and requires to be *consistent*, meaning that messages should repeatedly be send from only source, to guarantee that the communication between parts is more effective.

On the other hand, the accuracy and effectiveness of the message is also determined by the characteristics of the signals' receiver. To perceive the signals, receivers must remain attentive (attention) and vigilant to the surrounding environment and once captured, these must be translated so that signal can be understood (interpretation). It is important that feedback is given to reinforce the effectiveness of the signals, which can be provided by sending countersignals to reduce information asymmetry. Additionally, to avoid environmental distortions, the medium used to propagate the signal should be carefully selected so it cannot reduce the observability of the signal.

The fact that Information affects decision making makes this theory (on figure 1) crucial to reduce the information asymmetry between the parties, the signallers that send signals without awareness and receivers who perceive or not the signs emitted. Additionally, as Brooks (2019) stated, to avoid opportunistic behaviours and deceptive perceptions there's the need of increase sing the trustworthiness of the signals as well as to communicate the unobservable qualities (such as congruence), as observable attributes. For example, Spencer (1973) have demonstrated how a job applicant might engage in behaviours which reduces the asymmetry of the information that hampers the selection ability of prospective employees. The author illustrates the possibility of distinguee high quality from low quality employees, based on their signal emissions, founded on their education levels. This and other scenarios are supported by Bird and Smith (2005).

# 3.2 Realistic Accuracy Model (RAM)

The Realistic accuracy Model (on figure 2) refers the four steps required to successfully have accurate personality judgements by the perceiver (the person making the judgment) regarding the targets' information's made available (person being judged). This process is likely to occur with or without both parties being aware. For example, in screening, companies screen their candidates without them realizing as, candidates screen companies to identify if they fit their organisation (person-organisation-fit) and the job (person-job-fit).

For the judgement to be the most accurate as possible, it will have to be based in several factors such as *relevance*, *availability*, *detection*, and *utilization*, for each specific order. The first step is the *relevance* which provides insight regarding the quality of the information released by the target. The more genuine it is, the most relevant the cues will be. The second step is denominated as *availability*, which is only considered available if the cue can be detected by a judge. The message can be verbal or non-verbal and unless they are expressed in a manner they can be captured, hampered the accuracy of the trial. *Detection* marks the third step and occurs when the perceiver recognizes the relevant and available information of the target. The level of detection may rise if the judge pays attention to the target or relates with their same situation. The last characteristics, to be considered, only accessed if all the others have already been portraited, is *Utilization*, which consists in making an accurate personality judgement based on the information released. The result is much likely to vary from one target to another since cues and contexts are different.

The process accounts several moderators which might influence the level of the accuracy of the perception such as: the aspect of the judge, to be a "good judge" the observer requires understanding the differences between individuals; the characteristics of the target, to facilitate the judgement "judgability" and be considered a "good target", the information provided will need to be available and relevant as possible. In addition, the features of the traits, may jeopardize the perception due some traits characteristics being more easily judged by others, as well as the "level of "evaluativeness" and "favorability" which can easily induce bias. Finally, the properties of the information, emitted by the target, can deeply influence the accuracy of the judgements. Its quantity (amount of information available) and quality (relevance of the information) as well as the presence of the "acquaintanceship effect" (which induced by the cycle of connection, can help to predict behaviours), can therefore affect the accuracy of the judgements. This model becomes a useful contribution to this study as will allow to verify the deepness that the lack of visible, rich, relevant high-quality information will have in recruiters hiring decisions (Brooks, 2019).

#### 3.3 Framework comparison

The combination and integration of the RAM model, which regards the accuracy of targets information's judgement and the signally theory, which analyses the asymmetry between the information emitted by senders and the one obtained by receivers, will provide to our research the conceptualization to understand the reasons and objectives that lead applicants to share certain types of information on their social medias and how were those information's perceived by recruiters during the screening process.



Figure 1 - Signally theory model by Michael Spencer 1973



Figure 2 – Realistic Accuracy Model by David Funder 1987

The table 1, provides a comparation between both Model and Theory. When analysed, is feasible to conclude that, for the purpose of this research the best approach is the Realistic Accuracy Model (RAM), since it organizes the information in only four dimensions instead of five and directs the focus on the perceptions on the message on the receiver and not on the sender's instead. This model provides important understanding regarding the characteristics that will increase the accuracy and fairness of the judgments of the information released by the target.

Table 1 – Comparation between "Signally Theory" and "Realistic Accuracy Model" (RAM)

Signally Theory		Realistic Accuracy Model (RAM)
	Michael Spence 1973	David funder 1987
	Useful to describe the problem of	Important to understand which is
Motive	asymmetry it exists when a part	the process for a fair and accurate
&	sends a signal which reveals some	judgement of the information
Objective	unknown information to the	received.
	other.	
	Reducing information asymmetry	Improving judgement accuracy
	The sender or signaller	The Target
	Detains positive and private	Makes available relevant
Protagonists	information that is not available	information of the traits being
	to outsiders and chooses whether	judged
	and how to signal it	

	The Receiver	The Judge
Protagonists	Chooses how to interpret the	Detects and utilizes the information
	signal which might not behave	to make a judgement
	quality or be observable	
	(Signal)	
Characteristics	- Cost	Relevance
of the	- Fit	Availability
message	- Observability	Detection
	- Frequency	Utilization
	- Consistency	
		Characteristics of the judge
Moderators of	Attention	Characteristics of the target
the message's	Interpretation	Features of the traits
interpretation	Feedback and Environment	Properties of the information
	Distortion	(quality and quantity)

## 4. Screening the SNS digital footprint of the applicants

# 4.1 Companies SNS use in recruitment & Screening

After an extensive analyse several authors highlight that one of the biggest challenges in every organisation is to recruit real talent, finding employees who believes and trust the brand and will, for that matter, as Carless (2005) pointed out, be a good fit for the job (person-job fit) while add value to the business (person-organization fit). To understand this topic, is important to present the steps followed by companies during the recruitment process. The recruitment process of organizations vary from one company to another, where they add, omit, and alter some of the steps, however, the majority, follows the 4 steps mentioned by Gatewood, Feild, and Barrick (2016) which includes: preselection, in-depth assessment, background check and final selection decisions, however, previous studies have led us to believe in the need to integrate one more step, which is often overlooked, but it is crucial to determinate the right fit for the company, the final selection decision. The process starts by:

1. Identifying the skills necessary for the vacancy and create a job description that will be later posted to attract candidates.

- 2. Pre-selection: receiving applications, reviewing résumés, and assessing candidate's knowledge, skills, and abilities (KSA) to exclude the non-fit. Possibly making preliminary tests or initial interviews on the phone.
- 3. In-dept appraisals: administering selection tests such as ability, work sample, group dynamics and simulations, and conducting face-to-face interviews.
- 4. Background checks through reference checks, previous employers, and web searches to verify information's
- 5. Jacobson & Gruzd (2020) refers to the final selection decision step in which companies compares each applicant and decide which the one represents the best fit and offer the job.

Society advancements and the appearance of young generations such as the Millennials and Gen X, groups permeable to changes and technological advances, forced companies to engage in new technologies, such as new ways to recruit, like electronic recruitment (E-recruitment). Those changes brough several advantages such as process optimization, like increasing the practicality of online job posting, in job boards and in recruitment and social media websites. Additionally, as Boudlaie et al. (2019) claimed, helped to reduce hiring costs as it required minimal costs, which integrated small companies (which now had the possibility to resort to the same methods). However, as Jacobson and Gruzd (2020) recognized, also posed new challenges, such as necessity of integrating other tools in the process to guarantee that data is properly filtered (Jeske & Shultz, 2019) and verify the effectiveness of the results since, DeCenzo et al. (2010, p. 144) proved, only 20% of applicant's who apply, have the minimum capabilities required for the job.

Companies' attempt to find the right talent as they adjust to the new era and engage with the new generations, have created the need to gain better insights regarding the skills, capabilities and personalities of the candidates, to be able to optimize the process and, end the "war for talent" (Chambers et al., 1998). The elected tool to end this struggle was cibervetting, which is the denomination to the practice consisting in gathering online information regarding a person, to evaluate their suitability for a particular role in a company. This tool can also be denominated has "Facebook fired" (Berkelaar & Harrison, 2016), "employee surveillance" (Ajunwa, Crawford, & Schultz, 2017), social media screen and online screen, screening (Jacobson & Gruzd, 2020), which will be used interchangeably in this study.

Even though this study focus on the selection and recruitment of talent hunting (Boudlaie et al., 2019), social media screen can be used for a matter of reasons inside a company, as it is able to impact other types of HR functions across the cycle of the employee, such as onboarding, collaboration and retention as well as affect the overall productivity of the company and employees satisfaction. However, Boudlaie et al. (2019) highlights than even though it can be useful for active recruitment is

not practical at all levels and positions since recruiting managers requires more time and detailed processes to access particularly skills, knowledge, among others.

Existing literature about resorting to screening tools for personnel selection normally debates the following topics, which we will describe in the next chapter: The first category englobes all the requirements required to consider screening as a valid tool to recruit candidates. The second topic identifies of the most common used social media in the process as well as the motives combed to make decisions ( Brown & Vaughn, 2011; Becton et al., 2019). The last category includes the repercussions of those practices for applicants and candidates' level of awareness regarding the subject.

#### 4.2 Screening candidates

# 4.2.1 Is screening a valid method?

When individuals interact on the web, they share sensitive information such as personal status, opinions, proposition and public and private data (Chang et al., 2017), leaving tangible and intangible records of their activities. These are define by Muhammad et al. (2018) as digital footprints, and can be used to identify their users or by companies, to get a perspective of their interactions and human behaviours (Helm, 2018).

On his study, Jacobson and Gruzd (2020) stated, that to obtain insights, data requires to be collected, which can be accomplished following different approaches: Firstly, by paying to social media companies that, after collecting the big data will do a profound analysis, for then providing departments such as marketing, information such as cookies, to allow them to create paying targeted ads and, for human resources departments, useful insights in decision making, which will impact individuals, governments, and companies lives. On the other hand, by collecting unfiltered data regarding their applicants for later applying Application Programming Interface (APIs), to understand them. This unfiltered data can be easily traced resorting to searching engines such as google, aggregations and internet searches (which only requires to put the name and almost instantly will provide accessed to all the online public records of that person). Additionally, companies can also engage in other less ethical and current approaches such as asking candidates a friend's invitation on social media, being able to access their private information's or, by requesting their passwords and accesses.

Corporations use of social media screen for personnel selection is not a new trend. A study from Reppler's have recognized that in 2011, USA companies were already using social media networks to screen job applicants, resorting to distinct SNS, to obtain more personal views of the candidates avoiding making decisions only based on their resumés. Recent studies in the field such as (Gil, 2019;

Hartwell & Campion, 2020; Jacobson & Gruzd, 2020), have led us to recognize that this practice has dramatically risen is popularity from 11% to 70% in a decade, meaning that now, about seven of ten recruiters screen their candidates during the hiring process.

Berkelaar and Harrison (2016) have identified four requirements to verify the validity of this process in assets recruitment:

1.Is it legal? - The Legality of the tool: Previous literature as (Peluchette & Karl, 2009) have identified that there are countries where checking online sources is normal and even a formal requirement for employers (Berkelaar & Harrison, 2016; Root & McKay, 2014). The first requirement, for screening be identified as a valid tool, is its legality, as Boudlaie et al. (2019) presented. Hence, there are countries which legislative contexts' and rules encourages social media screen, to avoid illegal discrimination and negligent hiring and where employers are free to make unfair decisions as long as they do not violate certain rules, such as the required policy of disclosing, that the choice was based resorting to cibervetting.

On the other hand, several authors believe that this process is not in line with legal requirements. This evidence is based in the risk of privacy invasion felt by applicants about the lack of awareness regarding who is accessing their data. For that matter employers open themselves up for lawsuits when selection devices appear to be biased, inconsistent, inaccurate, or discriminatory. For example, a potential concern that could arise from checking out Facebook is that, quite often, users will post pictures of themselves on the site. If these and other legally protected demographic information, ends up being part of the selection process it can jeopardize the process and the company. For that matter, employers must be careful that this process is not envisioned as discriminatory (Smith & Kidder, 2010).

For that matter and to combat Cambridge analytics data scheme which have occurred in 2018, Europe have stablish that information such as gender, age, ethnic origins, sexual orientation, life style, healthy status, religious or political views are information's are under the General Data Protection Regulations (GDPR), so in order to be able to collect it and use it for recruitment and selection purposes, this process ought to be in line with the guidelines (Jeske et al., 2019).

**2.Is it valid? - Validity of the tool:** Peluchette and Karl (2009) believe that social media is a valid source of information about potential job candidates because allows to gather as much information as possible about their applicants providing a multidimensional perspective which will improved decision making (Smith & Kidder, 2010).

Nevertheless, is important to highlight that other authors believe that gathering a lot of information about a person might be misleading since it is difficult to collect information maintaining the true context and meaning. For example, if the information is decontextualized or the recruiter are not able to properly understand the content it might induce mistakes, such as not hiring. For that matter, using this method to recruit may increase the inequality of the choices based in their gender,

age, ethnic origins, sexual orientation, life style, healthy status, religious or political views (Jeske & Shultz, 2019). Additionally, if the Facebook page shows inaccurate information that will be considered, the true validity of the tool becomes discredit.

3.Is the information reliable? - Reliability of the information: Smith and Kidder (2010) considered that, what is written on individuals' Facebook wall is always what humans believe about themselves. This opinion is supported by Berkelaar and Harrison (2016), who believes that conventional sources such as letters of recommendation and can easily be forged and discredited, however, having online recommendations, connections and publications allows to verify the information provided. But even if much of the information online can seem reliable, given the possibility that they can post information about other persons without any revision, leads to frequent problems of misrepresentation, inaccurate information, as well as exaggeration, humours and false information's. Additionally, the possibility of identifying others though tag, comments, videos and pictures and Facebook's strict rule against deleting comments from other users, forbites individuals to exclude erroneous information about their persona. This lack of control over their own identities is recognized by Stoughton, Thompson, and Meade (2015), as increasing the risk that applicants will be undervalued by hiring organizations Additionally, is relevant to mention, that much of the information gleaned from social media is not job related (Becton et al., 2019) and, shouldn't be accounted as part of the equation, since, once repeated can unconsciously induce different results.

**4. Does it optimizes the process? - Optimization tool:** In Boudlaie et al. (2019) opinion, Screening is an almost costless and easy way to search for more information about candidates and saves recruiters, precious time that can be used to recruit managers, which requires more time and criteria. The author do not believed that this process is practical to understand the "tangible figure out the actual personalities and abilities of job applicants", since social media profiles are commonly self-enhancing content, not representing the person in reality, showing lack of trustworthy, which makes this matter to require full consideration, to be able to base right choices.

Several authors defended that as companies believe that their employees add value to their company, this process is crucial to identify best fits for the company, providing a leverage while, prevents dismissals and avoidance of the costs associated with that. However, authors as Boudlaie et al. (2019) believes that to increase the probability of making appropriate choices, other tools such as local research, interviews and digital footprint, should also be added.

To conclude, resorting to social media screen to find information regarding a person, is part of the normal internet use for many companies and most countries, who additionally, do not seem as having any policies to regulate these practices. Unfortunately, there are few studies in Portugal regarding this practice, which makes it imperative to understand to which level is legal, valid, and acceptable and useful to optimize the recruitment process in Portugal.

#### 4.2.2 Where do recruiters search for information?

SNW become the elected place for recruiters, to find all the information they need about candidates. Previous research reports that this trend already exists in Portugal despite being an unexplored theme and boasting a much less pronounced trend that in other countries such as the United states. Humanos et al. (2018) reported that only 64.5% uses social media to collect information about their candidates, study reinforced by Gil (2019) with a sample study of 124 individuals which concluded that 79% of the inquiries resorted to social media screen during recruitment.

Screening can be performed on all the networks available but, since Facebook and LinkedIn have different purposes, motivations and perceptions, as Chang et al. (2017) claims, the source of information depends on the objective of the research, and on the industry, since as CareerBuilder (2018) mentioned IT industries (74%) and manufacturing industries (73%) are more likely to search online for they candidates that on the retail and non-retail sales (59%).

Melão and Reis (2020) considered Facebook as a non-professional network, as it can be easily manipulated, yet allows to asses organization fit and soft skills, whereas Becton et al. (2019), recognizes the utility of Linkedin to uncover professional attributes and job fit, even though this author recognizes that unprofessional SNW profiles negatively influences recruiters evaluations while professional SNW content had no little to no effect on evaluations, which findings generally support popular press reports.

Previous studies such as Reppler (2011) revealed that most accessed recruitment is Facebook (76%), Twitter (53%) and LinkedIn (48%). A further study from Adecco (2015) emphasized that whereas Linkedin is more popular to recruit, Facebook is recurrently used to check candidates' online reputations and even at an equal rate, to evaluate their personality, which is turning Facebook a more equal platform to Linkedin to check online reputation, opinion supported by Chang et al. (2017) which recognizes that 23% of professional uses Facebook to do it. On the other hand, in Portugal those impressions are not supported by most authors. Even though Gil (2019) shows that 23.5% of the sample resorts, the most, to Facebook, the biggest part of the sample (76.5%) yet resorts, the most, to LinkedIn. This study is also supports evidences from Melão and Reis (2020), which, with a larger sample (n=429) showed that a very significant part of their sample (89.3%) reports using LinkedIn while only 57.3% uses Facebook in such process.

# 4.2.1 Which kind of information are recruiters searching for?

When individuals interact on the web, they leave tangible and intangible, records which identifies them and, are defined by Muhammad et al. (2018) as digital footprints. The possibility of sharing sensitive information like personal status, opinions, proposition and public and private conversations (Chang et

al., 2017), making SNS, the elected places for recruiters to find personal and relevant information about citizens.

When companies want to gain perspective on human behaviours and interaction (Jeske & Shultz, 2016; Helm, 2018) to provide an overview of the applicants, they resort to public tools such as searching engines (Buchanan et al., 2017). This possibilities to verify their identities as well as uncovering positive and negative attributes or other traits that might jeopardize company' results (RiskAware, 2017; Gruzd, Jacobson, & Dubois, 2020). This affirmation is supported by CareerBuilder (2018), which proved that 66% uses searching engines like google and focus on their active digital footprint, public online records on social media, that are helpful to optimize their processes (Boudlaie et al., 2019).

Recruiters resort to all social medias available but, since the focus of this study is the professional network LinkedIn and the personal one Facebook, we will mainly focus on the content that can be found on both networks. Even though most recruiters believe that those SNW are two strong sources of information because Facebook has the wider amount of personal information and Linkedin, the recognition on the professional area some specialists disagree. While most identify Facebook online profiles as representations of the most desirable traits on a person, identifying users as creators, commenters and reviewers in a social community (Chang et al., 2017), representing an extension of one's self and mirroring the actual personality of its users (Azucar et al., 2018), others such as Feher (2019) argued that it might not reflect their authentic identity, which Boudlaie et al. (2019) describes as the "real-world personality". Both opinions may be right since because, even if exaggerated, online profiles might contain truthful information about a person.

Social media entails several details about a person, which supports recruiters' decisions of resorting to these sources to Cybernet. Several authors have underlined the main three reasons of their searches:

The first identifiable reason is *curiosity*. This can be stimulated with the intent of the recruiter to find any previously unknown information available online that was not provided or covered by the jobseeker on the cv's, résumés and cover letters, such as unique interests, past-times activities, travels and cultural interests, and which may enhance applicants' profiles.

Secondly, to identify *positive information* to support hiring decisions. For example, discovering additional information's which enhances their capabilities, competencies as well as identifying personality traits that suits a determinate job, will add value to the applicant. Furthermore, finding information that validates jobseeker's trustworthiness or qualifications as well as discovering good contributions from others (such as good reviews) will also be beneficial to the process (Reppler, 2011; RiskAware, 2017; Gil, 2019; Hartwell & Campion, 2020).

Thirdly, to uncover negative information's or as Berkelaar and Harrison (2016) have labelled it as "red flags" associated with motives not to hire. Screening is a very useful process to uncover falsified information's such as information that do not validates resumés' content and find inferences about applicants lack of professionalism (Henderson, 2019) and job fit. Root and McKay (2014) study highlighted that only 12% of the employers assumed looking for motives not to hire. In addition, preceding studies prove that the majority of the content searched shows not admissible conducts, that will not be valorised by upcoming employers, such as signals of misalignment with the organisation (Peluchette & Karl, 2009), information inducing in inappropriate behaviours such as illegal activities or unprofessionalism (Boudlaie et al., 2019) or other behaviours which might jeopardize companies' image or affect job performance (Berkelaar, 2017; Berkelaar & Harrison, 2016).

The type of content searched and collected from social media screen in hiring decisions, as mentioned previously, depends on the goal, objective and hiring policies of the companies, and can positively or negatively affect perceptions but will never go unnoticed, which is possible to view an overview, on table 2 and table 3. Moreover, Bohmova and Pavlicek (2015) proved that more than 35% of employers decide not to hire based on the online content, which is supported by Jacobson and Gruzd (2020) study. Also, previous studies results highlighted that negative motives are given more importance that positive ones and as Chang and Madera's (2012) referred, 12.4% disqualifies applicants when problematic content is found (Melão & Reis, 2020). The list of contents commonly evaluated are composed by on previous literature on the theme, starting from the Faux pas (revised) that lists only the content that could be tracked on Facebook profiles, while adding knowledge from studies regarding other social medias (professional and personal ones) in other countries (Jobvite, 2018; JobVite, 2016; Peluchette & Karl, 2009, 2010; Hedenus, Backman, & Håkansson, 2019; Henderson, 2019; Hartwell & Campion, 2020) and in Portugal (Braga, 2019; Gil, 2019).

Most screeners who came across content enhancing improperness, such as potential drug consumption (CareerBuilder, 2014; RiskAware, 2017; Jobvite, 2018; Hartwell & Campion, 2020), weapons displayed use (RiskAware, 2017; Hartwell & Campion, 2020), alcohol consumption (CareerBuilder, 2014; Jobvite, 2018; Gil, 2019; Hartwell & Campion, 2020) and criminal behaviours, such as the participation in activities in violation of workplace policies (RiskAware, 2017) showed having a high negative influence on perceptions. Contrary to this, where all the behaviours which entailed helping others, such as making contributions to charities, be a volunteer or engaging in local and national organisation (Jobvite, 2018), were precepted as adding value to the applicant.

The continuously addiction of sharing with others what is happening, leaves on social media, contents such as informal selfies or tagged photos (Peluchette & Karl, 2008), provocative photos, videos or information (Peluchette & Karl, 2010; Reppler, 2011; RiskAware, 2017; Gil, 2019; Henderson, 2019; Hartwell & Campion, 2020) as well as sexual posts and references (RiskAware, 2017; Hartwell &

Campion, 2020), indicators of profanity (Hartwell & Campion, 2020), which are easy to find online, however, negatively appreciated by employees.

For most companies, one of the most desirable capabilities on a candidate is their social skills. Keeping this in mind, having mutual connections, besides facilitating the references, also seem to increase the trustworthiness on the applicant (Jobvite, 2018; Gil, 2019; Hedenus et al., 2019), which can be slightly enhanced by having a high number of friends and connections (Hedenus et al., 2019; Hartwell & Campion, 2020). On the other hand, if applicants show a relatively low number of friendships (Hartwell & Campion, 2020) is slightly seen as more negative, however if, as Hedenus et al. (2019) reported some of their connections are affiliated with criminal elements, controversial interest groups or are in conflict with those on the organisation, the negative perception trend becomes accentuated.

Regarding the visual and textual content, present on profiles, when poor communication skills and inappropriate ways to communicate (communication style) are showed (Reppler, 2011; CareerBuilder 2014; RiskAware, 2017; Jobvite, 2018), as well as grammar and spelling mistakes (Jobvite, 2018; Hartwell & Campion, 2020;), the recruiter mentioned feeling negatively impressed; while showing creativity (RiskAware, 2017; Gil, 2019;), interesting hobbies and interests (Hedenus et al., 2019) or and extensive and interesting network content are judged as a trustworthy and cooperative applicant (Gil, 2019; Hedenus et al., 2019).

Companies which reassures that a happy employee is the best asset a company might detain, are normally the companies which defends the need of owning a work-life balance. This premiss can be supported by Hartwell and Campion (2020) study, which showed that having information about family, sporting events and recent vacations is able to slightly but positively influence decisions, while attending at parties and social events can be assessed on the contrary. Furthermore, since screening aims to find the right fit for the job, professional content can also change recruiters' perceptions. If candidates seem to share confidential information (CareerBuilder, 2014; Gil, 2019; Hartwell & Campion, 2020) spears bad-mounting comments about previous employers or co-workers (Reppler, 2011; CareerBuilder, 2014; Hartwell & Campion, 2020), company will believe that those contents are showing negative attributes that might jeopardize the company (RiskAware, 2017; Jacobson & Gruzd, 2020). While if candidates have good references posted by others (Reppler, 2011; Gil, 2019), if their traits seem to fit the organisation' culture, have received complements and awards congratulating them for their work, as well as spending several years on the same organisation (Gil, 2019) recruiter might perceive it as committed and hardworking employee which will valorise their decisions.

Companies' internationalization raises the necessity in creating multidisciplinary work groups, which makes imperative to screen their candidates to understand if there are any contents enhancing

discriminatory behaviours concerning matters such as race, gender or religion (CarrerBuilder, 2014; Gil, 2019; Hartwell & Campion, 2020).

Analysing online contents also relates with their presence on SNS. Jeske et al. (2019) underlines, that the non-self-disclosure of a candidate can be judged negatively as a cover up of questionable behaviours, based on the assumption that they are not SNS member (Hedenus et al., 2019) or that their profiles are not trackable, which (Hedenus et al., 2019; Hartwell & Campion, 2020) denominates as "invisibility", so it's difficult to verify its identity. In addition, detaining an unsuitable name (Gil, 2019), not having a profile picture and have not updated profiles (Hartwell & Campion, 2020) are also previewed as negative factors. This is supported by CareerBuilder (2018) which declared that 47% of the employers were not able to find a candidate online, which decreased the possibility of calling that person for an interview, since 28% would like to gather more information regarding a candidate before calling it for an interview and 20% expects applicants to have an online presence.

On the other hand, some authors believe that matters such as political, ethical and religious content should be considered neutral and not accounted on hiring decisions, however in Gil (2019) study, beliefs and customs were seen as negative inducers, as well as commenting on controversial topics such as religious statements and politicians rants (Peluchette & Karl, 2008; Jobvite, 2018; Hartwell & Campion, 2020).

To facilitate the comprehension of the various types of contents, Berkelaar and Buzzanell (2015) have separated these in five dimensions: visual (all the "red flags" brought up by pictures, illustrations and avatars, such as illegal activities and unprofessional behaviours), Textual (the type, amount and the manner works and behaviours were described, such as characteristics which enhances lack of communication skills and "text speaks"), Relational (connections and relevant social information to verify truthiness) and technological (indicators how candidates uses technologies, for which purposes, lack of privacy settings and lack of commitment on work activities).

Below, there are two summarizing tables (table 2 and 3) with all the contents that have been valorised and undervalued by employees during screening:

Table 2 – Types of online contents which negatively influences perceptions

Type of content	Authors
Discriminatory behaviours or inappropriate  Negative comments about race, gender, or religion	CareerBuilder (2014) Gil (2019) Hartwell and Campion (2020)
Potential drug use Indications of drug use References to "marijuana"	CareerBuilder (2014) RiskAware (2017) Jobvite (2018) Hartwell and Campion (2020)
Profanity	Hartwell and Campion (2020)

Provocative photos Inappropriate photos, videos, or information (tongue or nudity)	Peluchette and Karl (2010) Reppler (2011) RiskAware (2017) Henderson (2019) Gil (2019) Hartwell and Campion (2020)
Sexual posts Sexual references	Hartwell and Campion (2020) RiskAware (2017)
Indications of gun use Display or use of weapons	RiskAware (2017) Hartwell and Campion (2020)
Evidence of excessive drinking Pictures of alcohol consumption "Alcohol use"	CareerBuilder (2014) Jobvite (2018) Gil (2019) Hartwell and Campion (2020)
Attendance at parties/social events	Hartwell and Campion (2020)
Commenting on controversial topics such as:	Peluchette and Karl (2008
Religious statements	Jobvite (2018)
Political statements/political rants	Hartwell and Campion (2020)
Informal selfies or tagged photos	Peluchette and Karl (2008)
Beliefs and customs	Gil (2019)
Criminal behaviours such as the participation in activities	RiskAware (2017)
which are in violation of university or workplace policy  Having a relatively low number of friends/connections	Hartwell and Campion (2020)
Contacts which values may conflict with those of the	Hedenus, Backman, and Håkansson
organization	(2019)
Affiliations with criminal elements or controversial	Hedenus, Backman, and Håkansson
interest groups (may influence decisions)	(2019)
Negative comments about the applicant from others	Hartwell and Campion (2020)
Identify poor communication skills	Reppler (2011)
Inappropriate communication skills	CareerBuilder (2014) Jobvite, (2018)
Grammar & spelling mistakes	Jobvite (2018) Hartwell and Campion (2020)
Extensive social network	Hedenus, Backman, and Håkansson (2019)
Sharing confidential information	CareerBuilder (2014) Hartwell and Campion (2020) Gil (2019)
Disparaging current/former employer	Reppler (2011)
Bad-mouthing about previous employers/co-workers	CareerBuilder (2014)
	Hartwell and Campion (2020)
Lied about qualifications	Reppler (2011)
Contradicts qualification	RiskAware (2017)
	Gil (2019) Hartwell and Campion (2020)
Negative attributes which may jeopardize the company	Hartwell and Campion (2020) RiskAware (2017)
	Jacobson and Gruzd (2020)
Misalignment with the organization Lack of professionalism	Berkelaar and Harrison (2016) Gil (2019)
Candidates who are not members of SNS	Hedenus, Backman, and Håkansson (2019)

SNW profile that has not been regularly/recently updated	Hartwell and Campion (2020)
Not finding an applicant's SNW profile;	Hedenus, Backman, and Håkansson (2019);
Candidates' invisibility	Hartwell and Campion (2020)
Not having a profile picture	Hartwell and Campion (2020)
Unsuitable profile names	Gil (2019)

Table 3- Types of online contents which positively influences perceptions

Type of content Authors

Type of content	Authors
Creativity	Gil (2019)
	RiskAware (2017)
Mutual connections or contacts	Gil (2019)
	Jobvite (2018)
	Hedenus, Backman, and
	Håkansson (2019)
Having a relatively high number of friends or connections	Hartwell and Campion (2020)
	Hedenus, Backman, and
	Håkansson (2019)
Information about family	Hartwell and Campion (2020)
	Hedenus, Backman, and
	Håkansson (2019
Information about sporting events	Hartwell and Campion (2020)
	Hedenus, Backman, and
Information about a recent vacation	Håkansson (2019)
	Hartwell and Campion (2020)
Interests and Hobbies	RiskAware (2017)
	Hedenus, Backman, and
	Håkansson (2019)
Extensive and interesting network	Hedenus, Backman, and
	Håkansson (2019)
Showed solid communications skills	Reppler 2011
Communication style	RiskAware (2017)
Page content	Gil (2019)
Examples of written or design work	Jobvite (2018)
Good references	Reppler (2011)
Good comments posted by others	Gil (2019)
Complements and awards	Gil (2019)
Time within the company	Gil (2019)
Personality fit the company	Reppler (2011)
Demonstrates ability which fits the company's culture	Gil (2019)
Information that supports professional qualifications	Reppler (2011)
Adequate professional profile	Gil (2019)
Profile endorsing qualifications	RiskAware (2017)
	Hartwell and Campion (2020)
Member of a SNS	Hedenus, Backman, and
	Håkansson (2019)
SNW profile with little information (due to privacy settings)	Hartwell and Campion (2020)

#### 4.3. Recruiters Screening perceptions

Berkelaar and Harrison (2016) said "Cibervetting affects personnel selection". This sentence recognizes that, although this process brings several advantages to companies, mainly the optimization of the recruitment and hiring process, it must be taken in account, as it can have consequences for individuals, organizations and society lives.

### 4.3.1 Sociodemographic characteristics of Recruiters

The interpretation of the reality is different among people. Previous studies on the field have recognized that characteristic of the applicants can affect their online behaviours (Adamovic, 2020), however, when facing the other side of the coin, recruiters' characteristics, there is few empirical information about this matter.

Recruiters perceptions may vary based on their socio demographic, socioeconomic and social factors, as well as their experiences, backgrounds, and memories. According to Bauld, Chesterman, and Judge (2000), all these backgrounds can alter perceptions, as well as the way questions are addressed and by whom.

First, recruiter's culture is proved to alter the perceptions of the job candidate's nonprofessional content (El Ouirdi, Pais, Segers, & El Ouirdi, 2016a), that is why, according with Vera Manuel testimonial on Rebelo (2013), detaining soft skills is one of the most important characteristics in a recruiter. Capabilities such as communication and critical thinking, as well as understand their role, their objectives, and the desired profile of the person there are recruiting. In addition, is also important to be able think outside the box and identify people that have longitudinal capabilities, which can be recognized as an asset for a company. Secondly, Prior studies of Darbyshire, Kirk, Wall, and Kaye (2016) show that recruiter personality traits (extraversion, agreeableness, openness, conscientiousness and neuroticism) can influence their perceptions, consequently influencing outcomes.

Lastly, Lippa and Dietz (2000) mentioned, the accuracy of personality judgments are based on the characteristics of the "good judge" (T. Letzring, Colman, L. Krzyzaniak, & Wood Roberts, 2017; T. D. Letzring, Funder, Letzring, & Funder, 2019), so we have underline four social demographic characteristics: Age, gender, level of education and size of the company.

# 4.3.1.1 Recruiter characteristics: Age

Staring with the "Age" is one of the most mentioned characteristics as influencing the way information is communicated and perceived. We started by implying that Generations perceptions are different based on their knowledge and past experiences. As Wingo (2019) mentioned, young adults (individuals born in the middle 1990's) are immeasurably different from their millennials processors. The term

"old" do not only recognizes people for their age as by their attitudes. Botfield (2018) recognizes that older people are commonly perceived as more judgemental, less open and less knowledge in certain matters. Additionally, is also portraited as being less comfortable in discussing persistent taboos such as sexual health, sexual practices, and sex stigmas.

This premiss is reinforced by several studies as, Botfield (2018), that have pointed down that younger generations are developing their own identity, becoming more open-minded and less traditional. Wingo (2019) explains this matters, declaring that they spent their time differently, always connected to new technologies; they behave in a different way, rejecting once sanctified taboos, establishing higher and bigger goals, and they live life differently, always seeking for new opportunities which make them happy, chasing better life opportunities and careers. Moreover, young generations are also marked by their higher level of tolerance and acceptance as well as lack of patience for inequality (Wingo, 2019), even if some authors do not recognize that they are growing as fast as others generations.

Several studies report that, in addition to the era and the values with which they grow up, older adults focus more on positive effects, that is why they give higher rates to positive figures, since they seem to transmit a different stimulation that negative or neutral ones. However, these phenomena do not occur on the same terms to youngest individuals since their stimulus are different. This premiss can also explain why social contents are interpreted differently, because as Neiss, Leigland, Carlson, and Janowsky (2009) affirmed: "age differences affect affective perceptions of the pictures".

Moreover, a study of Bauld, Chesterman and Judge (2000), highlighted that older users are more likely to express higher levels of satisfaction that younger people. This may be since older users are usually satisfied services provided, meet their needs, while young generation, while younger generations have higher standards of satisfaction.

Lastly, there are several observed evidences that across age groups, woman have higher privacy concerns and perceive higher levels of risk that man (Jacobson & Gruzd, 2020), explained by the fact that women can be more aware and concerns with privacy matters.

# 4.3.1.2 Recruiter characteristics: Gender

In general, "gender" is one of the most recognized characteristics. Both sexes are crucial in the life and business environments. Gender is recognized as a "protected characteristic", which indicates that there are several policies and laws against discrimination based on these specific characteristics (CarrerBuilder, 2014; Gil, 2019; Hartwell & Campion, 2020).

Over the years, states have been creating policies to balance gender differences. In companies, these policies intent to equivalate the positions that both genders occupy, which is one of the reasons

why the percentages on Woman on leadership positions are escalating (Noland & Kotschwar, 2016). However, there is still a long way for both Man and Woman have the same rights, the same "voice" and, in the business environment the same recognition and equal pay checks.

Several countries such as France Spain, Norway Iceland and Finland, have been stablish measures in which there are quotas to fulfil with woman, while on South Korea, these policies encourages companies to provide flexible work and childcare supports (which also supports the economy and procreation of the country), and other countries have been adopting new policies stablishing balance quotes and developing WLB policies (Noland & Kotschwar, 2016).

For Noland and Kotschwar (2016), Gender is associated with company performance, since women in leadership positions showed to improve values and increase skills diversity. In addition, El Ouirdi, Pais, Segers, and El Ouirdi (2016) references in his study that Woman are able to process elevated levels of information, which they consider from both objective and subjective perceptions, while man select only the information they need to process and only understand the "bigger picture". This study also mentions other authors who, proved that man is less responsive to the negative stimulus on their environment highlighting that women, will be more severe when judging professional and nonprofessional contents.

Lastly, being the focus of this study, SNW, Jacobson and Gruzd (2020) referees based on several empirical evidences that women tend to be more risk averse, so they have higher privacy concerns in both online and offline environments.

# 4.3.1.3 Recruiter characteristics: Level of education

The Level of education, is one of the characteristics which changes with the passage of time and, the lack of access to this, represents itself, a constraint to perceptions. Botfield (2018) have recognized that "no experience is universal "and that there are different types of education and learning. However, the study of Lima and Bastos (2019), proved that the years of formal education, as well as specific scientific training on a subject, increases the chances of the information being perceived more correctly, given that education is more valued than experience a certain domain. This can be explained by the same author that emphasizes that formal education may increase cognitive abilities, improving the perceptions of the surroundings, and affects the ability to comprehend existing relationships. When people are not educated or particularly educated regarding a matter, their perceptions can vary from someone that deeply knows the subject in study. Szczepanowski et al. (2020) referred that learning experiences can influence social perceptions and specific interpretation which, Viljoen and Stephens (2020), by differing the different types of background education (such as the area of the expertise), affirms that the higher the level of education an individuals is, the more positive is the

perceptions of a specific and relatable situation, while, learning experiences can negatively affect their perceptions.

## 4.3.1.1 Recruiter characteristics: Size of the company

The "Size of the company" in which recruiters work can also be identified as a characteristic which can influence their decisions. The size of the company (micro, small, median, and large), the number of employees, the area of actuation and their location are all factors that can change the way the contracting process is carried out.

Most companies have created formal policies and provided training to their employees so they all follow the same steps, however, as Bordonaba-Juste et al.'s (2012) findings suggests, larger firms, have larger resources, and hierarchical structures and traditional heritages, so the larger the firm, the more likely is to use different communication tools, explore e-business more intensively and to institutionalize policies such as gender quotes and other measures for example, and integrating policies regarding disable people. Furthermore, while SME's are more willing to innovate and try out new businesses processes, larger companies normally do not intent to change, yet, they search to innovate ways to allocate their multiple resources (Bordonaba-Juste et al., 2012). Additionally, they expect that large firms will have more specialized employees than SMEs, which most small firms' resort (mostly IT).

Firm size also has several implications. Bonafede et al. (2016) recognized that the presence of women in leadership places is associated management systems, which varies across European countries. In addition, Company size, is also influenced by hiring decisions, ability to perform in the job and professional appearance. Largest companies like confidence young minds while small companies endorse commitment of intensive work. Furthermore, smaller companies expressed the desire to expand employment opportunities for youth and larger companies indicated a desire to give back to the community.

### 4.3.2 Bias in Recruiters' Screening perceptions

Snooping around applicants' provide employers useful information that they might not be able to obtain otherwise (Karl, Peluchette, & Schlaegel, 2010), however, it can compromise the existing relationship between parts and reduce the attractiveness of an organisation (Gruzd, Jacobson, & Dubois, 2020b).

For that matter Karl, Peluchette, and Schlaegel (2010) highlight the caution and carefulness in handling the information uncovered, given that they are considerations and judgements that may not

be based exactly on correct information, and consequently trigger negative and discriminatory decisions and applying extremely bias.

Several authors have shed light regarding this subject by enumerating the most common "burdens of proof" in discrimination (on table 4). The huge amount of information and different types present on social media (Smith & Kidder, 2010) rises one of the biggest constraints on an accurate judgement referred by Letzring, Colman, L. Krzyzaniak, and Wood Roberts (2017) is the misperception of the information obtained. This phenomena is defined by Berkelaar and Buzzanell (2015) and as the "decontextualization/recontextualization effect" and occurs when recruiters search for online information and only some parts appears on display and without context, even the most positive behaviours can be poorly interpreted. In addition, even if the information is correctly collected it may rise problems of reliability since recruiters do not normally attest the veracity and accuracy of the content tracked (Berkelaar & Buzzanell, 2015; Boudlaie et al., 2019; Breaugh, 2016; Jeske & Shultz, 2016; Melanthiou et al., 2015).

Due to the nature of the information, screening can likewise raise several ethical concerns, such privacy (Melanthiou et al., 2015; Breaugh, 2016; Jeske & Shultz, 2016; Hartwell & Campion, 2020; Melão & Reis, 2020). There is a thin line between peeking on peoples' lives and violating their privacy, since candidates lack control over their own data (SHRM, 2017) and since third parties are able to reference them, they become excluded from their own data.

Beyond ethical concerns, the lack of unstandardized information (Breaugh, 2016; Jeske & Shultz, 2016) can lead most recruiters to make discriminatory judgements (Hedenus & Backman, 2017; SHRM, 2017; Hartwell & Campion, 2020) against racial and ethnic minorities whose demographic information may include, as Scepura (2020) described "protected characteristics". That list entails features such as age (Caers & Castelyns, 2011; Evuleocha & Ugbah, 2018), Disability (Smith & Kidder, 2010), sex (Karl et al., 2010; Evuleocha & Ugbah, 2018;), gender (Caers & Castelyns, 2011; Jeske & Shultz, 2016; Scepura, 2020), race (Karl et al., 2010; Smith & Kidder, 2010; Caers & Castelyns, 2011; Jeske & Shultz, 2016; Evuleocha & Ugbah, 2018; Scepura, 2020), religion (Karl et al., 2010; Evuleocha & Ugbah, 2018), sexual orientation (Caers & Castelyns, 2011; Jeske & Shultz, 2016; Evuleocha & Ugbah, 2018), relationship status (Evuleocha & Ugbah, 2018), marital status (Evuleocha & Ugbah, 2018; Melão & Reis, 2020) and pregnancy conditions. Moreover, also other characteristics such as names (Caers & Castelyns, 2011; Elias, Honda, Kimmel, & Chung, 2016) which are enhanced by racial stigmas involving enhancing the discrimination based on the way they sound, nationality (Evuleocha & Ugbah, 2018), skin colour (Evuleocha & Ugbah, 2018)) and Political affiliations (Evuleocha & Ugbah, 2018). Most of those bias is currently mentioned in previous literature however few shows how certain behaviours are differently evaluated from one person to another.

Other authors such as Jeske and Shultz (2016) also gives connotation to the importance given to other attributes such as visual characteristics like facial attractiveness and maturity (Caers & Castelyns, 2011). Furthermore other topics such as *health matters* (Caers & Castelyns, 2011; Jeske & Shultz, 2016) such as obesity or *disability* (Smith & Kidder, 2010) and *lifestyle choices* (Jeske & Shultz, 2016)also seem to contribute unduly to distorted perceptions.

To finish, since there is no proof that collected information are relevant to work-related potential or performance (Caers & Castelyns, 2011; Hedenus & Backman, 2017; SHRM, 2017) and the percentage of selectors which reports having formal policies is low (Caers & Castelyns, 2011; SHRM, 2017), is important that companies set up formal and informal policies as well as provide recruitment and hiring departments especial training and pre-teste guides to be able to assess, with more justice, screening content (Becton et al., 2019).

Table 4 – Characteristics which can compromise perceptions

Type of Bias	Authors
Ethical risks: Violations of privacy	Melanthiou et al. (2015) Breaugh (2016) Jeske and Shultz (2016) Hartwell and Campion (2020) Melão and Reis (2020)
Exclusion - Lack of control over data	Hedenus and Backman (2017)
Legal risks: Discrimination Lack of demonstrated validity &reliability	Berkelaar and Buzzanell (2015) Melanthiou et al. (2015) Breaugh (2016) Jeske and Shultz (2016) SHRM (2017) Hedenus and Backman (2017) Boudlaie et al. (2019) Hartwell and Campion (2020)
Information is not relevant to their work-related potential or performance	Caers and Castelyns (2011) SHRM (2017) Hedenus and Backman (2017)
Decontextualization and recontextualization affect Misperception/ misunderstanding	Berkelaar and Buzzanell (2015) Letzring, Colman, L. Krzyzaniak, and Wood Roberts (2017)
Amount and type of information	Smith and Kidder (2010)
Lack of information on online pages Lack of standardized information  Demographic information against racial and ethnic minority candidates	SHRM (2017) Jeske and Shultz (2016) Elias, Honda, Kimmel, and Chung (2016)
Age	Caers and Castelyns (2011) Evuleocha and Ugbah (2018)

Race	Karl et al. (2010) Smith and Kidder (2010) Caers and Castelyns (2011) Jeske and Shultz (2016) Evuleocha and Ugbah (2018) Scepura (2020)
Gender	Caers and Castelyns (2011) Jeske and Shultz (2016) Scepura (2020)
Sex	Evuleocha and Ugbah (2018) Karl et al. (2010)
Sexual orientations	Caers and Castelyns (2011) Evuleocha and Ugbah (2018) Jeske and Shultz (2016)
Marital status	Evuleocha and Ugbah (2018) Melão and Reis (2020)
Religion affiliation	Karl et al. (2010) Evuleocha and Ugbah (2018)
Visual characteristics	Jeske and Shultz (2016)
Names inducing racial stigmas Minority-sounding' names	Caers and Castelyns (2011) Elias, Honda, Kimmel, and Chung (2016)
Lifestyle choices	Jeske and Shultz (2016)
Health conditions such as obesity	Caers and Castelyns (2011) Jeske and Shultz (2016)
Disability	Smith and Kidder (2010)
Facial attractiveness - Facial maturity	Caers and Castelyns (2011)
Skin Colour	Evuleocha and Ugbah (2018)
Nationality	Evuleocha and Ugbah (2018)
Political affiliation	Evuleocha and Ugbah (2018)

### 4.4 Screening repercussion and Candidates awareness?

As Peluchette and Karl (2009) and Feher (2019) revealed, Social media websites and digital platforms aims their users to express themselves, creating a secure and congruent data set to be connected with others, acquire new knowledge or find other users with the same interests (Chang et al., 2017), as well as strengthening social relationships (Boudlaie et al., 2019).

The lack of awareness regarding this premises lead us to informed that extremely important that the digital footprint is taken seriously because it can be beneficial or harmful, but it's never irrelevant (Boudlaie et al., 2019) and can have several consequences and advantages on people's lives and companies like affect their online records and even their credibility.

The lack of alertness that their digital footprints and over-sharing can have several implications when applying for an internship opportunity or a job placement (Peluchette & Karl, 2009) as well as other career-related consequences (Becton et al., 2019). It is clearly shown by the statistics of CareerBuilder (2009) stated on Haefner (2009) that the hiring decisions ratio is influenced by the

process denominated screening, occurring on applicants SNS profiles. Even though there are many studies related with the information taken from social media, previous literature have not, yet, evaluate applicants reactions, perceptions and cognition regarding the self-disclosure of that information in the cibervetting (Jeske et al., 2019). Several authors defend that there is a large disconnection between the reality and people's perception, and how common it is for social media to have a negative impact on ones' liability. For example, even though previous research confirms that young people have high awareness of employers' use of social media for screening, other studies shows that only 2% of social media of the users, believe that their social media posts have caused them to get fired or not be hired (Jacobson & Gruzd, 2020). The veracity of this opinion is supported, on the different methods that organisations use to verify the identity of their candidates, and associate with their capabilities for the vacancies. Finding records that are not well interpret of demonstrate behaviours to which companies do not identify with their mot, may prejudice those applications, even if the information is false or under prejudice (Buchanan et al., 2017).

In one hand, some users are unmindful that simple actions during the use of the internet such as searching for something, opening a travel agency website or use social media are registered. Their multiple accesses to different sites and platforms lead Feher (2019) to raise questions such as "who am I online?", searching for the best guidelines for a long-term control of their online representations. Several studies have highlighted their naïve knowledge regarding the subject: A study of medical students by George, Green, et al. (2014) underline that most people are naïve about the potential hazards resulting from their involvement with social networking sites such as Facebook, as well as the negative impact that improprieties may have on future employment opportunities and on the doctor-patient relationship.

On the other hand, other individuals are cognizant that their accesses have possibly been registered by platforms, even though many are only aware that the data registered not only comprehends the active records as also the non-passive, intangible and transparent data. Having this idea in mind is relevant to understand why people, knowing that these data exists and can be used for other purposes without their own knowledge, decides to leave it (Muhammad et al., 2018). This premiss can be explained by two main factors, being the first the lack of knowledge how to monitor, control and edit the information that has been left over the years on social media and that entails protected classes categories information based on which people can be illegally discriminated (Becton et al., 2019), and secondly based on the value that people give to privacy. Rendering Chang et al. (2017), the number of information disclosed decreases as the perception of the privacy concerns increases, example that can be illustrated by the various types information shared on Facebook and not on LinkedIn. Opinion however, that goes against (Jacobson & Gruzd, 2020), which study showed that on Linkedin (71.1%) have public setting while on Facebook 82.7% have private profiles.

Having said this, this topic not only displays the lack of awareness towards privacy on some individuals as it also sheds light on the growing awareness that users and businesses are gaining regarding concepts such as SNW use, privacy, and digital footprints. However, there is still lack of understanding regarding this matter.

# 5. Conceptual framework and Hypothesis formulation

# **5.1 Conceptual Framework**

One of the biggest challenges for companies is finding the right fit for the vacancies available, however, finding these talents is a hard-working and time-consuming method. To guarantee the efficiency and success of the process, many companies have been resorting to social medias such as LinkedIn, Facebook, Twitter, and Instagram, among others.

Most authors have been recognizing that integrating SM's does not only allows to reach wider audience, and other departments not covered by traditional methods, as it facilitates several steps during the recruitment process. Resorting to social media screen, according with Evuleocha and Ugbah (2018), is a "potentially powerful tool for screening job applicants prior to a face-to-face encounter", allows to acquire information about candidates, reduce uncertainty and increase the predictability of their applicants behaviours, which facilitates hiring decisions. Even though there are several research regarding candidate's awareness and disposable to be screen, there seems to be little interest in understanding the characteristics of the recruiters in this process and their perceptions regarding the several types of contents tracked online.

The previous literature has proved that some types of content influences positively and negatively recruiters' intentions to hire, leading us to ask: Can we evaluate, In Portugal, which specific types of contents, portraited on applicant's social media profiles, are able to influence recruiters hiring decisions?

The framework constructed sheds light regarding how the information released by the stimulus person on their SNW profile is relevant and available and how will affect the perception and judgement of the receiver (Recruiter).

In this case, and accordingly with the literature review, we will be searching to identify which are the dimensions of content released by applicants on their social media networks - especially on Facebook and LinkedIn – and the consequences – positives or negatives on influencing recruiters perceptions, as well as identifying if the characteristics of the applicants can induce bias and if the main characteristics of the recruiter is able to affect their perceptions.

Accordingly, with the framework on the figure below (figure 3) Recruiter perceptions are influenced by the different types of contents available on online SM profiles, as well as by the characteristics of the judge and the characteristic of the applicant.

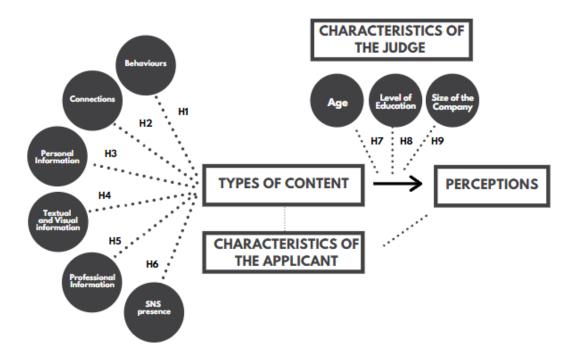


Figure 3 – Conceptual Model, based on Darbyshire et al. (2016) Model, adapted from the David
Funder (1995/1999) Realistic Accuracy Model (RAM)

The first construct regarded the *Types of applicants' online content*. The list was designed based on the different types of contents that can be found online, in the different platforms and that were already mentioned and evaluated in other studies (Karl et al., 2010; Berkelaar & Buzzanell, 2015; Isabel & Fragoso, 2017; RiskAware, 2017; Gil, 2019; Hedenus et al., 2019; Hartwell & Campion, 2020).

To facilitate its assessment, the contents were divided in dimensions. In a previous study of Berkelaar and Buzzanell (2015), online information that employers reported using for personal selection were divided in 5 themes (visual, textual, rational, technological and absence of information), however, since this study accounted more variables, to facilitate it's comprehension, on this framework contents were subdivided differently, in 6 dimensions (Behaviours, connections, Personal information, Textual and Visual Information, Professional information and SNS presence). In each of the tables below, table 5 (5.1,5.2,5.3,.5,4, 5.5 and 5.6) there is a summary of all the contains inserted in each dimension.

Table 5 – Applicant's social media online contents, in dimensions (adapted from Berkelaar and Buzzanell (2015))

Table 5.1 - Applicant's social media online contents "Behaviours"

Content Dimensions	Type of online content	Source
	Informal selfies or tagged photos	Hartwell and Campion (2020)
	Comments in controversial topics: religious; political rants	Karl et al. (2010) Hartwell and Campion (2020)
	Provocative/inappropriate photos/videos/information	Karl et al. (2010) Hartwell and Campion (2020)
Behaviours	Sexual references	Karl et al. (2010) Hartwell and Campion (2020)
	Drugs use and 'marijuana' references	Karl et al. (2010) Hartwell and Campion (2020)
	Comments about race	Hartwell and Campion (2020)
	Participation in activities in violation of university or workplace policy	RiskAware (2017)
	Evidence of excessive drinking	Karl et al. (2010) Hartwell and Campion (2020)
	Display or use of weapons	Hartwell and Campion (2020)

Table 5.2 - Applicant's social media online contents "Connections"

Content Dimensions	Type of online content	Source
	Mutual connections	Gil (2019)
Connections	Relatively low number of friends	Hartwell and Campion (2020)
	Relatively high number of friends	Hartwell and Campion (2020)
	Contacts which values may be in conflict with those on the organization	Hedenus, Backman and Hakansson (2019)
	Affiliations with criminal elements or controversial groups	Karl et al. (2010)

Table 5.3 - Applicant's social media online contents "Personal Information"

Content Dimensions	Type of online content	Source
Personal	Family pictures and information	Karl et al. (2010) Hartwell and Campion (2020)
Information	Attendance at parties or social events	Hartwell and Campion (2020)
	Recent holiday pictures	Hartwell and Campion (2020)
	Negative comments from others	Hartwell and Campion (2020)

Table 5.4 – Applicant's social media online contents "Textual and Visual information"

Content Dimensions	Type of online content	Source
Textual	Multiple languages	Isabel and Fragoso (2017)
and Visual	Excessive posting	Beyvers and Herbrich (2016)
information		Berkelaar and Buzzanell (2015)
	Poor communication skills	Hartwell and Campion (2020)

Table 5.5 - Applicant's social media online contents "Professional information"

Content Dimensions	Type of online content	Source
	Good references posted by others	Hartwell and Campion (2020)
Professional	Information supporting professional qualifications	Hartwell and Campion (2020)
information	Content enhancing professionalism and P-O Fit	Gil (2019)
	Information Contradicting qualifications	Hartwell and Campion (2020)
	Sharing confidential information	Hartwell and Campion (2020)

Table 5.6 - Applicant's social media online contents "SNS Presence"

Content Dimensions	Type of online content	Source
	Not members of SNS	Hedenus, Backman and Hakansson (2019)
SNS	Not having a profile picture	Hartwell and Campion (2020)
Presence	Profile with little information, due to privacy settings	Hartwell and Campion (2020)
	Profile not regularly/recently updated	Hartwell and Campion (2020)
	Candidates' invisibility (profile not found)	Hartwell and Campion (2020)

The second construct, on table 6, refers to the *characteristics of the applicants*. Several studies have highlighting that several characteristics are considered "protected data", which indicates that there is legislation regarding matter to avoid ats of discrimination. Based on this, this study aims to highlight, if, nowadays, there are still factors able to compromise or influence the decisions, based in observable characteristics of the applicants. Table 6 summarizes the most common bias in evaluation processes.

Table 6 – Characteristics of the applicant

Type of online content	Source
Age	Caers and Castelyns (2011)
	Evuleocha and Ugbah (2018)

Gender	Caers and Castelyns (2011) Jeske and Shultz (2016) Scepura (2020)
Race	Karl et al. (2010) Smith and Kidder (2010) Caers and Castelyns (2011) Jeske and Shultz (2016) Evuleocha and Ugbah (2018) Scepura (2020)
Marital status	Evuleocha and Ugbah (2018) Melão and Reis (2020)
Religion	Evuleocha and Ugbah (2018) Karl et al. (2010)
Name (non-common, other nationalities)	Caers and Castelyns (2011) Elias, Honda, Kimmel, and Chung (2016)
Nationality/national origin of the candidate	Evuleocha and Ugbah (2018)
Profile picture (facial attractiveness)	Jeske and Shultz (2016)

The last construct of this framework regards the characteristics of the judge. Studies in the field have highlight that perceptions can, in the overall be influenced by demographic characteristics and recruiter's 5 traits of personality (extraversion, agreeableness, openness, consciousness and neuroticism) can influence the accuracy of their judgements, regarding applicants facebook contents. For that matter, this framework aims to specify if recruiter's demographic characteristics, and not traits of personality are correlated with their perceptions of online content, a table summarizing the characteristics (table 7) can be found below.

Table 7 – Characteristics of the Judge - Demographic Characteristics of the applicant

Type of online content	Source
Age	Bauld et al. (2000) Neiss et al. (2009)
	Botfield (2018)
	Wingo (2019)
Gender	Noland and Kotschwar (2016)
	El Ouirdi, Pais, Segers, and El Ouirdi
	(2016b)
	Jacobson and Gruzd (2020)
Level of education	Botfield (2018)
	Lima and Bastos (2019)
	Szczepanowski et al. (2020)
	Viljoen and Stephens, 2020)
Size of the company	Bordonaba-Juste et al. (2012)
	Bonafede et al. (2016)

#### **5.2** Hypothesis formulation

The main goal of this study is to understand how online contents could alter Recruiters perceptions and consequent hiring decisions. The study was based on the Realistic Accuracy Model (RAM) of David Funder, 1987. This model focusses on the accuracy of the judgment by the judge of the signal emitted by the target. The research Model we present, have suffered the necessary adaptations and adjustments to fulfil the needs of our research.

During screening, practice which consists in gathering online information regarding a person, to assess their suitability for a particular role in a company, recruiters are faced with different types of content, which influences their decisions. These perceptions will be affected by ulterior motives such as the source of the content, the type of content posted or shared by applicants on their social medias, the characteristics of candidate and the recruiter. In addition, the lack of accuracy on the judgment can have career-related consequences (Becton et al., 2019) such as implications for internship applications or professional placements (Peluchette & Karl, 2009).

Companies search for different types of information in different SMs, being the two most common sources, Facebook, the most popular social media and LinkedIn, the most recognized professional network. The source of information varies from one recruiter to another and while Facebook is more recognize as a useful resource to attest organization fit and soft skills, Melão and Reis (2020), Linkedin is best suited for professional attributes and job fit (Becton et al. 2019). However, both networks are utilized to uncovering unknown information; positive and negative attributes or other traits that might jeopardize company' results (RiskAware, 2017; Gruzd, Jacobson, & Dubois, 2020).

"A picture is worth a thousand words", is a popular Portuguese saying which is related with the interpretation recruiters have regarding online contents. The digital footprint left resulting from the interactions on social medias includes pictures, posts, comments and all the interactions established with others. Most of their signals were expressed without prejudice and with the deliberately objective of portraying positive deliberations, however, since signals are not isolated, normally lack contextualization, and are judge by different people, can show different outcomes. To facilitate the comprehension of the effect that each specific type of content has on Portuguese recruiters' perceptions and interpretations, contents were subdivided in six dimensions.

To measure the value of the perception, given to each of the images portraying a different behaviour of the applicant, was created the dimension "Behaviours". Thus, including, Informal selfies or tagged photos, Comments in controversial topics: religious; political rants, Provocative/inappropriate photos/videos/information, sexual references, Drugs use and 'marijuana' references, Comments about race, Participation in activities in violation of university or workplace policy, Evidence of excessive drinking and Display or use of weapons. Most of these behaviours depict illegal materials, actions, and thoughts, which in other studies have been proved to negatively

influence recruiters' decisions. As a result, In Portugal is expected that: **H1** - The majority of the online content of the candidates (Behaviours) are perceived as negatively influencing recruiters' perceptions.

The second dimension "connections" comprises all the different types of contents which are associated with relationship ties such as having: Mutual connection, Relatively low number of friends, Relatively high number of friends, Contacts which values may be in conflict with those on the organization and Affiliations with criminal elements or controversial groups. In a globalized world, networks such as LinkedIn influences their users to have bigger and wider networks, thus Having mutual connections with others and a High number of friends were identified as positively influencing perceptions while, Having a low number of friends, Having contacts which values may be in conflict with those on the organisation and Affiliations with criminal elements were perceived as negatives. For that matter, we deduced the follow hypothesis: H2 - The majority of the online content of the candidates (Connections) are perceived as not influencing neither positively nor negatively recruiters' perceptions.

All the contents containing information regarding their personal life were inserted on the dimension "Personal information" and included Family pictures and information, Attendance at parties or social events, Recent holiday pictures and negative comments from others. The valorisation of family and traditions (Family pictures) and WLB "Recent holiday pictures", are two of the most recurrent practices being implemented on onforward companies, which Hartwell and Campion (2020) study, proved as slightly positively influencing decisions, while attending party events was and comments from others proved to be slightly negative influencers. Therefore, due to the equality of positive and negative influences on perceptions regarding this dimension, is expected that: H3 - The majority of the online content of the candidates (Personal information) are perceived as not influencing neither positively nor negatively recruiters' perceptions.

When Recruiters access users' profiles, they came across with "Visual and Textual information" which enhances their capabilities, such as being able to speak or write in different languages (Multiple languages), the way they communicate with others (showing poor communication skills) and the amount of information they are constantly posting, sharing and commenting (Excessive posting). All those behaviours can be perceived differently according with the person that is evaluating this information, and for that matter we place: H4 - The majority of the online content of the candidates (Textual and Visual information) are perceived as being not influencing neither positively nor negatively recruiters' perceptions.

When Recruiter's screen their main goal is to identify the right person for the job. Having mention this, on the dimension "Professional information" are all the types of content that are job-related such as Good references from others, Information supporting professional qualifications, Content enhancing professionalism and P-O Fit, Information contradicting qualifications and Sharing confidential

*information).* Most of the content identified in this rubric enhances the professional capabilities of the applicant. For that matter we expect that: H**5** - The majority of the online content of the candidates (Professional information) are perceived as positively influencing recruiters' perceptions.

Nowadays, being present in, at least, one of the SNW is a current practice so we have put together all the contents representing this dimension "SNS Presence", and which included Candidate's invisibility and Not members of SNS, when their profile could not be found, Not having a profile picture, which do not validate their identity, if their profiles portraited to be Profile with little information due to privacy settings, or lacking update Profile not regularly/recently updated. All the contents were identified as slightly influencing negative perceptions unless the profiles with privacy settings, and for that matter we can assume that: **H6** - The majority of the online behaviours of the candidates (SNS presence) are perceived as not influencing neither positively nor negatively recruiters' perceptions.

During the recruitment process of a company, one of the main objectives is to find the right fit and avoid discriminatory ats towards the characteristics physical and psychological of the applicants. Some studies highlight that are several characteristics, mainly "protected characteristics" such as age, gender and marital status which affects the perceptions of the recruiters inducing bias of discrimination and opening the company to lawsuits. In order to attest this veracity in Portugal we stablish: *H7 - The majority of the online behaviours of the candidates (SNS presence) are perceived as not influencing neither positively nor negatively recruiters' perceptions.* 

Lippa and Dietz (2000) recognized that the accuracy of the judgements, is possible due to the characteristics of the "good judge" as T. Letzring et al. (2017), have recognized it. Previous authors underline that the age, level of education and size of the company are all characteristics able to alter the perception. Those last hypothesis crosses those characteristics with the dimensions of online contents present on previous hypothesis to, primarily realize which are the dimensions that are most correlated by these characteristics, and secondly to comprehend how the candidate's characteristics are correlated with the recruiter's characteristics. Characteristics such as age, enhances the substantial difference between the older, wiser and traditional generations (Botfield, 2018) and the young, tolerant, open-minded and technologic natives. The fact that both generations did not grow up with the same freedoms and tools, such as technological ones, enhances their different points of views. The differences between the different age groups, determine that different types of content have correlated statistical significative ties, which are perceived differently, leading us to make the following assumptions: H8a -The perception of candidate's online content (Behaviours and, Textual and Visual information) is correlated with the age of the recruiters and H8b - The perception of candidate's characteristics (factors influencing decisions) is correlated with the "Age" of the recruiters

The *level of education* varies for one person to another. Several studies have affirmed, that in other fields of knowledge the education level is proved to increase cognitive capabilities (Lima & Bastos,

2019), and based on the different knowledge background (Viljoen & Stephens, 2020), affect perceptions (Szczepanowski et al., 2020). To access if the same applies to cibervetting regarding online contents judgements, we believe H9a - The perception of candidate's online content (Connections, textual and visual information, professional information, SNS presence) is correlated with the "Level of education" of the recruiters and H9b - The perception of candidate's characteristics (factors influencing decisions) is correlated with the "Level of education" of the recruiters

The size of the company where a person works can influence their decisions. The way resources are allocated (Bordonaba-Juste et al., 2012), the firm is managed, and the practices that are implemented, can alter perceptions. To access the impact that the size of the company may have on the comprehension of the contents, during social media screen, we hypothesize: **H10a** - The perception of candidate's online content (Connections, Personal information, Textual and Visual Information and SNS Presence) is correlated with the "Size of the company" of the recruiters and **H10b** - The perception of candidate's characteristics (factors influencing decisions) is correlated with the "size of the company" of the recruiters

Following, below, there is a table summarizing all the research hypothesis which were proposed in this last chapter (table 8).

Table 8 - Research Hypothesis compilation (author's source)

Hypothesis	Authors
Hypothesis 1 - The majority of the online content of the candidates (Behaviours) are perceived as negatively influencing recruiters' perceptions	Karl et al. (2010) RiskAware (2017) Hartwell and Campion (2020)
Hypothesis 2 - The majority of the online content of the candidates (Connections) are perceived as not influencing neither positively nor negatively recruiters' perceptions.  Hypothesis 3 - The majority of the online content of the candidates (Personal information) are perceived as not influencing neither positively nor negatively recruiters' perceptions.	Karl et al. (2010) Gil (2019) Hedenus, Backman and Hakansson (2019) Hartwell and Campion (2020)  Karl et al. (2010) Hartwell and Campion (2020)
Hypothesis 4 - The majority of the online content of the candidates (Textual and Visual information) are perceived as being not influencing neither positively nor negatively recruiters' perceptions.	Berkelaar and Buzzanell (2015) Beyvers and Herbrich (2016) Isabel and Fragoso (2017) Hartwell and Campion (2020)
Hypothesis 5 - The majority of the online content of the candidates (Professional information) are perceived as positively influencing recruiters' perceptions.	Gil (2019) Hartwell and Campion (2020)

Hypothesis 6 - The majority of the characteristics of the candidates are perceived as not influencing neither positively nor negatively recruiters' perceptions.	Hedenus, Backman and Hakansson (2019) Hartwell and Campion (2020)
Hypothesis 7 - The majority of the online behaviours of the candidates are rarely perceived as influencing recruiters' perceptions.	Karl et al. (2010) Smith and Kidder (2010) Caers and Castelyns (2011) Elias, Honda, Kimmel, and Chung (2016) Jeske and Shultz (2016) Evuleocha and Ugbah (2018) Scepura (2020) Melão and Reis (2020)
Hypothesis 8 - a: The perception of candidate's online content (behaviours and textual and visual information) is correlated with the age of the recruiters b: The perception of candidate's characteristics (factors influencing decisions) is correlated with the "Age" of the recruiters	Karl et al. (2010) Smith and Kidder (2010) Caers and Castelyns (2011) Berkelaar and Buzzanell (2015) Beyvers and Herbrich (2016) Jeske and Shultz (2016) RiskAware (2017) Isabel and Fragoso (2017) Evuleocha and Ugbah (2018) Scepura (2020) Hartwell and Campion (2020)
Hypothesis 9  a: The perception of candidate's online content (Connections, textual and visual information, professional information, SNS presence) is correlated with the "Level of education" of the recruiters  b: The perception of candidate's characteristics (factors influencing decisions) is correlated with the "Level of education" of the recruiters	Karl et al. (2010) Berkelaar and Buzzanell (2015) Beyvers and Herbrich (2016) Isabel and Fragoso (2017) Evuleocha and Ugbah (2018) Gil (2019) Hedenus, Backman and Hartwell and Campion (2020)
Hypothesis 10 a: The perception of candidate's online content (Connections, Personal information, Textual and Visual Information and SNS Presence) is correlated with the "Size of the company" of the recruiters b: The perception of candidate's characteristics (factors influencing decisions) is correlated with the "size of the company" of the recruiters	Karl et al. (2010) Caers and Castelyns (2011) Jeske and Shultz (2016) Hedenus, Backman and Hakansson (2019) Gil (2019) Scepura (2020) Hartwell and Campion (2020)

#### **III Methods**

# 6. Methodological approach

Accordingly, with Pardal (1995, p.10) the methodology is a "guiding body of research that, obeying a system of norms, makes possible the selection and articulation of techniques, to be able to develop the empirical verification process".

The main goal of this chapter is answering to the hypothesis formulated on the previous section, by identifying (1) the research design of the study ( such as the procedures, technics, and instruments of data collection), (2) the framework of the instrument construct, (3) scales and measurements of the data and (4) data treatment and analyse of the sample.

to explain how the data was treated.

## 6.1 Research design

To obtain the necessary data and answer all objectives, this study followed a quantitative research method. This required the use of patronized techniques to collect data such as surveys, to transform objectives of a study in mensurable variables. Surveys are methods of data collection that involves asking candidates questions and which can be completed through an interview or a questionnaire. Since this topic is still an unexplanatory theme in Portugal, and the process requires a large sampling size, the elected process was the inquiry by questionnaire (found attached on annex A) thus allowing to characterize the population and the phenomena. It can contain open questions (the written answer is evaluated) an closed questions (participants must elect one of the choices available), however, this questionnaire have only, accounted multiple choices and dichotomous questions (yes or no questions) aiming to obtain the needed responses to test the formulated hypothesis (Huesch, Mukherjee, & Saunders, 2018)

The survey was applied between 16 August and 16 September 2020 and was conveniently distributed on the internet being released in two ways. First, disclosed for personal networking contacts on LinkedIn and Facebook being then shard on participants personal networking contacts. Secondly, an invitation to participate in the study was sent to all the participants of the database of the 19<sup>th</sup> edition of the ExpoHR occurring in Lisbon that had public Linkedin accounts. After accepting the invitation, a message was sent containing a small approach to the theme, the objectives of the study as well as the importance of the participation to the research, the profile desired to answer the survey and a link to access the questionnaire.

To facilitate the collection and posterior treatment of the data, the questionnaire was elaborated on google forms platform, required only between 8 and 10 minutes to be completed and the data

collection was concluded guaranteeing the anonymity of all its participants. Moreover, is important to highlight that this survey was pretested by three academics and four HR professionals, who provide feedback towards clarity, consistency, and relevance, inserted on the final version of the survey.

#### 6.2. Framework – Instrument construction and data collection

The framework of the questionnaire was based on the work of different authors such as Hedenus et al. (2019) and Gil (2019) and Hartwell and Campion (2020) and Jacobson and Gruzd (2020). The survey included five sections: Demographic profile, Online recruitment, Screening purposes and Social media and Screening content, accounting accounted 22 questions

The first topic accounted five questions and asked general demographic information's such as Gender, Age, Highest level of education, industry or sector of work and the size of the company.

The second topic (Online recruitment) refers to candidates' opinion and SM use. This topic asked candidates which was the main function of each social media (Facebook, LinkedIn, Instagram, and Twitter) and which type of profile – Personal or Professional- they had on each one of the four options. A 5 Likert-scale (from public profile to private profile) accessed their level of privacy on their online accounts, and the last two questions questioned what the level of alert about their digital footprint on SNW was.

The third topic accounted 4 elements and asked participants their function and involvement in the recruitment process, as well as their years of experience on the field and their duties as a recruiter. The last question of the topic referred to understanding how common online recruitment on companies was.

The fourth theme pinpointed the main purposes of screening, as well as the type of information searched – unknown information, positive information, and negative information. In addition, participants were questioned regarding the significance of the context where the information is found to be (resorting to a 5 Likert scale from never to almost always). Lastly, which SNW was more commonly used to screen applicants – Facebook or LinkedIn- and if they would not hire based on the content tracked online ( on the two social medias mentioned priorly), which were accessed resorting to a 5 Likert scale between never and almost always.

The last subject started by asking participants it they believe that digital footprint can influence hiring decisions (accessed on a scale form never to almost always). The second section of the topic was related with the influence of candidates' content on hiring perceptions. Those contents were divided in sub-topics: behaviours, connections, personal information's, textual and visual information's, professional information's, and SNS presence and all the variables were evaluate by recruiters using a 5-Likert scale between (much more negatively and much more positively). The last question asked

which candidates' characteristics were able to jeopardize or compromise recruiters' perceptions, being also evaluated resorting to a 5-likert scale between never and almost always.

To structure and facilitate the comprehension of the study on table 9 there are the categories and dimensions of the analyse

Table 9 - Instrument construct (author's source)

Construct	Item
Social Media use	A1 Main purpose of each SM  A2 Level of privacy  A3 Digital footprint awareness
Online recruitment	B1 Individuals involvement in recruitment B2 Current practice
Screening purposes	C1 Main purposes of cibervetting C2 Screening Sources C3 Screening context
Social media and	D1 Influencers on decisions
Screening content	D2 Online contents influences D3 Screening Bias

# **6.3 Scales and measurements:**

To be consistent with previous studies, most scales have been adapted from questionnaires or theoretical constructs and have undergone only the necessary modifications and additions to respond to the hypothesis of this study. The most common scales used by the participants, to answer all the questionnaire items were five-point Likert-type scales.

Firstly, to attest the level of privacy in online accounts recruiters were asked to identify if their accounts as "public", "most public", "most private", "private" or "unsure."

The level of awareness of the digital footprint was measured based on an agreement with two items: "Which is the level of agreement with this sentence: I am aware of my digital footprint" and "Does your profile on those social media has content that you would not enjoy your own recruiters to see?". This was rated on the following 5-point Likert scale adapted from Paiva (2013), that assessed the awareness between 1 and 5: (1 - strongly disagree, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - Strongly agree).

The significance of the context measuring the item: "How significant do you consider the context where the information is found to be? assessed by a 5 items between 1 and 5 (1 - Never influences, 2- Rarely influences, 3 - Sometimes influences, 4 - Often influences, 5 - Almost always influences).

SNW perceptions to hire, is measured in 1 item with two options (Linkedin and Facebook), to attest recruiters decisions based on the contend found online, which answered the item: "I would not hire someone based on their online content – which is the level of agreement with this sentence?"?". This was rated on the following 5-point Likert scale between 1 and 5: (1 - strongly disagree, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - Strongly agree)

*SNW influence significance* was measured with one item: "Do you believe that candidates' digital footprint can influence being hired?", resorting to a 5 point scale from 1 to 5 (1 - never, 2 - rarely, 3 - sometimes, 4 - often, 5 - almost always).

Perceptions of SNW information was measured with a list of 32 pieces, of commonly content found on SNW, which was previously recognized as affecting recruiter's perceptions. The list of contents included 36 items resulting from a combination of information from prior academic research such as the original Faux Pas scale by Karl et al. (2010), social media content by Karl, Peluchette, and Schlaegel (2010), the Revised Faux pas scale of Miller (2020), the 27 social media content item's list of Hartwell and Campion (2020), as well as other academic research such as Jacobson and Gruzd (2020) and still popular press accounts and industry surveys. Questionnaire respondents had to classify the impact on perceptions of candidate's image in the 36 items subdivided into 6 dimensions (behaviours, connections, textual & visual information, personal information, professional information and SNS presence). The classification of individual's perceptions of specific data types in specific contexts such as job hiring was given according to the 5-point Comfort scale developed and evaluated by Hartwell and Campion (2020) which ranged from (1 – I would view the applicant much more negatively, 2 - I would view the applicant somewhat more negatively, 3 - I would view the applicant neither positive or negatively, 4 - I would view the applicant somewhat more positively, 5 - I would view the applicant much more positively).

Influences of SNW perceptions. Defining what is appropriate or not raises an inherent danger since it can differ between groups. The inappropriateness can be measure by several items refereeing characteristics such as gender, race, sex, among others that, as Miller (2020) have denominate as "subjectivity traps". The scale utilized was a 5 factors Likert scale ranging from 1 to five (1 – never influences, 2- rarely influences, 3 – somewhat influences, 4 – often influences, 5 – almost always influences).

#### 6.4 Data treatment and analyse

To be able to present the data, tables and graphs were used, with statistical data preceded by analysis. Data analysis was performed using descriptive and inferential statistics, using the Statistical Package for the social Sciences software (SPSS-24.0).

To perform the descriptive analysis, several parameters were used for the distribution of variables, namely frequency, percentage, mean and standard deviation. To perform the inferential analysis and taking into account the fulfilment of the criteria for performing parametric tests, and after performing the Kolmogorov Smirnov normality test, Hypothesis Null (H0) is that data are normally delivered, and that the p. Value result was (p <0.05) for the variables under study, we reject the null hypothesis (H0) and assume that the sample does not follows a normal distribution. In this sense, non-parametric tests were used. To correlate the variables under study, Spearman's correlation coefficient was used, which is a measure of nonparametric associations between two at least ordinal variables. This coefficient is valid for the replacement of the values of the rules, by the respective orders. Association measures quantify the intensity and direction of the association between two variables (Marôco, 2014).

# 6.5 Universe and sample

The sampling method followed a non-probabilistic random sample of convenience (haphazard) which allowed to randomly select candidates based on their "easy availability" until the desired sample size was reached, as well as being an easy and fast data collection method, however, is important to highlight that the results and further conclusions from this type of sampling may not apply to a population or universe.

Since the main objective of this study was to identify if applicants' digital footprint could have consequences in recruiters' hiring decisions, the questionnaire required to be answered by a target audience. For that matter, two restrictions were applied, first, participants had to have experience in functions such as hiring and/or recruiting (even if, at the moment, their roles were not on that specific area), and had to be Portuguese or working in a Portuguese company.

## 7.1 Sample characterization

## 7.1.1 Sociodemographic characteristics

The initial sample of 110 individuals who completely unsewered all the questions of the questionnaire, 18 had never performed screening and since it is a crucial characteristic in this study, were therefore eliminated.

Out of that new filtered sample, 57 respondents were Female (62%) and 35 were Male (28.3%). Most respondents were on the age range between 25 and 34 years old (32%), followed by the age range between 35 and 44 years old (25%), data present on annex B and C. To be able to characterize the sample, on annex D, regarding their education level, we have sub-divide in three levels: Level 1 (including Hight school graduates and Professional/technical degree), Level 2, (Bachelor's and Postgraduations), and level 3 (that included people with Master's degree, PhD. And MBA's). The sample proved to be highly educated, since 89.1% of the respondents had at least a bachelor's degree (Bachelor's and post-graduation- 26,1% and Bacharel, Master's and Doctorate degree — 63%).

Those details go along with the size of the company, on annex E, in which 40,2% worked on big firms with more than 250 employees and 25% in median companies.

Bellow, there is table 10, which summarizes all the sample demographic characteristics:

Table 10 -Sociodemographic characterization of the sample (n = 92)

	n	%
Gender		
Female	57	62,0
Male	35	38,0
Age		
Under 25 years old	9	9,8
25 - 34 years old	32	34,8
35 - 44 years old	25	27,2
45 - 54 years old	16	17,4
55 - 64 years old	10	10,9
Level 1		
High school graduate	9	90,0
Professional/Technical degree	1	10,0
Level 2		
Bachelor's degree	23	95,8
Post-graduation	1	4,2
Level 3		
Bacharel Administration /MBA	1	1,7
Doctorate degree (Ph.d)	1	1,7
Master's degree	56	96,6

Size of the company you work		
Micro (less than 10 employees)	16	17,4
Small (less than 50 employees)	16	17,4
Median (less than 250 employees)	23	25,0
Big (250 or more employees)	37	40,2

#### 7.1.2 Social Media Use

As presented in instrument construct table 9, on the last section to assess the use of Social Media by recruiters is important to ascertain: A1 – which is the main purpose of each social media and what type of accounts does any recruiter has on each social media and A2 – The level of privacy in each SM and A3 – The awareness regarding the profile's content availability.

Firstly, to access whether each social media was considered by respondents as being a professional, personal or both, respondents were asked "which is for you, the main function of each social media?", regarding four of the most popular social medias on the internet, Facebook, LinkedIn, Instagram and Twitter. Regarding SM Facebook (present on annex F1), the majority of the sample (78.3%) have recognized it as a personal tool yet, 17,4% of the sample recognize it as having both functions. Concerning LinkedIn (table F2, on annex), almost all the respondents of the survey (94.6%) mentioned showing it as a professional tool. In addition, on Instagram (present on table F3, on annex), 75 of the 92 recruiters have identified it as a personal network and, as regards Twitter (table F4, on annex), even though 19.6% recognizes it as a professional tool, the majority of the sample have elected as being a personal tool. Regarding the type of account that every recruit has on these Social Medias, but regarding only the two in which our study focus on - Facebook and LinkedIn (table G1 and G2 on annex), 6 individuals mentioned not having an online account on this SM, more than half of the sample (63%) as having a personal account even though, about one courter of respondents (28.3%), referred as having a professional and personal account. On the other hand, and regarding LinkedIn, the majority (78.3%) of the sample mentioned having a professional profile yet 5.4% owned a personal profile.

Secondly, respondents were asked to answer the question "which is the level of privacy of your online accounts", found on annex H, where responses could include one of the items presented: Public profile, Most Public, Unsure, Most Private, Private profile. On Facebook, annex H1, the majority of the sample (70.6%) recognized as having a "most private" (40.2%) and "private profile" (30.4%) whereas 14.1% identified it as having a "most public", whereas, on LinkedIn, annex H2, 59.8% argued having a public profile and 31.5%, a "most public" profile.

Lastly, to attest recruiter's digital footprint awareness, table on annex I, we asked which is the level of agreement with the sentence:" I am aware of my digital footprint?". The majority of respondents 57 of the 92 respondents (61.9%), "agree" (46.7%) and "strongly agree" (15.2%) with the sentence, moreover, once asked specifically in "which SM they would have content that they would not like their own recruiters to see", on Facebook, most of respondents (58.1%), did not agreed (disagree - 23.5%)

and strongly disagree - 34.6%) even though 21% "did not agree nor disagree", while on LinkedIn "strongly disagree" was the most common answer (70.2%), table present on annex J.

#### 7.1.3 Online Recruitment

As presented in instrument construct table 9, on the last section, to assess the online recruitment we assess two different items: B1 Individuals involvement in recruitment and B2 Current practices.

First, as pictured on annex K, to understand the number of respondents who were currently involved on the recruitment process of the company, from the sample of 92 individuals only 72 (about 78.3%) have answered "yes".

Regarding the years of experience in the recruitment and selection of employees, the majority 46.2% had less than 5 years of experience, while 18.7% and 16.5% correspondently had between 5 and 10, and 11 and 15 years of experience on the field. The table contemplating this information can be found on annex L.

Concerning the function and types of jobs did recruiters hired, on table L, on annex; most of the sample elected for openings for professionals (67.4%), administrative support workers (54.3%) and first and mid-level officials and managers (51.1%), table M, on annex.

Lastly, as characterized on table N, on annex, to understand if E-recruitment was a current practice during hiring, the overall majority (92.1%) of the respondents answered as their organisation being resorting to these methods.

## 7.1.4 Screening purposes

To access what leads recruiter to screen, we asked respondents certain questions that we divided on several items for better interpretations: C1 to identify the main purposes of cibervetting, C2 Distinguish the Screening Sources and C3, The Screening context of these practices.

Firstly, to identify if they were appropriate for the study, we asked respondents if they normally screen? They had to answer, yes or no. If their answer were "no" they could not continue to answer the questionnaire and jumped for the last question to terminate the questionnaire. 92 of the 110 correspondents continued the survey since their response was "yes" (on annex O)

During screening three main purposes were made available to evaluate the type of information searched, by recruiters, on online SM profiles, using the question: "Which are the main purpose of viewing applicant's social media information during hiring process?". Respondents could select all the options which applied, between motives such as curiosity, looking for positive information to reinforce their hiring decisions or uncovering negative information, which are associated with motives not to hire. When respondents were asked regarding this matter, the most popular answer was finding

positive information (63%), followed by 59.8%, who recognize as searching for unknown information and only 43.5% (40 of the 92 respondents) recognized that was to track negative information. All the information is portraited on Table 11.

Table 11 – Main purposes of viewing applicants Social Media information

Which are the main purpose media informations du	•	- 11		
	No	)	Yes	;
	n	%	n	%
To find negative information, or red				
flags (normally associated with				
motives not to hire)	52	56,5	40	43,5
To find positive information, such as				
applicant qualifications (normally				
associated with motives to hire)	34	37	58	63
To find any previously unknown				
informations available online	37	40,2	55	59,8

Attempting to understand, "what type of information you attempt to gather when viewing each social media website", as observable on table 12. On Facebook, the results showing a search for "unknown information" was considered by 60.9% of the inquiries as being the most searched information while searching for "negative information" and searching for "positive information" overcome an impasse in approximately 40%, while on LinkedIn the majority of the sample (76.1%), recognize that their main objective in searching on this network was to find positive information about applicants.

Table 12 – Type of information attempted to collect in SNS – Facebook and LinkedIn

What type of informa	tion you attemp		when	
vicwing each	No	Yes	es	
	n	%	n	%
Facebook				
Negative informations	51	55,4	41	44,6
Positive informations	55	59,8	37	40,2
Unknown informations	36	39,1	56	60,9
Linkedin				
Negative informations	70	76,1	22	23,9
Positive informations	18	19,6	74	80,4
Unknown informations	53	57,6	39	42,4

In addition, individuals were asked "how significant they considered the context where the information was found?". Even though the mean was of approximately 3 (M=3.26), corresponding to

"sometimes significant", 32.6% of the sample have recognized that the context was "often" (26.1%) and "almost always" significant. This significance can be found on table 13, below.

Table 13 – The significance of the context where screening information is collected

How significat	How significant do you consider the context where the information is found to be?									
	Mean	Sd				Someti		Almost		
				Never	Rarely	mes	Often	always		
Significance			n	1	10	51	24	6		
	3,26	0,8	%	1,1	10,9	55,4	26,1	6,5		

(1=Never | 2=Rarely | 3=Sometimes |4=Often | 5=Almost always)

Lastly, when respondents were asked to "which social media, they resorted the most resorts to screen applicants during the hiring process", 89.1% answered as being LinkedIn. The answers to the question "would not hire someone based on their online content", regarding Facebook, even though, on average (M=2.96) this response was precepted as only "sometimes" affecting hiring, (33,7%) of the sample, though, have recognize that "often" (22.8%) and "almost always" (10.9%) they would not hire based on the contents available on that social media. Regarding LinkedIn, even if, this sentence was precepted as "never" influencing hiring decisions, a bigger part of the sample (48.9%) have recognized that "sometimes" and "often" they would not hire based on social media screen content, on table 14.

Table 14 – Level of agreements in not hiring applicants based on their online content (Facebook and LinkedIn)

Which is the level of agreement with this sentence: " I would not hire someone based on their online content"										
	Mean	Sđ		Never	Rarely	Someti mes	Often	Almost always		
Facebook			n	15	15	31	21	10		
	2,96	3,0	%	16,3	16,3	33,7	22,8	10,9		
Linkedin			n	10	26	25	20	11		
	1,22	1,2	%	10,9	28,3	27,2	21,7	12,0		

(1=Strongly Disagree | 2=Disagree | 3=Neither more positively or negatively |4=Agree | 5=Strongly agree)

## 7.1.5 Social media and Screening content

To access the effects and bias of screening this topic was divided in three main items: D1 Influencers on decisions, D2 Online contents influences and D3 Screening Bias.

To answer the question "Do you believe that candidate's digital footprint can influence being hired", even though, on average and according the table 15, the mean being approximately 3, (M=3.37), which corresponds as only "sometimes" influencing hires, 39.1% of the participants have considered as "often" (25%) and "almost always" (14.1%) influencing hiring.

Table 15 – Significance of the influence of candidate's digital footprint

Do you believe that candidates' digital footprint can influence being hired?									
	Mean	Sd				Someti		Almost	
				Never	Rarely	mes	Often	always	
Significance			n	1	13	42	23	13	
	3,37	0,9	%	1,1	14,1	45,7	25	14,1	

(1=Never | 2=Rarely | 3=Sometimes | 4=Often | 5=Almost always)

Regarding recruiter's perceptions, the respondents were asked to classify on a scale from 1 to 5 ( 1 – much more negatively, 2- somewhat more negatively, 3 – neither positively or negatively, 4 – somewhat more positively and 5 – much more positively), "How would they view the applicant", during screen if certain contents were found. The different types of content tracked during screening, where then subdivided in 6 dimensions (behaviours, connections, personal information, textual and visual information, professional information and SNS presence).

In the rubric "Behaviours", there were only two main variables which means where different from the others. The first variable was Informal selfies or tagged photos (M= 3,02; SD= 0,7) which was perceived by the majority of the respondents (72.8%) as "not influencing positively nor negatively" recruiters perceptions and Display and use of weapons (M= 1,49; SD= 0.8) that was identified by their respondents, as viewing the applicant "much more negatively" if this type of content was screened. All the other means of the 7 variables indicated that they would be identified as "somewhat more negatively", even though on the variables Drugs use and marijuana references (M= 1,64; SD= 0.8), Comments about race (M= 1,64; SD= 0.8), Participation in activities in violation of university or workplace policies (M= 1,59; SD= 0.8), and Evidence of excessive drinking (M= 1,58; SD= 0.8), more that 50% of the sample selected that they would view the applicant "much more negatively". All those contents can be observed on table 16.

Table 16 – Online content "Behaviours"

				more	at more	more	Somewh	Much
	Mean	Sđ		negativel	negativel	pos/nega		more
				y	y	t	positively	positively
Informal selfies or tagged			n	2	10	67	10	3
photos	3,02	0,7	%	2,2	10,9	72,8	10,9	3,3
Comments in			n	23	28	39	2	
controversial topics:	2,22	0,8	%					
religious; political rants				25	30,4	42,4	2,2	_
Provocative/inappropriate			n	40	29	21	2	
photos/videos/information	1,84	0,9	%	43,5	31,5	22,8	2,2	_
Sexual references			n	45	30	15	1	1
Sexual references	1,73	0,9	%	48,9	32,6	16,3	1,1	1,1
Drugs use and			n	50	28	12	1	1
'marijuana' references	1,64	0,8	%	54,3	30,4	13	1,1	1,1
Comments observe and			n	51	25	14	2	
Comments about race	1,64	0,8	%	55,4	27,2	15,2	2,2	_
Participation in activities								
in violation of university			n	50	33	6	3	
or workplace policy	1,59	0,8	%	54,3	35,9	6,5	3,3	_
Evidence of excessive			n	53	28	9	1	1
drinking	1,58	0,8	%	57,6	30,4	9,8	1,1	1,1
Display or use of			n	60	21	9	2	
weapons	1,49	0,8	%	65,2	22,8	9,8	2,2	_

(1=Much more negatively | 2=Somewhat more negatively | 3=Neither more positively or negatively | 4=Somewhat more positively | 5=Much more positively)

When analysing the rubric "Connections", observed on table 17, is possible to say that, based on the mean, the number of friends - being low (M=2.91, SD= 0.5) or high (M=3,02; SD=0.5) - didn't seem to influence "neither more positively or negatively" recruiter's perceptions (84.8%), as well as having Mutual connections (M= 3.27; SD= 0.8). On the other hand, showing Affiliation with criminals elements" (M=1.43; SD=0.7), were identified by the majority as portraying a "much more negatively" element and, the mean of the variable Contact with values that may be in conflict with the organisation (M=2.40; SD= 0.7), even though 46.7% have percept it as "somewhat more negatively" almost the same number of respondents (41.3%) have identified as not affecting the perception of an applicants.

Table 17 – Online content "Connections"

Connections ( " I would view the applicant)									
				Much	Somewh	Neither	Somewh	Much	
	Mean	Sd		more	at more	more	at more	more	
				negatively	negatively	pos/negat	positively	positively	
Relatively low number of			n	2	8	78	4		
friends	2,91	0,5	%	2,2	8,7	84,8	4,3	_	
Relatively high number of			n	2	3	78	9		
friends	3,02	0,5	%	2,2	3,3	84,8	9,8	_	
Contacts which values			n	8	43	38	2	1	
may be in conflict with	2,40	0,7	%	8,7	46,7	41,3	2,2	1,1	
Affiliations with criminal			n	64	17	10	1		
elements or controversial	1,43	0,7	%	69,6	18,5	10,9	1,1	_	
Mutual connection			n	2	6	57	19	8	
	3,27	0,8	%	2,2	6,5	62	20,7	8,7	

(1=Much more negatively | 2=Somewhat more negatively | 3=Neither more positively or negatively | 4=Somewhat more positively | 5=Much more positively)

Regarding the content that can be tracked, and influence recruiters' perceptions of the applicant is also the category "Personal information", on table 18. On average, Negative comments from others (M=2.38; SD=0.7), seems to be the variable considered as being the most negative in which it refers to personal information and even though on average, the Family pictures and information (M=3.33; SD=0.6), were not precepted as a positive or negative factor, 62 of the 92 respondents (67.4%), have identified as it as "somewhat more negatively".

Table 18 – Online content "Personal information"

Personal informations ( " I would view the applicant)									
	Mean	Sd	1	Much more negatively	Somewh at more negatively	Neither more	Somewh at more positively	Much more	
Family pictures and			n	1	62	26	3	1	
informations	3,33	0,6	%	1,1	67,4	28,3	3,3	_	
Attendance at parties or			n	1	3	71	16	1	
social events	3,14	0,5	%	1,1	3,3	77,2	17,4	1,1	
Recent holiday pictures			n	1	5	71	15		
	3,09	0,5	%	1,1	5,4	77,2	16,3	_	
Negative comments from			n	13	32	46	1	_	
others	2,38	0,7	%	14,1	34,8	50	1,1	_	

(1=Much more negatively | 2=Somewhat more negatively | 3=Neither more positively or negatively | 4=Somewhat more positively | 5=Much more positively)

The variables composing the dimension "Textual and visual information", table 19, show all different means *Poor communications skills* (M=1.83; SD=0.7) was the only variable to show have a slightly negative impact on perceptions, mainly since this rubric was, the majority 82,6% of sample

have reported as identifying the profile "somewhat more negatively and much more negatively". *Excessive posting* (M=2.65; SD=0.6), showed as having no influence on the overall perception, while showing to know *Multiple languages* (M=3.74, SD=0.9) was considered by 63.1% of respondents as "somewhat more positive" and "much more positive" precepting the candidates.

Table 19 – Online content "Textual and visual information"

Textual and visual informations ( " I would view the applicant )									
				Much	Somewh	Neither	Somewh	Much	
	Mean	Sd		more	at more	more	at more	more	
				negatively	negatively	pos/negat	positively	positively	
Multiple languages			n	1	5	28	41	17	
	3,74	0,9	%	1,1	5,4	30,4	44,6	18,5	
Excessive posting			n	3	29	57	3		
	2,65	0,6	%	3,3	31,5	62	3,3	_	
Poor communication skills			n	33	43	15	1		
	1,83	0,7	%	35,9	46,7	16,3	1,1	_	

(1=Much more negatively | 2=Somewhat more negatively | 3=Neither more positively or negatively | 4=Somewhat more positively | 5=Much more positively)

Regarding table 20, "Professional information", the cues Content enhancing professionalism and organisation fit (M=4.15, SD=0.7) and Information supporting qualifications (M=4.15, SD=0.7) are, according with the mean, considered the most positive aspects relating with this topic, while Sharing confidential information (M=1.47, SD=0.8) and Contradicting qualifications (M=1.55, SD=0.8) were the most negative ones.

Table 20 - Online content "Professional information"

Professional informations	("]	I would	view	the appl	licant )	)
---------------------------	-----	---------	------	----------	----------	---

				Much	Somewh	Neither	Somewh	Much
	Mean	Sd		more	at more	more	at more	more
			1	negatively	negatively	pos/negat	positively	positively
Sharing confidential			n	63	18	9	1	1
information	1,47	0,8	%	68,5	19,6	9,8	1,1	1,1
Contradicting qualifications			n	56	25	8	2	1
	1,55	0,8	%	60,9	27,2	8,7	2,2	1,1
Good references posted by			n	1	1	11	60	19
others	4,03	0,7	%	1,1	1,1	12	65,2	20,7
Information supporting			n	1	1	7	57	26
professional qualifications	4,15	0,7	%	1,1	1,1	7,6	62	28,3
Content enhancing			n	1	1	10	51	29
professionalism and	4,15	0,7	%	1,1	1,1	10.9	55.4	31,5
organisation fit				1,1	1,1	10,9	33,4	31,3

(1=Much more negatively | 2=Somewhat more negatively | 3=Neither more positively or negatively | 4=Somewhat more positively | 5=Much more positively)

The last dimension evaluated with this question was "SNS presence", present on table 21. Even though respondents have considered, based on the mean, that all the aspects of this rubric did not influence positively or negatively recruiters perceptions, on the variable Not having a profile picture (M=2.52, SD=0.7), Profile not regularly/recently updated (M=2.64, SD=0.6), and Candidate's invisibility (M=2.51, SD=0.7), approximately 37%, 30% and 29%, respectively mentioned as being precepted it "somewhat more negatively".

Table 21 – Online content "SNS presence"

SNS (social networks sites) presence (" I would view the applicant)								
				Much	Somewh	Neither	Somewh	Much
	Mean	Sd		more	at more	more	at more	more
				negatively	negatively	pos/negat	positively	positively
Not members of SNS			n	3	16	71	2	
	2,78	0,5	%	3,3	17,4	77,2	2,2	_
Not having a profile picture	•		n	6	34	50	2	·
	2,52	0,7	%	6,5	37	54,3	2,2	_
Profile with little information,	•		n	1	18	62	11	•
due to privacy settings	2,90	0,6	%	1,1	19,6	67,4	12	_
Profile not regularly/recently	•		n	4	27	59	2	•
updated	2,64	0,6	%	4,3	29,3	64,1	2,2	_
Candidates' invisibility (profile			n	10	26	55	1	
not found)	2,51	0,7	%	10,9	28,3	59,8	1,1	_

(1=Much more negatively | 2=Somewhat more negatively | 3=Neither more positively or negatively | 4=Somewhat more positively | 5=Much more positively)

To understand the characteristics that could influence recruiters' perceptions, we asked respondents which were the "Factors that may compromise or influence the decisions based upon the observed behaviours, during the hiring process". That was assess resorting to a scale ranging from 1 to 5 (1 – never, 2 – rarely, 3 – somewhat, 4 – often, 5 – almost always).

Lastly, the characteristics of the applicants that can influence perceptions are portraited on table 22. The majority of the sample (ranging between, approximately 84% and 96%) have identified that "Protected Characteristics" (Scepura, 2020) such as Religion (M=1.27, SD=0.7), Marital status (M=1.27, SD=0.7), Race (M=1.42, SD=0.9), and Gender (M=1.52, SD=0.9), "never" and "rarely" influences perceptions, however, the variable Gender was recognized by 13% of the respondents as "somewhat influencing". Regarding the mean of the "protected characteristic" Age, is show on the table below (Table 22), to be the most influencer, almost half of the sample (44.6%) recognized is as "somewhat" (37%), "often" (5.4%) and "almost always" influences decisions.

Table 22 – "Characteristics of the applicants" - Online content Discrimination Bias

Characteristics of the applicants								
	Mean	Sđ		Never	Rarely	Somewhat	Often	Almost always
Age			n	27	24	34	5	2
	2,25	1,0	%	29,3	26,1	37	5,4	2,2
Profile picture (facial			n	47	23	14	6	2
attractiveness)	1,84	1,1	%	51,1	25	15,2	6,5	2,2
Nationality/national origin of			n	55	18	16	2	1
the candidate	1,65	0,9	%	59,8	19,6	17,4	2,2	1,1
Name (non common, other			n	56	22	8	5	1
nationalities)	1,62	0,9	%	60,9	23,9	8,7	5,4	1,1
Gender			n	64	13	12	1	2
	1,52	0,9	%	69,6	14,1	13	1,1	2,2
Race			n	70	12	6	1	3
	1,42	0,9	%	76,1	13	6,5	1,1	3,3
Marital status			n	76	11	2	2	1
	1,27	0,7	%	82,6	12	2,2	2,2	1,1
Religion			n	75	12	2	3	
	1,27	0,7	%	81,5	13	2,2	3,3	_

(1=Never| 2=Rarely| 3= Somewhat |4=Often | 5=Almost always)

### 7.2 Test of hypothesis

To understand the type of relationship between the sociodemographic variables (*Sex, age, Level of education, and Company size*) these were crossed with the variables under study. Then we start to present only the results that proved to be statistically significant. In the following hypothesis, we will assess the correlation that each of these variables has with the content available in online profiles, except for sex, since no significant differences were found between sex and the other variables of the study.

# 7.2.1 The influence of Age on recruiters' perceptions

Hypothesis 8 aim to uncover the existence of a correlations with statistical significance between the "age" of the recruiter and the different dimensions of online contents and characteristics of the applicants. This hypothesis was subdivided into two distinct assumption, hypothesis 7a, aiming to uncover which type of specific online contents within each the dimensions (Behaviours, textual and visual information) were correlated with the variable age, and hypothesis 8b, aiming to correlate age with the characteristics of the applicant (race, nationality, marital status). All the correlations are present on table 23.

Regarding H8a, to access the nature of the relationship between the variable "Age" and the group variables elected (*sexual references, informal selfies and tagged photos*), Spearman's correlation was employed. It appears that the result of Spearman correlation coefficient between the variables

demonstrates the existence of a statistical significative correlation (r = -,317; r = ,275), respectively. Spearman coefficient varies from -1 and 1 and the sign of the correlation represents the direction of the association. Since these results are negative and detain low values, they show weak negative correlations, suggesting that every time one variable "age" increases, the other (sexual references decreases). This associated can represent that, as the "age" of the recruiter increases there can be a tendency to interpret sexual references and informal selfies as being more negative. On the other hand, regarding the variable *Poor communication skills* that belong to the dimension "Textual and Visual information" the result was also a negative week statistically significant correlation (r = -,206).

The hypothesis 8b stats that the *Age* of the recruiter is correlated with the *race*, *nationality*, and *marital status* of the applicant. The analysis, using Spearman coefficient, obtain a negative significant statistical correlation of r=-,236, r=-,245 and r=-,235, correspondently, which suggests as older a recruiter gets, the more negative is the tendency of the other variables.

Table 23 – Correlation between the variable "Age" and the online content dimensions

	Age
Behaviours (I would view the applicant)	
Sexual references	-,317**
Informal selfies or tagged photos	-,275**
Textual and visual informations (I would view the applicant)	
Poor communication skills	-,206*
Factors may influence the decisions based upon the	
observed behaviours, during the hiring process	
Race	-,236*
Nationality/national origin of the candidate	-,245*
Marital status	-,235*

<sup>\*\*</sup> A correlação é significativa no nivel 0,01 (bilateral).

## 7.2.2 The influence of the level of education on recruiters' perceptions

Hypothesis 9 was created to evaluate the nature of the correlation between the variable "Level of education" of the recruiters and the different dimensions of online contents and characteristics of the applicants. This hypothesis was subdivided into two distinct assumption, hypothesis 8a, aiming to uncover which type of specific online contents within each the dimensions (*Connections, Textual and visual information, professional information and SNS presence*) were correlated with the variable age, and hypothesis 9b, aiming to correlate age with the characteristics of the applicant (*Religion*), all present on the table 24.

Regarding H9a, to access the nature of the relationship between the variable "Level of education" and the group variables elected (*Connections, Textual and visual information, professional information* 

<sup>\*</sup> A correlação é significativa no nivel 0,05 (bilateral).

and SNS presence), even if results resorting to Spearman correlation coefficient shows that there is only statistical significative correlation with some of the variables in each dimension.

Regarding the dimension *connections*, the variable *Mutual connections*, was the only who showed negative weak correlations (r=-,0.233) with the "Level of education". Furthermore, the gauging of the correlation between "Education level" and the dimension "*Textual and Visual information*" portraying two distinct relationship directions. Showing positive weak ties regarding *Poor* communication skills (r=,245) and a negative weak relationship with the variable's *Multiple languages* (r= -,236). Concerning the "Level of education" was only correlated with four variables of this dimension "Professional information" (*Sharing confidential information* (r=,273), *Good references posted by others* (r= -,251), *Information supporting qualifications*" (r= -,229) and *Content enhancing professionalism and organisation fit* (r= -,233), that is why is only partially valid. All those correlations showed positive weak ties unless "sharing confidential information", which direction was contrary. The last dimension, "SNS presence" only showed to be significantly statistical positively correlated with one variable three of all the variables in this dimension: "not having a profile picture" (r=,238), "Profile not regularly updated" (r=,248) and "Candidate's invisibility" (r=,235).

Moving to *Hypothesis* **9b**, the "Education Level" of the recruiter showed to be significantly statistical negatively correlated with one of the variables of this dimension "factors influencing decisions" *Religion* (r=-,220), so there is a contrary relationship between them, as one increases, the other decreases.

Table 24 – Correlation between the variable "Level of education" and the online content dimensions

	Last level of
	Education
Connections (I would view the applicant)	
Mutual connection	-,233*
Textual and visual informations (I would view the applicant)	
Poor communication skills	,245*
Multiple languages	-,236*
Professional informations (I would view the applicant)	
Sharing confidential information	,273**
Good references posted by others	-,251*
Information supporting professional qualifications	-,229*
Content enhancing professionalism and organisation fit	-,233*
SNS (social networks sites) presence (I would view the appl	icant)
Not having a profile picture	,238*
Profile not regularly/recently updated	,248*
Candidates' invisibility (profile not found)	,235*
Factors may influence the decisions during the hiring process	
Religion	-,220*

<sup>\*\*</sup> A correlação é significativa no nivel 0,01 (bilateral).

<sup>\*</sup> A correlação é significativa no nivel 0,05 (bilateral).

## 7.2.3 The influence of the size of the company on recruiters' perceptions

Hypothesis 10 was designed to evaluate the nature of the correlation between the variable "Size of the company" where recruiters work and the different dimensions of online contents and characteristics of the applicants. For a better valuation, this hypothesis was subdivided into two distinct assumption, hypothesis 10a, aiming to uncover which type of specific online contents within each the dimensions (*Connections, Personal information, Textual and visual information and SNS presence*) were correlated with the variable "size of the company" and hypothesis 9b, targeting the correlation with the characteristics of the applicant (*Gender*), all present on the table 25.

Hypothesis 10a, aimed to access the nature of the relationship between the variable "Size of the company" and the group variables elected (*Connections, Personal information, Textual and visual information and SNS presence*). The result of Spearman correlation coefficient between the "Size of the company" and all the dimensions of content were proved to be positively statistical significantly correlated and of low intensity, unless, on the dimension "*Connections*", were the variable *Having a high number of friends*, showed a stronger correlation of (r=,359) that all others. In addition, regarding the dimension "*Personal information*" there were two significant correlations with the variable *Attendance at parties and Recent holiday pictures*", (r=,2587; r=,291) respectively. While the correlation with "*Textual and visual information*" was established with only one variable *Poor communication skills* (r=,293) and lastly, the variable *Candidate's invisibility*, part of the "*SNS Presence*" dimension, showed a correlation of (r=,264) with the "size of the company".

Lastly, H10b showed a statistically significant correlation of r=,209, with low intensity and negative direction between the variable in study "Size of the company" and the characteristic of the candidate "Gender".

Table 25 – Correlation between the variable "Size of the company" and online content dimensions

	Size of the
	company
Connections (I would view the applicant)	
Relatively high number of friends	,359**
Personal informations (I would view the applicant)	
Attendance at parties or social events	,287**
Recent holiday pictures	,291**
Textual and visual informations (I would view the applicant)	
Poor communication skills	,293**
SNS (social networks sites) presence (I would view the appli	icant)
Candidates' invisibility (profile not found)	,264*
Factors may influence the decisions during the hiring process	
Gender	-,209*

<sup>\*\*</sup> A correlação é significativa no nível 0,01 (bilateral).

<sup>\*</sup> A correlação é significativa no nivel 0,05 (bilateral).

Table 26 – Validation of Research Hypothesis summary (Author's source)

		Hypothesis validation
H1: The majority of the online content of the candidates (Behaviours)	Spearman's	
were perceived as negatively influencing recruiters' perceptions	correlation	Partially
	coefficient	validated
H2: The majority of the online content of the candidates (Connections)	Spearman's	
are perceived as not influencing neither positively nor negatively	correlation	Partially
recruiters' perceptions.	coefficient	validated
H3: The majority of the online content of the candidates (Personal	Spearman's	
information) are perceived as not influencing neither positively nor	correlation	Partially
negatively recruiters' perceptions.	coefficient	validated
H4: The majority of the online content of the candidates (Textual and	Spearman's	
Visual information) are perceived as being not influencing neither	correlation	Partially validated
positively nor negatively recruiters' perceptions.	coefficient	
H5: The majority of the online content of the candidates (Professional	Spearman's	
information) are perceived as positively influencing recruiters'	correlation	Partially
perceptions.	coefficient	validated
H6: The majority of the characteristics of the candidates are perceived as	Spearman's	
not influencing neither positively nor negatively recruiters' perceptions.	correlation	Partially validated
	coefficient	
H7: The majority of the online behaviours of the candidates are rarely	Spearman's	5 !!
perceived as influencing recruiters' perceptions.	correlation	Partially validated
	coefficient	
H8 a: The perception of candidate's online content (behaviours and		5 !!
$textual\ and\ visual\ information)\ is\ correlated\ with\ the\ age\ of\ the\ recruiters$	Spearman's	Partially validated
H8 b: The perception of candidate's characteristics (factors influencing	correlation	
decisions) is correlated with the "Age" of the recruiters	Coefficient	Partially validated
H9 a: The perception of candidate's online content (Connections, textual		
and visual information, professional information, SNS presence) is	Spearman's	Partially validated
correlated with the "Level of education" of the recruiters	correlation	
Ha b: The perception of candidate's characteristics (factors influencing	Coefficient	Partially
decisions) is correlated with the "Level of education" of the recruiters		validated

H10 a: The perception of candidate's online content (Connections,		
Personal information, Textual and Visual Information and SNS Presence)	Spearman's	Partially validated
is correlated with the "Size of the company" of the recruiters	correlation	
H10 b: The perception of candidate's characteristics (factors influencing	Coefficient	Partially
decisions) is correlated with the "size of the company" of the recruiters		validated

## **V** Discussion

This study was developed based on adaptation of the Realistic accuracy Model of David Funder (1995/1999), by Darbyshire et al. (2016), which main' objective was to understand the accuracy of the judgements of the message immitted by the target. This study intended to analyse if screening was a current practice in Portugal, and which were the main sources and purposes of recruiters cibervetting processes. In addition, this study had the objective of identifying the specific types of online contents present on application 'online profiles, that are able to alter positively and negatively recruiter's perceptions. in addition, it also aimed to analyse, the characteristics of the applicants that can compromise perceptions and identify the sociodemographic features of the "good judge" that are correlated with candidates' behaviours and their personal characteristics.

Our study showed that that 83% of all the 110 recruiters who responded to our survey, resort to screening. This only reenforces what was mentioned by previously by Humanos et al. (2018) and Gil (2019), that screening is not a new trend and, as the years passes and companies recognizes its benefits, the number of recruiters who uses this process increases. Currently in Portugal this practice is legal since it doesn't go against the Portuguese labour law (Leitão, 2020), yet it requires careful consideration, since most data is under Europe GDPR protected supervision (Jeske et al., 2019). ON the other hand, previous research, in other countries, showed that in 2011, Facebook was the most common search tool used during screening. These results were supported by other studies in the field, such as Adecco (2015) that proved that Facebook, in 2015, as continued as being considered the most resorted tool, during screen. Nonetheless, recent studies of Melão and Reis (2020), in a sample of 429 individuals, showed that a very significant part (89.3%) reported using LinkedIn while only 57.3%, assumed to use Facebook in the process. On the other hand, on the Portuguese Panorama, 89.1% of our sample, have mentioned resorting to LinkedIn, to research their applicants. Even though there are few studies in Portugal sustaining this practice, a study of Gil (2019) with a similar sample size of data, supports our research.

There are several reasons that explains the choice of one network over another, in the search for information about candidates:

First, the election of the tool to screen often focus on the objective and hiring policies of the companies. In our research, 78.3% of the sample, identified Facebook as a personal tool as does Melão and Reis (2020), and 94.6% identifies LinkedIn as a professional tool, which only enhances the results of studies such as Chang et al. (2017) and Becton et al. (2019). In addition, in our study we also wanted to uncover, if the purpose that recruiters identify in each social was the same as the one they currently use that platform for since as Peluchette and Karl (2009) argued, the purpose that leaves each person to use these platforms are different. Our study has investigated this theme by asking participants, the

type of account they own on each SNS, which showed that 63% have a personal account on Facebook, whereas on LinkedIn, 78.3% of the respondents had a professional account.

Secondly, the source of the information may also be related with the type of information searched. Recruiters commonly search for three main types of content: 1, Positive data, which can corroborate their aptitudes for the job; 2, negative data or "red flags", normally associated with uncovering motives not to hire and 3, unknown information tracked by curiosity or to uncover and validate information that did not appeared on the cv's.

The finding on the research showed that 63% answered as looking for positive information, 59.8% for unknown information and only 43.5% recognized searching negative information. Those values are higher than the ones registered in other studies and other countries, such as Root and McKay (2014) where only 12% of the recruiters assumed looking for motives not to hire. These findings can be based on the association that, as the practice has become more popular is last years, recruiters become less afraid to recognize that they search for reasons not to elect that person for the job, or, since in our study we guaranteed confidentiality over the data, people felt comfortable in sharing their experiences.

In our study, we also found essential to ask Portuguese recruiters which type of information they searched on professional and non-professional social media. The majority identify commonly using LinkedIn to track negative information (76.1%) and unknown information (57.6%). Tracking for negative content is supported by Chang et al. (2017), whom recognize that LinkedIn is the right source to check candidates online reputation and asses organisation fit and soft skills (Melão and Reis, 2020), as well as identify their lack of professionalism. Regarding this negative search, also supported by the study of Root and McKay (2014), which have highlighted that only 12% of the employers assumed looking for motives not to hire, which reflects that this trend has been growing, specifically, for companies that have many candidates and want to eliminate the last adequate, on the first phases of the process. On the other hand, LinkedIn is commonly used to search unknown data, mostly regarding professional capabilities of the applicants, since is the most common place were applicants will explain in detail their professional capabilities and receive comments from others as well as being useful to validate qualifications (Henderson, 2019).

The search on Facebook, however, has register 59.8% of the sample tracking positive information and 55.4% negative information. This argument is sustained by several research which believe that o facebook profiles people behaviour differently, mirroring their own personality (Azucar et al., 2018), since is a social network and not a professional one. For that matter, is the elected place to uncover hobbies and self-enhancing characteristics such as creativity, however, is also the place where most recruiters search for the "red flags" (Berkelaar & Harrison, 2016) or any behaviour (illegal or

innapropriate) that seems to harm or jeopardize the company (Berkelaar & Harrison, 2016; Berkelaar, 2017).

In addition, our study intended to portrait if recruiters would not hire, based on online content screen. The result proved to be ambiguous, as 33.7% answered *often* and *almost always* while approximately the same amount (32.6%) mentioned *never* and *rarely*, episode that also occurred on LinkedIn where 39.2% answered *never* and 33.7% rarely responded *often and almost always*. Several opinions support our findings such as CareerBuilder (2014), which mentioned that 35% of employers decide not to hire based on online content and 12.4% disqualifies applicants when problematic content is found (Melão & Reis, 2020), which can be explained by Chang and Madera's (2012), that refers that negative motives are always given more importance that positive ones.

Even though, all the information presented until now, did not answered directly to the hypothesis established, we found them crucial to understand the screening environment on Portuguese companies.

Portuguese recruiters, resort to personal and professional sources of information to uncover different types of data and obtain a multidimensional perspective of the candidates (Smith & Kidder, 2010), to then reject the ones that do not seem fit. The list of contents that was evaluated, in the first 6 hypotheses of this study, only entailed information that were already proved in previous studies, has influencing recruiters' perceptions, however, never all addressed on the same research.

The first hypothesis tested the dimension "behaviours", which contained 9 different behaviours that could commonly be tracked on applicants' profiles during screening. The results showed that only one behaviour "informal selfies or tagged photos" showed *neither positively nor negatively* influencing decisions which is against (Peluchette & Karl, 2008) that proved to be a negative influence. In addition, the majority of the other variables showed to *somewhat more negatively* influence perceptions, which is validate by literature that have identified potential drug use (CareerBuilder, 2014; RiskAware, 2017; Jobvite, 2018; Hartwell & Campion, 2020), weapons displayed use (RiskAware, 2017; Hartwell & Campion, 2020), alcohol consumption (CareerBuilder, 2014; Jobvite, 2018; Gil, 2019; Hartwell & Campion, 2020) and criminal behaviours, such as the participation in activities in violation of workplace policies (RiskAware, 2017) as having a high negative influence on perceptions. Those results are easy to corroborate, since the behaviours on this category only entailed red flags (Berkelaar, 2014) such as inappropriate, illegal activities and (Boudlaie et al., 2019), and which do not appeal potential contractors.

In relation to the second hypothesis, it intended to show that the 5 contents inserted on the dimension "connections" would not influence perceptions, positively or negatively. The results showed that the number of friends – high or low- and mutual connections did not affect perceptions. These results are not supported by literature since, Hedenus et al. (2019) and (Hartwell & Campion,

2020) recognized, that having a high number of friends and mutual friends facilitates references and helps to validate the information of the candidates, while, having a low number of friends was considered by the author to slightly negatively influence perceptions. On the other side, contact affiliated with criminals and who's values were not according with the goals of the company were seen as somewhat influencing these decisions, which is endorsed by Peluchette and Karl (2009), which can enhance their misalignment with the organisation.

The Hypothesis 3 aimed to test if the dimension of online content "Personal information" had any influence on perceptions. Data showed only one, "negative comments from others", as negatively slightly impacting perceptions, which is in accordance with Hartwell and Campion (2020) research. However, "attendance at social events" even though showing not to alter perception in our study, were referred in other studies as Hartwell and Campion (2020) as being a slightly negatively influence, while, on the same study "family pictures and recent holidays" were valorised factors, but our results showed indifference, regarding this matter. This diverged opinion may be based on the type of company people work and if practices such as WLB are valorised.

The results of the fourth hypothesis which aimed to test whether the dimension of online content "Textual and Visual information" did not influenced recruiters' assessments. The Mean of the tree variables which composes this dimension proved as neither positively nor negatively influence perceptions, however when those factors are analysed in separate they diverge. Results show that knowing multiple languages is perceived by 44.6% of the sample as positively influence the profile while lacking communication skills were, on the contrary, evaluated as negatively influencing assessments, in which the majority of respondents (82.6%) identify it seeing the candidate much more and somewhat more negatively and which is corroborated by several authors who argued as feeling negatively impressed (Reppler, 2011; CareerBuilder, 2014; RiskAware, 2017; Jobvite, 2018).

Hypothesis five tested the dimension "Professional information" to assess if the information that contains could have positive effects on perceptions. The results illustrate that all the contents that enhance capabilities such as qualifications, organisation fit, professionalism in which are included the positive comments from others are positive influencers and are supported by other empirical evidence such as Henderson (2019), while all the behaviours of this rubric that induces unprofessionalism or characteristics that can affect job performance such as sharing confidential information and contradicts information, show to cause negative impressions in this study and on others (Berkelaar & Harrison, 2016; Berkelaar, 2017; Boudlaie et al., 2019).

The results of the 6<sup>th</sup> hypothesis aimed to prove that candidates SNS presence does not affect the perception of the recruiter. The mean result showed that all five contents of this dimension did not seem to influence decisions. On the other hand, not updating the profile regularly or being able to track the applicant on the SNS was considered slightly negative. This is due to, when the candidate

seems "invisible", according to Hedenus et al. (2019) and Hartwell and Campion (2020) it appears as hiding something, while not being an SNS member (Hedenus et al., 2019) portraits lack of interest in lifelong learning and professional development, and, in addition, the absence of a profile picture, doesn't allow recruiter's to validate the veracity of the information. Both contents showed that, the lack of information, is previewed as negative by recruiters, and accordingly with CareerBuilder (2018) can decrease the possibility of calling that person for an interview.

The second construct of the model, "characteristics of the candidate intended to evaluate if the characteristics, physicals and psychological of the candidates", such as ( age, gender, race, religion, marital status), could influence their decisions. The results proved that most of the mean of all the variables, were identified as "never" and "rarely" affecting perceptions, validating the hypothesis purposed.

The results are not according with empirical studies, which, even though recognizing that in the last few years most companies have been trying to implement measures to avoid discrimination such as stablishing policies that obligates companies to fulfil women quotas in firms and leadership roles as well as equal pay rates (Noland & Kotschwar, 2016). For recruiters, to be able to collect information provides a multidimensional perspective over there candidates, however several studies highlight that the "protected characteristics" (Scepura, 2020) such as age, gender, race and religion continues to lead to discriminatory hiring, especially age, which was recognized as the only one more able to alter the perceptions, which can be explained by the capability of the younger generations to have more knowledge and technological skills (Botfield, 2018).

In addition, there are also the stigmas associated with a characteristic that are not protected such as names, nationality and based on visual characteristics and attributes, such as facial attractiveness (Jeske & Shultz, 2016). These results highlight two important factors: the first is that several studies aware recruiters to be cautious when making evaluations, to avoid triggering and applying discriminatory bias ( Hoque et al., 2000; Caers & Castelyns, 2011; Elias et al., 2016; Jeske & Shultz, 2016; Evuleocha & Ugbah, 2018; Rich, 2018; Scepura, 2020) and secondly, the lack of recognition that any of these characteristics are able to influence decisions can be for lack of acknowledgement from the own recruiter. This is based on the recruiter not believing that he/she is a discriminatory persona or gives importance to certain attributes or characteristics. This problem can be solved, by the company by providing training and guides, as well as establishing formal and informal policies, so that their Hr, evaluate their candidates based on their professional the characteristics and not on the physical ones.

The last construct of the model aims to understand if characteristics of the recruiter could itself influence the way they perceive the information received. Of the several characteristics of the recruiter

only three (Age, Level of education and company size) was proved to be correlated with candidate's online contents.

The results of the hypotheses eight (a), regarding the variable age and the variables in study (behaviours and, textual and visual information). Age has presented a statistical correlation significance with some of the variables in each dimension. Firstly, it confirmed that as the age of the recruiter increases, the smallest are other variables such as sexual references and informal selfies. The literature proves that older people are commonly more perceive as judgemental, less opened and less comfortable in discussing persistent taboos such as sexual stigmas, (Botfield, 2018), and growing without technological items and selfies can misperceive these types of content. Regarding the correlation between age and the online content dimension "Textual and Visual information", is important to refer that, in this study showing poor communication skills have represented a negative weak correlation, which can be explained by Jacobson and Gruzd (2020), by expressing that young generations are known for their literacy levels and digital skill, which indicates that young generations are seen by older ones has detained more tools, knowledge and higher goals (Wingo, 2019), and, as the age of recruiters increases, the be more accentuated is the tendency of judging those applicants' lack of skills ( since this variable decreases).

Moving to *Hypothesis 8b*, our results prove that there is a negative statistically significant correlation between the age of the recruiter and the characteristics of the applicants. Even these results can't be explained by previous empirical evidence, we can assume that this correlation may be based on the fact that older people are less tolerant and open-minded (Wingo, 2019) and for that matter can be more discriminatory and that even without this correlation with the sociodemographic characteristics, factors such as *race* (Smith & Kidder, 2010; Karl et al., 2010; Caers & Castelyns, 2011; Jeske & Shultz, 2016; Evuleocha & Ugbah, 2018; Scepura, 2020), *marital status* (Evuleocha & Ugbah, 2018; Melão & Reis, 2020) and *nationality* (Evuleocha & Ugbah, 2018) are recognized as inducing discriminatory bias on everyday situations.

The results of the Hypothesis 9a show statistical significative correlations between the level of education of recruiters and the online content of the applicants. The results showed a negative but statistically significant correlation between the level of education and mutual connections. The direction of this correlation is not supported by literature which refers that as individuals grow and experiences new environments they develop more connections (Willmer, 2009), and well as, as the formal education increases, so the cognitive ability and surrounding perceptions, which affects the ability to understand existing relationships and connections (Lima & Bastos, 2019). In addition, *mutual connections* reenforce the possibility the verify information regarding the candidates ( Jobvite, 2018; Gil, 2019; Hedenus et al., 2019), which goes against the negative correlation between those variables. The correlations resulting between the education level of the recruiter and the textual and visual

information of the candidate are not corroborated by literature, such as Spencer (1973), that showed that high quality employees can be distinguish from low quality employees, based on the cost of their sign emission, episode in which having poor communications skills should not be valorised but knowing multiple languages and an extensive and interesting content profile are symbols of trustworthiness and cooperation (Gil, 2019; Hedenus et al., 2019). The level of education was also proved to be correlated with Professional information of the applicants, however, Carless (2005) mentions that the more educated the recruit is, more appreciated are seen applicants' good references, information supporting their qualifications and content that enhance their organisation fit and professionalism, and lower should be the quotation against those behaviours, such as sharing confidential information. However, findings do not support this argument, which correlation coefficient shows otherwise. Lastly, the existent correlation between the level of education and the SNS presence contradicts literature which mentions that SM online information are honest signs of the commitment and ability of job candidates (Baert, 2018) and profiles pictures are useful to identity validation (Hartwell & Campion, 2020), and there online inexistence (Hedenus et al., 2019), and outdated profiles reduces the possibility of calling that person for an interview, since 20% expects applicants to have an online presence (CareerBuilder, 2018).

Shifting to *Hypothesis 9b*, our results prove that there is a negative statistically significant correlation between the level of education of the recruiter and *religion* of the applicants. Even though we did not found previous empirical evidence regarding this matter, several authors considers religion as a neutral matter, however, statements proved to be harshly criticized (Peluchette & Karl, 2008; Jobvite, 2018; Hartwell & Campion, 2020), and one of the most judged characteristics regarding a person, (CarrerBuilder, 2014; Gil, 2019; Hartwell & Campion, 2020).

The correlation established on the tenth hypothesis (a), shows a positively significant statistical correlation with the size of the company and the number of friends (high) an applicant has. Even though there is no empirical support regarding this matter, literature recognizes that SM such as Linkedin is ideal places to develop business networks (Chang et al., 2017), especially Facebook that drives their users to develop relationships with others (Peluchette & Karl, 2009; Boudlaie et al., 2019), and when the candidate has bigger social capabilities are able to spread WOM to wider publics (Pongpaew et al., 2017). On the other hand, most companies valorise the capability of their employees to stablish a WLB, (Hartwell & Campion, 2020), and even though information about recent vacation are proved to slightly positively influence perceptions, on the contrary, attending at parties did not, what also was demonstrated on the finding of this study, Hartwell and Campion (2020).

The last two correlations show that the size of the company is associated with textual and visual information and SNS presence. Results show positive weak ties between the recruiter's company size and lack of *poor communication skills* of the applicant, which is not endorsed by literature, which

mentions, that larger firms, are expected to have more specialized employees than SMEs, (Bordonaba-Juste et al., 2012). Additionally, results obtained from the correlation of the size of the firm with candidates invisibility on SNS is not substantiated by data, which emphasizes that the non-selfdisclosure of a candidate, can indicate a cover-up of questionable behaviours that can be more hardly judged by receivers (Jeske et al. 2019) and should not, for that matter, be punctuated more positively, as our findings showed.

Lastly, Moving to *Hypothesis 10b*, our results prove that there is a negative statistical significant correlation between the company's size of the recruiter's company and the *gender* of the applicants. Lippa and Dietz (2000) recognize that the characteristics of the judge are able to alter the accuracy of the judgements and that gender stereotyping which exists in the workplace, results, much of the times in discrimination (Ann Ingalls, 2018), which supports data.

#### VI Conclusion

One of the biggest challenges for the companies nowadays is being able to identify the right fit for the vacancies available. Companies have been deciding to integrate other tools, such as social media screen, with traditional methods, to be able to optimize the process and track the necessary "talents" for their companies. Even though this process, has only been recognized in Portuguese companies, in the last few years, in other countries, is commonly seen as a formal requirement. Moreover, this practice has been proved to be useful to validate candidate's information, uncover signals of misalliance with the organisation and track information that increases the professionalism, trustworthiness and organisation fit of the candidates. However, it's an application also raises questions such as validation, legality, reliability and usefulness, especially, concerning the accuracy of the judgements based on the online information available, to make hiring decisions and the discrimination that can arise from these judgments.

Given the relevance of the subject, not only in the Portuguese context but also for empirical deepening, this research clearly illustrates that recruiters perceptions can vary accordingly with the signals they receive, meaning that their perceptions are influenced by the different types of information they uncover, during screening. Additionally, also raised questions regarding if the characteristics of the applicants were able to influence recruiters' perceptions and identify if there were specific demographic characteristics of the "good judge", that were correlated with candidates' online content.

For that matter, this research aimed to identify Recruiters' perceptions of the social media online contents of the applicants, tracked during the screening process. Based on a quantitative analysis regarding the several types of online contents, that are possible to track, and which were intentionally divided in 6 dimensions (behaviours, connections, personal information, textual and visual information, professional information and SNS presence), to facilitate it's comprehension, we conclude that different types of content available, have differently influences on the perceptions of the recruiters. The results indicate that on the overall, the majority of content dimensions ("Connections", "Personal information", "Textual and Visual information" and "SNS presence") neither positively nor negatively influence decisions, while "Behaviours" proved to negatively influence perceptions and "Professional information", on the contrary show, to positively influence recruiter's perceptions.

Regarding the characteristics of the applicants, "protected characteristics" such as gender, race, marital status and religion, prove to never influence decisions, while characteristics such as the name, picture of facial attractiveness, nationality and age prove to rarely influence, even though a third of the sample had recognized that age, somewhat influences decisions.

Lastly, the characteristics of the recruiter (age, level of education, size of the company) show to be significantly statistical correlated with several content dimensions, as well as with applicant's characteristics (age and race, nationality, marital status, religion and gender).

To conclude this study proved that, the different types of content, the characteristics of the candidates and the characteristics of the "judge", that were the three main constructs, identified on the Model developed, were proved to alter the perceptions of the recruiters. Based on this we aware Recruiters towards the use of these practices, during their recruitment process because, even though they are able to portrait a multidimensional overview of the candidate, social media such as Facebook, cannot portrait the actual personality of a candidate, their long-lasting digital footprint cannot mirror their actual behaviour in a company and the lack of contextualization and accuracy of the information can jeopardize the person and the company.

# VII Limitations and further research

This study provides valuable empirical contributions, however, is also important to underline their limitations.

First, the size of the sample was too small to obtain clearer perceptions regarding this matter, which do not allow us to transport these finding to a bigger universe.

Being this a quantitative study, further research can include the possibility to explore the subject qualitatively, identifying if their perceptions would, in fact, be altered by visual representations of the online content, as well as characteristics of the applicants and if their perceptions would, in fact, influence their hiring decisions.

Moreover, even though we asked the recruiter if they would not hire applicants based on their online contents, the study did not attest if it would really occur on the reality, so it would be important to evaluate the cibervetting process in a company and identify it this situation really materializes.

Lastly, it would be important to apply this study in other countries to identify if Portuguese practices, judgments, and perceptions are the same and if there are also influenced by their nationality, company policies and culture.

## VIII Academic Managerial implications

This study suggests that the social media online contents of the candidates, collected during screening, has the capability to influence recruiters' perceptions. Those perceptions are altered based on the different types of contents tracked as well as on the characteristics of the candidates. For that matter, one of the managerial implications resulting from the results and discussion of this research is the need of, the company, to provide their employee's guidelines to judge this information.

The company plays a big role in this process as it can establish formal and informal policies regarding how to manage, control and evaluate the information gathered. Firstly, the director of the Department of Human Resources, or the person that is directly above the recruiters, plays a big part in this process, since it can provide training. Having tutoring classes will provide additional guidelines regarding the criteria of the type of sources the information, that can be gathered, as well as the main purposes of this collection, such as uncovering information, searching for reasons not to hire or positive data which corroborates their entrée in the company.

To avoid misjudgements, the information collected should be as much contextualized and organized as possible and should establish a maximum time to be collected, as digital footprints tend to stay online up to 15 years. Furthermore, to avoid acts of discrimination and stereotypes, besides being instructed, recruiters should verify the accuracy of the information, that is not current practice, as well as underline the characteristics physics, visual and psychological that increases judgement bias.

To conclude, the last measure to be taken by companies is to provide their recruiter's feedback sessions to analyse the current situations and practices implemented on the company, as well as evaluate if the criteria still match to the desired results, and develop peer support groups in which, at any time, if the contractor has a doubt regarding a hiring decision, can enquire their colleagues with more experience in the field.

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#### **Annexes**

#### A - English questionnaire

The present survey is part of an investigation within the scope of a master's project in Human Resources and Consulting, carried out at IBS ISCTE Lisbon. The present investigation aims to identify the impact which candidates' digital footprint can have when applying for a job or position, namely, which are the behaviours which may positively or negatively influence recruiters' hiring decisions.

To be able to participate in this study is required to be a recruiter or in the last five years had occupied hiring or recruitment functions. Additionally, requires to be Portuguese or working for a Portuguese company. The results obtained will only be used for academic purposes in order to obtain the master's degree. I would appreciate it if you took about 8-10 minutes to answer spontaneously and sincerely to each of the questions, knowing that the information will be treated and collected, guaranteeing the confidentiality of all the participants.

Thank you in advance for your collaboration!

Note: Any doubt you may reach me by email to jsala@iscte-iul.pt

#### I demographic characteristics

**Demographic Profile** 

- 1. Age
- o Under 25
- 0 25/34
- 0 35/44
- 0 45/54
- 0 55/64
- o 65 or older
- 2. Gender
- o Female
- Male
- 3. Education: What is the last education level received?
- High school graduate.
- o Professional/technical degree
- o bachelor's degree
- o master's degree
- Doctorate degree (PhD)
- 4. Let us know which is the size of the company you work:
- Micro (less than 10 employees)

- Small (less than 50 employees)
- Median (less than 250 employees)
- o Big (250 or more employees)

#### **II Social Media Use**

1. Which is for you, the main function of each social media? (Select all that apply): \*

	Personal	Professional
Facebook		
LinkedIn		
Instagram		
Twitter		

1.1. In which of the following social medias do you have an account and to which end do you use it? (Select all that apply): \*

	Personal	Professional	No account
	account	account	
Facebook			
LinkedIn			
Instagram			
Twitter			

2. Which is the level of privacy of your online accounts?

	Public	Most	Unsure	Most	Private	No
		public		private	profile	account
Facebook						
LinkedIn						
Instagram						
Twitter						

3. "I am aware of my digital footprint"- which is the level of agreement with this sentence? Answer resorting to 5 - Likert scale

Awareness					
			disagree		agree
	disagree	<b>D</b> isagree	agree nor	<b>A</b> gree	<b>S</b> trongly
	Strongly		<b>N</b> either		

#### **III Online Recruitment**

- 1. Are you involved in the recruitment and/or hiring process of your company? \*
- Yes
- o No
- 2. How many years of experience do you have in recruiting and/or selecting employees?

0	16 - 20 years							
0	More than 20 y	ears						
3.1	n your duties as a	recruiter, for each	functions/type of jobs	do you hire? (Select al	l that apply):			
0	The state of the s							
0	First/Mid-Level Officials and Managers							
0	Professionals							
0	Sales Workers							
0	Craft Workers							
0	Operatives							
0	Administrative S	Support Workers						
0	Laborers Worke	ers						
0	Other:							
4. [	Does your organis	sation resorts to onl	line recruitment? *					
0	Yes							
0	No							
0	Do not know							
IV Scre	ening purposes							
1.	Do you resort to	social media screer	n during the recruitmer	nt process?".				
	o Yes							
	o No							
2.	Which are the	main purposes of v	viewing applicants' so	cial media informatio	n during the			
	hiring process?	(Select all that apply	y): *					
0	To find negative	information, or red	d flags (normally assoc	ciated with motives no	ot to hire)			
0	To find positive	information, such	as applicant qualific	ations (normally asso	ciated with			
	motives to hire)							
0	To find any prev	viously unknown inf	ormation available on	line				
2.1 Ple	ease indicate wha	t type of informatio	n you attempt to gath	er when viewing each	social media			
	bsite. (Select all t	• •	,	3				
	`	Personal	Professional	Unknown				
Fo	acebook							
	nkedIn							
	stagram							
	witter							

Less than 5 years
 5 - 10 years
 11 - 15 years

3. How significant do you consider the context where the information is found to be? \*
Answer resorting to 5 - Likert scale

	Never	Rarely	Sometimes	Often	Almost
					always
Significance					

- 4. To which social media do you resort the most to screen applicants during the hiring process? \*
- o Facebook
- o LinkedIn
- 5. "I would not hire someone based on their online content which is the level of agreement with this sentence?".

Answer resorting to 5 - Likert scale

	Strongly		Neither		
	disagree	Disagree	agree nor	Agree	Strongly
			disagree		agree
Awareness					

### **IV Social media and Screening content**

. Do you believe that candidates' digital footprint can influence being hired? \*
 Answer resorting to 5 - Likert scale

	Never	Rarely	Sometimes	Often	Almost
					always
Awareness					

2. Please indicate how discovering each of the following contents during screening would impact your image of an applicant:

Note: Please assume that 'SM' means Social media and 'SNS' are social network sites

2.1 Behaviours (" I would view the applicant . . . ") \*

Behaviours /	Much	Somewhat	Neither	Somewhat	Much
behaviour	more	more	more	more	more
viewed impact	positively	positively	positively	negatively	negatively
			nor		
			negatively		

Datastial			
Potential			
drug use;			
references to			
"marijuana"			
Provocative/			
inappropriate			
photos; videos,			
information's			
Display or			
use of weapons			
Comments			
about race			
Sexual			
references			
Evidence of			
excessive			
drinking			
Commenting			
on controversial			
topics: religious			
statements;			
political rants			
Informal			
selfies or tagged			
photos			
-			
Participation in			
activities which			
are in violation			
of university or			
workplace			
policy			
Sexual			
References			

# 2.2 Connections (" I would view the applicant . . . ") \* $\,$

Connections / behaviour viewed impact	Much more positively	Somewhat more positively	Neither more positively nor negatively	Somewhat more negatively	Much more negatively
Relatively					
low number of					
friends					
Contacts					
which values					
may conflict					
with those of					
the					
organization					

Affiliations			
with criminal			
elements or			
controversial			
interest groups			
Mutual			
connections			
Relatively			
high number of			
friends			

## 2.3 Personal information (" I would view the applicant . . . ") \*

Personal information/ behaviour viewed impact	Much more positively	Somewhat more positively	Neither more positively nor negatively	Somewhat more negatively	Much more negatively
Information					
about family					
Information					
about a recent					
vacation					
Negative					
comments					
about the					
applicant from					
others					
Attendance					
at parties and					
social events					

## 2.4 Visual and textual information (" I would view the applicant . . . ") $^{*}$

Visual profile/ behaviour viewed impact	Much more positively	Somewhat more positively	Neither more positively nor	Somewhat more negatively	Much more negatively
			negatively		
Poor					
communication					
skills					
Multiple					
languages					
Excessive					
posting					

## 2.5 Professional information ("I would view the applicant . . . ") \* $\,$

Professional information / behaviour viewed impact	Much more positively	Somewhat more positively	Neither more positively nor negatively	Somewhat more negatively	Much more negatively
Sharing confidential					
information Information					
Contradicting qualifications Good					
references					
posted by others					
Information that supports professional					
qualifications Content					
enhancing professionalism,					
and P-O FIT					

## 2.6 SNS presence ("I would view the applicant . . . ") \*

SNS presence / behaviour viewed impact	Much more positively	Somewhat more positively	Neither more positively nor negatively	Somewhat more negatively	Much more negatively
Not members					
of SNS					
Profile not					
regularly/recently					
updated					
Profile with					
little information,					
due to privacy					
settings					
Candidates'					
invisibility (profile					
not found)					
Not having a					
profile picture					

3. Which of the factors below may compromise or influence the decisions based upon the observed behaviours, during the hiring process? (Select all that apply): \*

Bias / Bias influence	Never influences	Rarely influences	Somewhat influences	Often influences	Extremely influences
Age					
Race					
Gender					
Name					
(non-common					
/other					
nationality)					
Religion					
Nationality					
/ origin					
Marital					
status					
Profile					
Picture/facial					
attractiveness					

## B – Age table

### Age

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Under 25 years old	9	9,8	9,8	9,8
	25 - 34 years old	32	34,8	34,8	44,6
	35 - 44 years old	25	27,2	27,2	71,7
	45 - 54 years old	16	17,4	17,4	89,1
	55 - 64 years old	10	10,9	10,9	100,0
	Total	92	100,0	100,0	

### C – Gender Table

### Gender

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Female	57	62,0	62,0	62,0
	Male	35	38,0	38,0	100,0
	Total	92	100,0	100,0	

### D - Level of education Tables

#### D1 – Table of Education Level in sub-levels

#### Last level of education1

Last leve	el of educa	ntion2	Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Level 1	Level 1 Válido	High school graduate	9	90,0	90,0	90,0
		Professional/Technical degree	1	10,0	10,0	100,0
		Total	10	100,0	100,0	
Level 2	Level 2 Válido	Bachelor's degree	23	95,8	95,8	95,8
		Licenciatura e Pós Graduação	1	4,2	4,2	100,0
		Total	24	100,0	100,0	
Level 3	Válido	Bacharel Admnistração e MBA Marketing	1	1,7	1,7	1,7
		Doctorate degree (Ph.d)	1	1,7	1,7	3,4
		Master's degree	56	96,6	96,6	100,0
		Total	58	100,0	100,0	

#### D2 – Table of Education Level in levels

### Last level of education2

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Level 1	10	10,9	10,9	10,9
	Level 2	24	26,1	26,1	37,0
	Level 3	58	63,0	63,0	100,0
	Total	92	100,0	100,0	

### E – Size of the company table

### 5. Which is the size of the company you work

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Micro ( less than 10 employees)	16	17,4	17,4	17,4
	Small ( less than 50 employees)	16	17,4	17,4	34,8
	Median (less than 250 employees)	60	65,2	65,2	100,0
	Total	92	100,0	100,0	

### F – Main function of each social media Tables

#### F1 – Main function of Facebook Table

## SOC\_Q1\_\_Facebook

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Professional network	4	4,3	4,3	4,3
	Personal network	72	78,3	78,3	82,6
	Professional & Personal	16	17,4	17,4	100,0
	Total	92	100,0	100,0	

#### F2 – Main function of LinkedIn Table

## SOC\_Q1\_\_LinkedIn

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Professional network	87	94,6	94,6	94,6
	Personal network	2	2,2	2,2	96,7
	Professional & Personal	3	3,3	3,3	100,0
	Total	92	100,0	100,0	

### F3 – Main function of Instagram Table

## SOC\_Q1\_\_Instagram

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Professional network	4	4,3	4,3	4,3
	Personal network	75	81,5	81,5	85,9
	Professional & Personal	13	14,1	14,1	100,0
	Total	92	100,0	100,0	

#### F4 - Main function of Twitter Table

# SOC\_Q1\_\_Twitter

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Professional network	18	19,6	19,6	19,6
	Personal network	62	67,4	67,4	87,0
	Professional & Personal	12	13,0	13,0	100,0
	Total	92	100,0	100,0	

## G – Recruiters' type of accounts in each Social Media Tables

### G1 – Account type on Facebook Table

## SOC\_Q1.1\_\_Facebook

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Personal	58	63,0	63,0	63,0
	Professional	2	2,2	2,2	65,2
	Professional & Personal	26	28,3	28,3	93,5
	No account	6	6,5	6,5	100,0
	Total	92	100,0	100,0	

### G2 – Account type on LinkedIn Table

## SOC\_Q1.1\_\_LinkedIn

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Personal	5	5,4	5,4	5,4
	Professional	72	78,3	78,3	83,7
	Professional & Personal	15	16,3	16,3	100,0
	Total	92	100,0	100,0	

### H – Social media Level of privacy Tables

## H1 – Level of privacy on Facebook Table

## SOC\_Q2\_\_Facebook

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Public profile	7	7,6	7,6	7,6
	Most public	13	14,1	14,1	21,7
	Unsure	1	1,1	1,1	22,8
	Most private	37	40,2	40,2	63,0
	Private profile	28	30,4	30,4	93,5
	No account	6	6,5	6,5	100,0
	Total	92	100,0	100,0	

### H2 – Level of privacy on LinkedIn Table

SOC\_Q2\_\_LinkedIn

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Public profile	55	59,8	59,8	59,8
	Most public	29	31,5	31,5	91,3
	Unsure	3	3,3	3,3	94,6
	Most private	3	3,3	3,3	97,8
	Private profile	2	2,2	2,2	100,0
	Total	92	100,0	100,0	

### I – Digital footprint level of awareness Table

SOC\_Q3\_\_'' I am aware of my digital footprint''- which is the level of agreement with this sentence? [Agreement]

		Frequência	Porcentagem	Porcentagem válida	Porcentagem cumulativa
Válido	Disagree	11	12,0	12,0	12,0
	Neither Agree nor Disagree	24	26,1	26,1	38,0
	Agree	43	46,7	46,7	84,8
	Strongly agree	14	15,2	15,2	100,0
	Total	92	100,0	100,0	

### J – recruiter's digital footprint awareness

Does your profile on those SOC media has content that you would not enjoy your own recruiters to see?

you would not enjoy your own recruiters to see:									
					Agree				
Mean	Sd		Strongly		nor		Strongly		
			Disagree	Disagree	Disagree	Agree	agree		
		n	59	15	3	4	3		
1,54	1,0	%	70,2	17,9	3,6	4,8	3,6		
		n	28	19	17	10	7		
2,37	1,3	%	34,6	23,5	21	12,3	8,6		
		n	27	19	15	12	2		
2,24	1,2	%	36	25,3	20	16	2,7		
		n	16	12	10	1			
1,92	1,0	%	41	30,8	25,6	2,6	_		
	Mean  1,54  2,37  2,24	Mean Sd  1,54 1,0  2,37 1,3  2,24 1,2	Mean Sd  n 1,54 1,0 % n 2,37 1,3 % n 2,24 1,2 % n	Mean         Sd         Strongly Disagree           1,54         1,0         %         70,2           n         28           2,37         1,3         %         34,6           n         27           2,24         1,2         %         36           n         16	Mean         Sd         Strongly Disagree         Disagree         Disagree           1,54         1,0         %         70,2         17,9           n         28         19           2,37         1,3         %         34,6         23,5           n         27         19           2,24         1,2         %         36         25,3           n         16         12	Mean         Sd         Strongly Disagree D	Mean         Sd         Strongly Disagree D		

(1=Strongly Disagree | 2=Disagree | 3=Neither Agree nor Disagree | 4=Agree | 5=Strongly agree)

## K – Involvement on the recruitment/hiring process of the company Table

	Yes		No	
	n	%	n	%
Are you involved in the recruitment and/or hiring process of your company?	72	78,3	20	21,7

## L – Years of experience in recruitment and/ or selecting employees Table

How many years of experience do you have in recruiting and/or selecting employees?

	n	%
< 5 years	42	46,2
5 - 10 years	17	18,7
11 - 15 years	15	16,5
16 - 20 years	9	9,9
> 20 years	8	8,8

### M – Functions for each Recruiters hire Table

In your duties as a recruiter, for each functions/type of jobs do you hire?

_	Yes		No	)
	n	%	n	%
Professionals	62	67,4	30	32,6
First/Mid-Level Officials and Managers	47	51,1	45	48,9
Administrative Support Workers	50	54,3	42	45,7
Operatives	44	47,8	48	52,2
Sales Workers	36	39,1	56	60,9
Executive/Senior-Level Officials and Ma	33	35,9	59	64,1
Laborers Workers	24	26,1	68	73,9
Craft Workers	11	12,0	81	88,0
Others	5	5,4	87	94,6

## $N-\mbox{\sf Table}$ of organisation representation in online recruitment

	Yes		No	
	n	%	n	%
Does your organisation resorts to online recruitment?	82	92,1	7	7,9

## O – Do you resort to screening?

	Ye	Yes		No	
	n	%	n	%	
Do you resort to social media screen during the hiring process?	92	83,64	18	16,36	