

## Cybervetting prospective employees of SMEs

### Zoltan Rozsa

*Faculty of Social and Economic Relations,  
Alexander Dubček University of Trenčín,  
Slovak Republic*  
[zoltan.rozsa@tnuni.sk](mailto:zoltan.rozsa@tnuni.sk)

### Iveta Kmecová

*Faculty of Corporate Strategy,  
Institute of Technology and Business in České Budějovice,  
Czech Republic*  
[kmecova@mail.vstecb.cz](mailto:kmecova@mail.vstecb.cz)

**Abstract.** Cybervetting has become an integral part of HR practices, even though it is generally perceived negatively, as an invasion into employees' privacy. In response, scholars have begun investigations of the ways social networks impact HRM in organizations. In this paper, we present and discuss the results of our exploration into whether SMEs will be screening job applicants. We have used binary logistic regression to build the model based on the predictors: company's size, HR formality score, company's age and turnover. The units of the analysis in this study are SMEs operating in Czech and Slovak Republics. Random sample technique was applied to select 665 respondents. The resulting model contained only Formality Score (FS) as a predictor with the association to SCR. We can claim that inclination to social networks' screening in SMEs decreases as FS rises. The study also reveals that social networks screening is widely spread among SMEs in both countries under study. The study extends the research on networks' screening and expands the knowledge about how SMEs are replacing formalised HR practices. Finally, it offers recommendations for future work that can enhance knowledge in social networks' impact on SMEs.

**Keywords:** social networks, screening, cybervetting, HRM, SMEs.

**JEL Classification:** J00, M12, M54

**Received:**  
August, 2019  
**1st Revision:**  
December, 2019  
**Accepted:**  
February, 2020

DOI:  
10.14254/2071-  
8330.2020/13-1/19

## 1. INTRODUCTION

Social networking sites (SNSs) have become popular, and today are playing a vital role in our lives (Tulu, 2017). According to Hootsuite (2019), in January 2019, 54% of the total population in the Czech Republic were active social media users, in the Slovak Republic, their share was 50%. Massive adoption of SNSs has fundamentally reshaped the way people make decisions and interact with each other (Qualman, 2010). HR professionals are no exception in this regard. Social networks have long become an essential HR supporting tool (Poba-Nzaou et al., 2016), they help to attract job applicants and gather additional information about job candidates before the interview (Evuleocha & Ugbah, 2018; Krasnova et al., 2010). Information obtained from SNSs may change job candidates' evaluation in a range of rather unexpected ways (Berkelaar, 2017). Social networks may cause bias and subjective judgments and thus may prevent individuals from obtaining a job without knowing why (Black & Johnson, 2012). Since employers do not make cybervetting activities or their outcomes visible, applicants may feel they lack opportunities to explain or correct misunderstandings (Berkelaar, 2014).

Cybervetting is not an unusual activity anymore as it is becoming the norm in HR practices. There is evidence that recruiting via social media is growing with 84% of organizations using it currently and 9% planning to use it. To compare, back in 2011, only 56% used social media for recruitment purposes. Overall, 43% of organizations said they use social media or online search engines to screen job candidates, and this shows an increase from 2013. Over one-third (36%) of organizations have disqualified job candidates in the past year because of concerning information (e.g., illegal activity, the discrepancy with application) due to information they found on a social media profile or through an online search (SHRM, 2016).

However, there is relatively little research on these issues in human resource management literature (Gentina & Chen, 2019; Wang et al., 2018; Won & Seo, 2017). In order to address the mentioned research gaps in the existing literature, this study examines how to predict the probability of whether SMEs will be doing social media screening of job applicants.

The paper is organised as follows. We first discuss literature on social networks and cybervetting in the HRM domain. This is followed by the methodology section, which explains the research context, methods of data collection and data analysis. After that, we discuss the results and their implications for HRM literature and practice. Finally, we conclude with some insights for future research.

## 2. LITERATURE REVIEW

### 2.1. Definition of social networks

Researches conducted in the HRM domain mainly utilise SNSs' definitions of Boyed & Ellison (2007) (Black & Johnson, 2012; Brown & Vaughn, 2011; Kluemper et al., 2016; Nayak et al., 2018; Rienties et al., 2010; Suen, 2018) or Kaplan & Haenlein (2010) (Aguado et al., 2016; Arjomandy, 2016; Kluemper et al., 2016; Martin et al., 2015; Poba-Nzaou et al., 2016; Vetráková et al., 2018). Boyed & Ellison (2007) define social network sites as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site". Kaplan & Haenlein (2010) in their work firstly create a classification scheme by creating three categories for "social presence/media richness" (low, medium, high) and two categories for "self-presentation/self-disclosure" (low, high). Secondly, they define six categories of social media one of which are SNSs (with medium social presence/media richness and high self-presentation/self-disclosure), and others are blogs, virtual

social worlds, collaborative projects, content communities, and virtual game worlds. Thirdly, they define SNSs as "applications that enable users to (1) connect by creating personal information profiles, (2) inviting friends and colleagues to have access to those profiles, and (3) sending e-mails and instant messages between each other. These personal profiles can include any type of information, including photos, video, audio files, and blogs". However, we should note that Boyed & Ellison (2007) definition of SNSs was already updated in order to accurately characterizes the today SNSs landscape. According to Boyed & Ellison (2013), SNSs are a networked communication platforms in which participants (1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-provided data; (2) can publicly articulate connections that can be viewed and traversed by others; and (3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site. Also, Kane et al. (2014) entered discussion and state that "SNSs possesses four essential features, such that users (1) have a unique user profile that is constructed by the user, by members of their network, and by the platform; (2) access digital content through, and protect it from, various search mechanisms provided by the platform; (3) can articulate a list of other users with whom they share a relational connection; and (4) view and traverse their connections and those made by others on the platform". Table 1 presents SNSs definitions in terms of their properties important in the context of our research.

Table 1

## SNSs' definitions

Authors	Service	Profile	Friends/Followers	Content
Boyed & Ellison (2007)	web-based services that allow individuals to	construct a public or semi-public profile within a bounded system	articulate a list of other users with whom they share a connection	View and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.
Kaplan & Haenlein (2010)	applications that enable users to	connect by creating personal information profiles. These personal profiles can include any type of information, including photos, video, audio files, and blogs	inviting friends and colleagues to have access to those profiles	sending e-mails and instant messages between each other
Ellison and Boyed (2013)	networked communication platforms in which participants	have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-provided data	can publicly articulate connections that can be viewed and traversed by others	can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site
Kane et al. (2014)	essential features, such that users	have a unique user profile that is constructed by the user, by members of their network, and by the platform	can articulate a list of other users with whom they share a relational connection; view and traverse their connections and those made by others on the platform	access digital content through, and protect it from, various search mechanisms provided by the platform

Source: as cited and authors processing

Other authors are also involved in discussing the essence of SNSs by highlighting some of their characteristics. For instance, SNSs allow users to create content (Kaplan & Haenlein, 2010); share and communicate content among and across hundreds or thousands of other individuals (Ham et al., 2014); build social relations with others who have similar interests, activities, backgrounds (Berthon et al., 2012; Cheung et al., 2015; Obar & Wildman, 2015). And all of that quickly and with relatively little effort (Mangold & Faulds, 2009), because of their collaborative, flexible, agile, spontaneous, unstructured, and informal nature (McAfee, 2006).

Another SNSs key characteristic is that they can take the form of either personal (or non-professional) networks (e.g., Facebook, Instagram) or professional networks that connect applicants with potential employers (e.g., LinkedIn) (Hanna et al., 2011; Hartwell & Campion, 2019; Nikolaou, 2014; Smith & Kidder, 2010; Suen, 2018; Zide et al., 2014). Within personal SNSs, users share substantial amounts of private information, regularly communicate and collaborate (Lewis et al., 2008; Subrahmanyam et al., 2008) and/or use game or applications (Rienties et al., 2010). In contrast, professional SNSs, such as LinkedIn, are primarily used for business purposes (Rienties et al., 2010) and almost exclusively for building professional relations (Zide et al., 2014). The use of professionally and non-professionally oriented SNSs has become widespread (Nikolaou, 2014) due to their increased accessibility through mobile technology (Kaplan and Haenlein, 2010). According to Liu et al. (2016) from SNSs can also be excluded networks for micro-blogging activity (Twitter, Tumblr, Sina-Weibo) because they focus on information dissemination (typically in the form of shorter blogging) (Liu et al., 2016).

## **2.2. Cybervetting in the HRM domain**

Cybervetting occurs when employers use nongovernmental, non-institutional online tools or sites (e.g. search engines and SNSs) to extract informal often personal information about prospective or current employees (Berkelaar & Buzzanell, 2014; McDonald et al., 2016). There is a relatively small body of literature that is concerned with cybervetting. Existed works can be divided into two areas, specifically from an employee and an employer perspective (Bartosik-Purgat & Jankowska, 2017).

From an employee perspective, scholars have investigated applicants' reactions to cybervetting. Madera (2012) studied the perceived fairness and job pursuit intentions of college students, who attended a career fair for hospitality positions. The results showed that organizations that used social networking websites as a selection tool were perceived as less fair than those that did not. Similarly, job pursuit intentions were lower for organizations that used social networking websites as a selection tool than organizations that did not. Berkelaar (2014), using semi-structured protocols to interview applicants about their job-seeking approaches, found that applicants felt the lack of opportunities to explain or correct misunderstandings. Although many applicants noted that employers could check an applicant's digital footprint for legitimate needs, most of them typically considered online information as personal; cybervetting deemed as an invasion to personal space and wanted from organizations to be transparent about the process and outcomes. Also, they asked for opportunities for correction. Curran et al. (2014) asked 12 college students to describe what they used SNSs for and what types of information they thought were available to others who looked at their sites. They found that college students are aware that potential employers will use SNSs to gather information about them, but at the same time, they are not overly concern about it. Aguado et al. (2016) study looked at differences in applicants' reaction to SNSs screening depending on whether it is a personal or professional network. They had also evaluated the role of different sociodemographic variables on the applicants' reactions. The results showed that both age and gender play a role in participants' attitudes towards personal networks but not towards professional ones. Contrary to what was hypothesized, older participants showed more positive attitudes towards the use of

personal networks than younger ones. Hurrell et al. (2017) explored how Generation Y employees experience and perceive employer use and monitoring of SNSs and whether employment-related concerns influenced their online behaviour. The study pointed out that cybervetting is in generally perceived negatively, such as the invasion into privacy. Nevertheless, many students displayed alertness through actively managing online profiles which, in turn, marginally yet significantly increased their justice perceptions. Suen (2018) examined similar research questions on data from Taiwan Facebook users using Partial Least Square Structural Equation Modelling (PLS-SEM). The results indicated that a candidate who can better control his/her SNSs information is less likely to perceive that his/her privacy has been invaded during SNSs screening by potential employers, thus mitigating his/her perception of procedural unfairness. Moreover, when SNSs screening is more transparent, the candidate is less likely to perceive the selection procedure as unfair, which will reduce his/her intention to withdraw from employment selection. Jeske & Shultz (2019) grappled with the issues of the relationship between perceived respect for privacy and potential job pursuit intentions when it comes to working with vulnerable groups. They found that perceived respect for privacy differed across the jobs. Specifically, they found that applicants were willing to accept the privacy violation if it was connected with recruitment for jobs involving work with children.

From employer perspectives, scholars have investigated the scope of cybervetting use and the prediction ability of published information. De La Llama et al. (2012) through 19 in-depth semi-structured interviews with employers belonging to Generation-X found, that thanks to Facebook, they can remove applicants who do not meet the company profile. The employers initially noted that the weight of Facebook is on the latter end of the hiring-decision spectrum, after the results of the interview with candidates and their resumes evaluation. However, the way how candidates portrayed themselves through their wall posts, as well as what they wrote on the walls were also crucial in hiring decision processes. Roulin & Bangerter (2013) turned their attention to the fact whether recruiters and potential applicants (students and graduates) both perceive professional SNSs as a potential antecedent of Person-Job fit information and personal SNSs as a potential antecedent of Person-Organization fit information. Their results suggest that applicants should worry less about smaller faux pas, such as pictures from parties with friends published on personal SNSs and focus more on developing the professional information section in their professional profiles. Nikolaou (2014) explored how HR professionals use SNSs. Specifically, he studied how they use SNSs in the recruitment process, and also their effectivity. Conducted research seems to indicate that HR professionals are more engaged in LinkedIn than Facebook and considered the information from professional SNSs as more effective than from private ones, in the recruitment process. Berkelaar & Buzzanell (2015) qualitative analysis of 45 in-depth employer interviews emphasized how employers evaluate extracted information about applicants during personnel selection. Their work showed that employers disqualified applicants who posted photos of inappropriate behaviour and/or have spelling, grammar issues. The level of used language presumably evidences about applicants' levels of professionalism, attention to detail, and suitability for employment. Results also showed that SNSs are used to assessing the trustworthiness of applicants' character or reputation. Employers also questioned the motivation of candidates who often played games. Machado (2016) acknowledged the fact that the practice of cybervetting is often seen as professional duty and urges greater awareness of the impact that online activity may have on applicants' image. Berkelaar (2017) offers a preliminary framework for understanding how and for what purposes employers using cybervetting in their personnel selection process. Hedenus & Backman (2017) paid special attention to recruiters' expectations and evaluations of confessions regarding information that can be found online about applicants. The presented qualitative analyses of interviews and observations of 36 Swedish hiring managers suggest that jobseekers are either expected to disclose information that can be found online in a proactive manner or to confess when

confronted with the findings reactively. Hartwell & Campion (2019) results indicate that SNSs content is considered useful and is regularly utilized during hiring. Some SNSs content is viewed positively (e.g., information supporting qualifications), while other information leads to negative perceptions (e.g., discriminatory comments). Finally, results support differentiation between personal and professional SNSs, as the kind of information sought and the effectiveness of assessing various work-related constructs differs between these SNS categories.

The prediction ability of SNSs information was assessed mainly by the ability to distinguish between those individuals who are high on Big Five personality traits from those who are low on that characteristic; and also, whether this information can be manipulated. Kluemper et al. (2009) support the notion that based solely on viewing social networking profiles, judges are consistent in their ratings across subjects and typically able to accurately distinguish high from low performers. In the next study, they suggest that evaluators trained to assess participant profiles can provide reasonably reliable estimates of Big Five personality traits from SNSs (Kluemper et al., 2012). Back et al. (2010) suggest that people are not using their SNSs profiles to promote an idealized virtual identity. Instead, SNSs might be an effective medium for expressing and communicating real personality. Schroeder & Cavanaugh (2018) indicate that individuals can indeed manipulate Facebook profiles to present themselves in a specific way. Faking ability had an inverse relationship with age and daily Facebook usage, and a positive association with cognitive ability, Facebook impression motivation, self-monitoring ability and sensitivity, and neuroticism. Interestingly, cognitive ability was only a marginally significant predictor of faking ability in the “fake bad” condition, and unexpectedly, this was a negative relationship.

### 3. AIM, METHODOLOGY AND DATA

The study aims to predict whether a company will cybervetting job applicants. The units of the analysis in this study are SMEs operating in Czech and Slovak republics. Random sample technique was applied in two public databases (“Albertina” and “Cribis”) to select the respondents. An online questionnaire survey was used to obtain data during October 2019. Company owners or persons in charge of recruitment were asked to complete the questionnaire.

There final sample consists of 665 usable questionnaires, where 62.71% per cent (N=417) were completed by Czech SMEs and 37.29 per cent by Slovak. According to their size, 83.46 per cent of them (N=555) belonged to the micro-enterprise category, 15.46 per cent (N=104) were small size, and 0.90 per cent (6) were medium size. For more extensive sample data, see Table 2.

#### *Variables*

##### *Measuring the company's size (CS) – independent variable*

We construct SMEs size within the European Commission recommendation: "The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million. Within the SME category, a small enterprise is defined as an enterprise which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million. Within the SME category, a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million" (EC, 2003).

*Measuring HR formality score (FS) – independent variable*

In SMEs, the HR processes may be managed by one person who determines the relevant factors and requirements for the job. (Abraham et al., 2015; Dvorský et al., 2018). However, HR formality is defined as the extent to which HR practices are documented, systemized, and institutionalized (Nguyen & Bryant, 2004).

There are relatively few studies in the area of measuring HR formality in SMEs. Most of published works adopt the 2004 Workplace Employment Relations Survey (WERS) approach (Lai et al., 2016; Saridakis et al., 2013; Storey et al., 2010), which collected data on a wide range of HR practices including recruitment, appraisal, and pay as well as methods of handling communication with employees. To measure degree of formality, WERS collected data about indicators as follows: (1) Person mainly concerned with HR issues; (2) Existence of a formal strategic plan; (3) Investors in People; (4) Presence of tests at induction as part of recruitment; (5) Any formal communication channels; (6) Any meeting between management and employee; (7) Presence of a dispute procedure; (8) Presence of an equal opportunity policy; (9) Presence of a grievance policy; (10) Presence of a performance appraisal program; (11) Formal target; (12) Any non-payment benefits (Forth et al., 2006). Nguyen & Bryant (2004) took similar approach when they compiled a list of the following criteria of HR formality: (1) Presence of HR specialist(s); (2) Written criteria for hiring; (3) Written criteria for firing; (4) Professional source of recruitment; (5) Existence of HR plan for the company; (6) Spending on training for employees, (7) Written job descriptions, (8) Written criteria for performance appraisal. Psychogios et al. (2016) measured the degree of HRM formality with questions whether the organization has HRM department or who takes responsibility for HRM, respectively, who is in charge of HRM.

Based on the previous studies, we created a list of 10 items that were relevant to the Czech and Slovak SMEs: (1) HR specialist(s) and presence of written: (2) HR plan; (3) Organizational chart; (4) Written job descriptions; (5) Employee selection policy; (6) Employee training and development policy; (7) Performance appraisal program; (8) Compensation policies and procedures; (9) Dispute procedure; (10) Equal opportunity policy. Responses to these questions were measured on a binary scale: “yes” (1) or “no” (0). An overall HR formality score was calculated as an equally weighted average of the items.

*Measuring turnover (TO) – independent variable*

To measure the company turnover, we asked the respondent to provide the exact amount of turnover reported in the tax return for the year 2018 as sales of goods, products and services. ECB euro reference exchange rate for Czech koruna (CZK) from 31st December 2018 was used to calculate turnover of Czech companies (1EUR=25.724 CZK).

*Measuring the company's age (CA) – independent variable*

The age of the companies was measured in three intervals coded as follows: (1) less than 5 years; (2) from 5 to 10 years; (3) more than 10 years.

*SNSs screening (SCR) – dependent variable*

The depended variable was coded as a dummy binary variable whose value is 1 if the respondent realised SNSs screening on the last employee selection and 0 if not.

*Analysis*

We used binary logistic regression to model the relationship between a binary target variable (SCR) and a set of independent variables (CS; FS; TO; CA). Binary logistic regression is a generalised linear model that estimates the probability of a binary outcome based on one or more independent predictors

and can be used as a classifier by setting a decision rule. This method offers the advantages of fast training time and interpretability and is suitable for problems where a linear relationship between the predictors and log odds can be assumed (Bigsby et al., 2019). The target level for logistic regression was set to 1 (the respondent realises SNSs screening). SAS JMP version 15 was used to make calculations.

#### 4. EMPIRICAL RESULTS AND DISCUSSION

##### *Descriptive statistics*

Table 2 presents the sample characteristics and responses to each measure. The results yielded some interesting findings. Firstly, even 65.11 per cent of SMEs (N=433) realised SNSs screening on the last employee. Secondly, the average formality score of SMEs in Czech and Slovak republic is low (Mean=0.19 Std Dev=0.13). Further analysis also showed that significant differences in formality score exist according to company size (p-value <.0001) and age (p-value <.0001). Difference between Czech and Slovak companies was not significant (Dif. SK-CZ=0.00693, p-value 0.589). However, these results are out of the scope of this paper.

Table 2

The sample characteristics

Variable	Micro size SMEs				Small size SMEs				Medium size SMEs			
	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total
Czech Republic	348	52.33			63	9.47			4	0.60		
Slovak Republic	207	31.13			41	6.17			2	0.30		
Company age less than 5 years	416	62.56			16	2.41			1	0.15		
Company age from 5 to 10 years	139	20.90			36	5.41			1	0.15		
Company age more than 10 years	0	0.00			52	7.82			4	0.60		
	Yes		No		Yes		No		Yes		No	
HR specialist(s)	4	0.60	551	82.86	74	11.13	30	4.51	5	0.75	1	0.15
HR plan	0	0.00	555	83.46	60	9.02	44	6.62	5	0.75	1	0.15
Organizational chart	0	0.00	555	83.46	9	1.35	95	14.29	3	0.45	3	0.45
Written job descriptions	210	31.58	345	51.88	63	9.47	41	6.17	5	0.75	1	0.15
Employee selection policy	97	14.59	458	68.87	35	5.26	69	10.38	5	0.75	1	0.15
Employee training and development policy	224	33.68	331	49.77	19	2.86	85	12.78	4	0.60	2	0.30
Performance appraisal program	1	0.15	554	83.31	2	0.30	102	15.34	3	0.45	3	0.45
Compensation policies and procedures	331	49.77	224	33.68	95	14.29	9	1.35	2	0.30	4	0.60
Dispute procedure	0	0	0	0	0	0	0	0	0	0	0	0
Equal opportunity policy	0	0	0	0	0	0	0	0	0	0	0	0
SNSs screening	417	62.71	138	20.75	16	2.41	88	13.23%	0	0.00	6	0.90
	Mean		Std Dev		Mean		Std Dev		Mean		Std Dev	
Formality Score	0.16		0.11		0.34		0.09		0.53		0.18	
Turnover 2018 (in EUR)	79012.46		78547.93		158112.06		105787.89		1854347.83		3574820.33	

Source: Authors' calculations



*Binominal logistic regression*

The goal of the building model is to estimate the likelihood that dummy binary variable is either “realise SNSs screening” (1) or “do not” (0) and thus which predictors (CS; FS; TO; CA) lead to SNSs screening of employees (SCR).

To build the model, we started by examining the impact of each predictors separately. Results showed statistically significant associations between the CS and SCR (Whole model test p value <.0001, misclassification rate=0.2316); FS and SCR (p value <.0001, misclassification rate=0.0135); TO and SCR (p value <.0001, misclassification rate=0.2376); CA and SCR (p value <.0001, misclassification rate=0.0361).

In the second step, we tried to create a model that contain all the predictors as effects. The constructed model's lack of fit report showed that the model fits the data well (0.9694) but there were some predictors without a statistically significant association with the response (CS p value=0.8833; CA p value=0.6175; TO p value=0.9698; CA p value=0.3394), so we decided to reduce the model by gradual insignificant predictor deletion. As Table 3 presents, the resulting model contained only FS as predictor with the association to SCR. The misclassification rate of the final model also proved that only 1.35 per cent responses are not the observed category. We also use prediction profiler to see how the crossed effects show as curvature in the prediction traces. It reveals, that inclination to SNSs screening decreases as FS rises.

Table 3

The final binominal logistic regressions

<b>Whole model test</b>				
<b>Model</b>	<b>-LogLikelihood</b>	<b>DF</b>	<b>ChiSquare</b>	<b>Prob&gt;ChiSq</b>
Difference	381.26434	1	762.5286889	<.0001
Full	48.82153			
Reduced	430.08588			
<b>Fit details</b>				
Lack of Fit	6	4.815091	9.630181519	0.1411
Saturated	7	44.00644		
Fitted	1	48.821531		
Misclassification Rate $\sum (q[j] \neq q_{Max})/n$		0.0135		
<b>Parameter estimates</b>				
<b>Term</b>	<b>Estimate</b>	<b>Std Error</b>	<b>ChiSquare</b>	<b>Prob&gt;ChiSq</b>
Intercept	17.07017433	1.538826297	123.05	<.0001
Formality Score	-68.62094991	6.141287572	124.85	<.0001

*Source: Authors' calculations*

*Discussion*

Our research confirms a wide application of SNSs screening in hiring processes among SMEs. This fact has several dimensions.

First, organizations that used SNSs during the candidates' selection are perceived as less fair than organizations that did not (Madera, 2012). Furthermore, when SNSs screening is transparent, the candidates are less likely to perceive the selection procedure as unfair, which will reduce their intention to withdraw from employment selection (Suen, 2018). Perceived respect for privacy is positively correlated, and information privacy concern is negatively correlated, with job pursuit intention (Jeske & Shultz, 2019). In this context, it should be stressed that the company's internal potential is most strongly influenced by the potential and commitment of its employees that can be directly influenced by the individual activities

of human resources management (Stachová et al., 2019). This is becoming even more critical in small and medium enterprises (SMEs) as they play a vital role in job creation (Koisova et al., 2017; Appiah et al., 2018) and are recognized as one of the main contributors to economic, development and employment growth (Cepel et al., 2018; Kljucnikov et al., 2016; Mura, 2019). Extensive and unregulated use of cybervetting by SMEs can reduce their credibility in potential employees' eyes, which could have, given the important position of SMEs, enormous consequences even though the Czech and Slovak economy still focuses on cheap labour which is not so sensitive about privacy. (Habánik et al., 2019).

Second, our results confirmed a low level of HR formality in SMEs even lower than was unveiled by works of Psychogios et al. (2016) or Saridakis et al. (2013). Therefore, the recruitment and selection stages and processes are not systematic and highly sophisticated instead they are at best, rudimentary and modest and managed by one person who determines the relevant factors and requirements for the job (Abraham et al., 2015). This may have at least two consequences, one for the company itself and second for society in general. This may have at least two consequences, one for the company itself and second for society in general. Such a person is unable to evaluate the findings sufficiently and is very likely to be mistaken in the selection of the employee which can also lead to hardly detectable discrimination regarding race, religion, national origin, age, gender and disability, since, as results showed, SMEs supply the existence of formalised HR practices with cybervetting.

Third, potentially more invasive monitoring of SNSs for current employees (rather than applicants) may occur over issues such as suspected illegal activity, defamation of the organization, or inappropriate conduct (Hurrell et al., 2017). Thus, we would also like to draw attention to ethics and legality of screening via SNSs screening. Specifically, we would like to emphasize employers to avoid bypassing an applicant's privacy settings to obtain additional information about the applicant (Chauhan et al., 2013).

## 5. CONCLUSION

The relationship between employers and potential employees is further changed by new practices (Ladkin & Buhalis, 2016). Even if SNSs screening does not replace other e-recruitment tools, many experts consider it more and more important. Nevertheless, the essential nature of SNSs remains for the moment subject to controversy (Girard et al., 2013) mainly because of significant legal, ethical and professional implications.

The study aimed to estimate which changes in predictors (CS; FS; TO; CA) lead to SNSs screening of employees (SCR) in SMEs. We started an examination with the impact of each predictor separately and continued with creating a model including all the predictors. The results showed that although each of the predictors was associated with changes in the response separately, together in one model, they were without a statistically significant association with response. Finally resulting model contained only FS as predictor with the association to SCR, and therefore we can claim that inclination to SNSs screening in SMEs decreases as FS rises. The study also revealed that 65.11 per cent of SMEs realise SNSs screening and as the by-product that the average formality score of SMEs in Czech and Slovak republic is low (Mean=0.19 Std Dev=0.13).

This study makes several contributions to theory and practice in human resource management. First, it extends the research on SNSs screening. Second, it expands the knowledge about how the SMEs replace the existence of formalised HR practices.

There are also some limitations which should be discussed. First, data collected from mainly from micro size SMEs might raise issues of generalizability, but this fully reflects the state of the SMEs in Czech and Slovak Republic with 82 per cent share of micro-size SMEs (Eurostat, 2017). However, what can affect the generalizability to a certain extent is that the sample did not contain the sole traders. Second, the

self-reported questionnaire could cause response bias from a misunderstanding of what a proper measurement is to social-desirability bias, where the respondent wants to 'look good' in the survey, even if the survey is anonymous (Rosenman et al., 2011). This fact can be accentuated by the fact that SNSs screening is frequently implemented without legal support, even on the edge of the law.

In future research, it would be useful to address the limitations of this research with enlarging sample to include more small and medium-size companies; the implementation of some experiments in research design such as verification of fictitious job applications evaluation according to different SNSs profiles; and extension of predictors by generational dimension, because of different generations managers can have different levels of trust to applicants. Also, other variables, such as gender, social embeddedness and educational background, should be addressed, because they influence the trust too (Lazányi & Bilan, 2017). A separate field of research, in the context of this issue, should be to verify how the information obtained from the SNS screening is evaluated, which is assessed as positive and which is not, according to job category.

## REFERENCES

- Abraham, M., Kaliannan, M., Mohan, A. V., & Thomas, S. (2015). A Review of SMEs Recruitment and Selection Dilemma: Finding a 'Fit'. *The Journal of Developing Areas*, 49(5), 335-342. doi:10.1353/jda.2015.0058
- Aguado, D., Rico, R., Rubio, V. J., & Fernández, L. (2016). Applicant reactions to social network web use in personnel selection and assessment. *Revista de Psicología del Trabajo y de las Organizaciones*, 32(3), 183-190. doi:10.1016/j.rpto.2016.09.001
- Appiah, M. K., Possumah, B. T., Ahmat, N., & Sanusi, N. A. (2018). Applicability of theory of constraint in predicting Ghanaian SMEs investment decisions. *Journal of International Studies*, 11(2), 202-221. doi:10.14254/2071-8330.2018/11-2/14
- Arjomandy, D. (2016). Social media integration in electronic human resource management: Development of a social eHRM framework. *Canadian Journal of Administrative Sciences-Revue Canadienne Des Sciences De L Administration*, 33(2), 108-123. doi:10.1002/cjas.1380
- Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychol Sci*, 21(3), 372-374. doi:10.1177/0956797609360756
- Bartosik-Purgat, M., & Jankowska, B. (2017). The use of social networking sites in job related activities: A cross-cultural comparison. *Entrepreneurial Business and Economics Review*, 5(2), 177-193. doi:10.15678/EBER.2017.050210
- Berkelaar, B. L. (2014). Cybervetting, Online Information, and Personnel Selection: New Transparency Expectations and the Emergence of a Digital Social Contract. *Management Communication Quarterly*, 28(4), 479-506. doi:10.1177/0893318914541966
- Berkelaar, B. L. (2017). Different ways new information technologies influence conventional organizational practices and employment relationships: The case of cybervetting for personnel selection. *Human Relations*, 70(9), 1115-1140. doi:10.1177/0018726716686400
- Berkelaar, B. L., & Buzzanell, P. M. (2014). Cybervetting, Person-Environment Fit, and Personnel Selection: Employers' Surveillance and Sensemaking of Job Applicants' Online Information. *Journal of Applied Communication Research*, 42(4), 456-476. doi:10.1080/00909882.2014.954595
- Berkelaar, B. L., & Buzzanell, P. M. (2015). Online Employment Screening and Digital Career Capital: Exploring Employers' Use of Online Information for Personnel Selection. *Management Communication Quarterly*, 29(1), 84-113. doi:10.1177/0893318914554657
- Berthon, P. R., Pitt, L. F., Plangger, K., & Shapiro, D. (2012). Marketing meets Web 2.0, social media, and creative consumers: Implications for international marketing strategy. *Business Horizons*, 55(3), 261-271. doi:10.1016/j.bushor.2012.01.007

- Bigsby, K. G., Ohlmann, J. W., & Zhao, K. (2019). The turf is always greener: Predicting decommitments in college football recruiting using Twitter data. *Decision Support Systems, 116*, 1-12. doi:10.1016/j.dss.2018.10.003
- Black, S. L., & Johnson, A. F. (2012). Employers' Use of Social Networking Sites in the Selection Process.
- Boyd, D. M., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication, 13*(1), 210-230. doi:10.1111/j.1083-6101.2007.00393.x
- Brown, V. R., & Vaughn, E. D. (2011). The Writing on the (Facebook) Wall: The Use of Social Networking Sites in Hiring Decisions. *Journal of Business and Psychology, 26*(2), 219-225. doi:10.1007/s10869-011-9221-x
- Cepel, M., Stasiukynas, A., Kotaskova, A., & Dvorsky, J. (2018). Business Environment Quality Index in the SMEs Segment. *Journal of Competitiveness, 10*(2), 21-40. doi:10.7441/joc.2018.02.02
- Chauhan, R. S., Buckley, M. R., & Harvey, M. G. (2013). Facebook and personnel selection. *Organizational Dynamics, 42*(2), 126-134. doi:10.1016/j.orgdyn.2013.03.006
- Cheung, C., Lee, Z. W. Y., & Chan, T. K. H. (2015). Self-disclosure in social networking sites. *Internet Research, 25*(2), 279-299. doi:10.1108/IntR-09-2013-0192
- Curran, M. J., Draus, P., Schrage, M., & Zappala, S. (2014). College students and HR professionals: conflicting views on information available on Facebook. *Human Resource Management Journal, 24*(4), 442-458. doi:10.1111/1748-8583.12033
- De La Llama, V. A., Trueba, I., Voges, C., Barreto, C., & Park, D. J. (2012). At Face(book) value: Uses of Facebook in hiring processes and the role of identity in social networks. *International Journal of Work Innovation, 1*(1), 114-136. doi:10.1504/IJWI.2012.047984
- Dvorský, J., Schönfeld, T., Kotásková, A., & Petráková, Z. (2018). Evaluation of important credit risk factors in the SME segment. *Journal of International Studies, 11*(3), 204-216. doi:10.14254/2071-8330.2018/11-3/17
- Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. (2003).
- Ellison, N. B., & Boyd, D. (2013). Sociality through Social Network Sites. *The Oxford Handbook of Internet Studies, 151-172*.
- Eurostat. (2017). *Annual enterprise statistics by size class for special aggregates of activities*
- Evuleocha, S. U., & Ugbah, S. D. (2018). Profiling: The Efficacy of Using Social Networking Sites for Job Screening. *Journal of Employment Counseling, 55*(2), 48-57. doi:10.1002/joec.12074
- Forth, J., Bewley, H., & Bryson, A. (2006). *Small and Medium-sized Enterprises. Findings from the 2004 Workplace Employment Relations Survey*. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/34309/06-1008-wers5-2004-smes-findings-2004.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/34309/06-1008-wers5-2004-smes-findings-2004.pdf)
- Gentina, E., & Chen, R. (2019). Digital natives' coping with loneliness: Facebook or face-to-face? *Information and Management, 56*(6). doi:10.1016/j.im.2018.12.006
- Girard, A., Fallery, B., & Rodhain, F. (2013). Integration of social media in recruitment: A Delphi study. *Advanced Series in Management, 97-120*.
- Habánik, J., Grenčíková, A., & Krajčo, K. (2019). New technology impact on the Sustainable Development. *Engineering Economics, 30*(1). doi:10.5755/j01.ee.30.1.20776
- Ham, C. D., Lee, J., & Lee, H. S. (2014). Understanding consumers' creating behaviour in social media: An application of uses and gratifications and the theory of reasoned action. *International Journal of Internet Marketing and Advertising, 8*(4), 241-263. doi:10.1504/IJIMA.2014.067652
- Hanna, R., Rohm, A., & Crittenden, V. L. (2011). We're all connected: The power of the social media ecosystem. *Business Horizons, 54*(3), 265-273. doi:10.1016/j.bushor.2011.01.007
- Hartwell, C. J., & Champion, M. A. (2019). Getting social in selection: How social networking website content is perceived and used in hiring. *International Journal of Selection and Assessment*. doi:10.1111/ijsa.12273
- Hedenus, A., & Backman, C. (2017). Explaining the Data Double: Confessions and Self-Examinations in Job Recruitments. *Surveillance & Society, 15*(5), 640-654.
- Hootsuite. (2019). *Digital 2019*. Retrieved from [https://datareportal.com/reports/digital-2019-global-digital-overview?utm\\_source=Reports&utm\\_medium=PDF&utm\\_campaign=Digital\\_2019&utm\\_content=Global\\_Overview\\_Promo\\_Slide](https://datareportal.com/reports/digital-2019-global-digital-overview?utm_source=Reports&utm_medium=PDF&utm_campaign=Digital_2019&utm_content=Global_Overview_Promo_Slide)

- Hurrell, S. A., Scholarios, D., & Richards, J. (2017). The kids are alert!: Generation Y responses to employer use and monitoring of social networking sites. *New Technology Work and Employment*, 32(1), 64-83. doi:10.1111/ntwe.12085
- Jeske, D., & Shultz, K. S. (2019). Social media screening and content effects: implications for job applicant reactions. *International Journal of Manpower*, 40(1), 73-86. doi:10.1108/ijm-06-2017-0138
- Kane, G. C., Alavi, M., Labianca, G. J., & Borgatti, S. (2014). What's different about social media networks? A framework and research agenda. *Mis Quarterly*, 38(1), 274-304.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68. doi:10.1016/j.bushor.2009.09.003
- Kljucnikov, A., Belas, J., Kozubikova, L., & Pasekova, P. (2016). The Entrepreneurial Perception of SME Business Environment Quality in the Czech Republic. *Journal of Competitiveness*, 8(1), 66-78. doi:10.7441/joc.2016.01.05
- Kluemper, D. H., Gueutal, H. G., & Rosen, P. A. (2009). Future employment selection methods: evaluating social networking web sites. *Journal of Managerial Psychology*, 24(6), 567-580. doi:10.1108/02683940910974134
- Kluemper, D. H., Mitra, A., & Wang, S. T. (2016). Social media use in HRM. *Research in Personnel and Human Resources Management*, 34, 153-207.
- Kluemper, D. H., Rosen, P. A., & Mossholder, K. W. (2012). Social Networking Websites, Personality Ratings, and the Organizational Context: More Than Meets the Eye?1. *Journal of Applied Social Psychology*, 42(5), 1143-1172. doi:10.1111/j.1559-1816.2011.00881.x
- Koisova, E., Habanik, J., Virglerova, Z., & Rozsa, Z. (2017). SMEs Financing as an Important Factor of Business Environment in Slovak Republic Regions. *Montenegrin Journal of Economics*, 13(2), 129-140. doi:10.14254/1800-5845/2017.13-2.8
- Krasnova, H., Spiekermann, S., Koroleva, K., & Hildebrand, T. (2010). Online Social Networks: Why We Disclose. *Journal of Information Technology*, 25(2), 109-125. doi:10.1057/jit.2010.6
- Ladkin, A., & Buhalis, D. (2016). Online and social media recruitment: Hospitality employer and prospective employee considerations. *International Journal of Contemporary Hospitality Management*, 28(2), 327- 345.
- Lai, Y., Saridakis, G., Blackburn, R., & Johnstone, S. (2016). Are the HR responses of small firms different from large firms in times of recession? *Journal of Business Venturing*, 31(1), 113-131. doi:10.1016/j.jbusvent.2015.04.005
- Lazányi, K., & Bilan, Y. (2017). Generation Z on the Labour Market – Do They Trust Others within Their Workplace? *Polish Journal of Management Studies*, 16(1), 78-93. doi:10.17512/pjms.2017.16.1.07
- Lewis, K., Kaufman, J., & Christakis, N. (2008). The Taste for Privacy: An Analysis of College Student Privacy Settings in an Online Social Network. *Journal of Computer-Mediated Communication*, 14(1), 79-100. doi:10.1111/j.1083-6101.2008.01432.x
- Liu, Z., Min, Q., Zhai, Q., & Smyth, R. (2016). Self-disclosure in Chinese micro-blogging: A social exchange theory perspective. *Information & Management*, 53(1), 53-63. doi:10.1016/j.im.2015.08.006
- Machado, L. M. O. (2016). The influence of the information published in "social network" in the process of selection and recruitment: an exploratory study in the literature. *Atoz-Novas Praticas Em Informacao E Conhecimento*, 5(1), 10-20. doi:10.5380/atoz.v5i1.44035
- Madera, J. M. (2012). Using social networking websites as a selection tool: The role of selection process fairness and job pursuit intentions. *International Journal of Hospitality Management*, 31(4), 1276-1282. doi:10.1016/j.ijhm.2012.03.008
- Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357-365. doi:10.1016/j.bushor.2009.03.002
- Martin, G., Parry, E., & Flowers, P. (2015). Do social media enhance constructive employee voice all of the time or just some of the time? *Human Resource Management Journal*, 25(4), 541-562. doi:10.1111/1748-8583.12081
- McAfee, A. P. (2006). Enterprise 2.0: the dawn of emergent collaboration. *MIT Sloan Management Review*, 47(3), 21-28.
- McDonald, P., Thompson, P., & O'Connor, P. (2016). Profiling employees online: shifting public-private boundaries in organizational life. *Human Resource Management Journal*, 26(4), 541-556. doi:10.1111/1748-8583.12121
- Mura, L. (2019). Entrepreneurship Internationalization - case of Slovak family businesses. *Ad Alta-Journal of Interdisciplinary Research*, 9(1), 222-226.

- Nayak, S., Bhatnagar, J., & Budhwar, P. (2018). Leveraging Social Networking for Talent Management: An Exploratory Study of Indian Firms. *Thunderbird International Business Review*, 60(1), 21-37. doi:10.1002/tie.21911
- Nguyen, T. V., & Bryant, S. E. (2004). A study of the formality of human resource management practices in small and medium-size enterprises in Vietnam. *International Small Business Journal*, 22(6), 595-618. doi:10.1177/0266242604047412
- Nikolaou, I. (2014). Social Networking Web Sites in Job Search and Employee Recruitment. *International Journal of Selection and Assessment*, 22(2), 179-189. doi:10.1111/ijsa.12067
- Obar, J. A., & Wildman, S. S. (2015). Social Media Definition and the Governance Challenge: An Introduction to the Special Issue. *SSRN Electronic Journal*. doi:10.2139/ssrn.2637879
- Poba-Nzaou, P., Lemieux, N., Beaupré, D., & Uwizeyemungu, S. (2016). Critical challenges associated with the adoption of social media: A Delphi of a panel of Canadian human resources managers. *Journal of Business Research*, 69(10), 4011-4019. doi:10.1016/j.jbusres.2016.06.006
- Psychogios, A., Szamosi, L. T., Prouska, R., & Brewster, C. (2016). A three-fold framework for understanding HRM practices in South-Eastern European SMEs. *Employee Relations*, 38(3), 310-331. doi:10.1108/ER-07-2014-0078
- Qualman, E. (2010). Socialnomics: how social media transforms the way we live and do business. *Journal of comparative research in anthropology and sociology*, 1(2), 225-228.
- Rienties, B., Tempelaar, D., Pinckaers, M., Giesbers, B., & Lichel, L. (2010). The Diverging Effects of Social Network Sites on Receiving Job Information for Students and Professionals. *International Journal of Sociotechnology and Knowledge Development*, 2(4), 39-53. doi:10.4018/jskd.2010100103
- Rosenman, R., Tennekoon, V., & Hill, L. G. (2011). Measuring bias in self-reported data. *Int J Behav Health Res*, 2(4), 320-332. doi:10.1504/IJBHR.2011.043414
- Roulin, N., & Bangerter, A. (2013). Social Networking Websites in Personnel Selection. *Journal of Personnel Psychology*, 12(3), 143-151. doi:10.1027/1866-5888/a000094
- Saridakis, G., Muñoz Torres, R., & Johnstone, S. (2013). Do Human Resource Practices Enhance Organizational Commitment in SMEs with Low Employee Satisfaction? *British Journal of Management*, 24(3), 445-458. doi:10.1111/j.1467-8551.2012.00814.x
- Schroeder, A. N., & Cavanaugh, J. M. (2018). Fake it 'til you make it: Examining faking ability on social media pages. *Computers in Human Behavior*, 84, 29-35. doi:10.1016/j.chb.2018.02.011
- SHRM. (2016). *Using Social Media for Talent Acquisition*. Retrieved from <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/social-media-recruiting-screening-2015.aspx>
- Smith, W. P., & Kidder, D. L. (2010). You've been tagged! (Then again, maybe not): Employers and Facebook. *Business Horizons*, 53(5), 491-499. doi:10.1016/j.bushor.2010.04.004
- Stachová, K., Papula, J., Stacho, Z., & Kohnová, L. (2019). External Partnerships in Employee Education and Development as the Key to Facing Industry 4.0 Challenges. *Sustainability*, 11(2). doi:10.3390/su11020345
- Storey, D. J., Saridakis, G., Sen-Gupta, S., Edwards, P. K., & Blackburn, R. A. (2010). Linking HR formality with employee job quality: The role of firm and workplace size. *Human Resource Management*, 49(2), 305-329. doi:10.1002/hrm.20347
- Subrahmanyam, K., Reich, S. M., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: Use of social networking sites by emerging adults. *Journal of Applied Developmental Psychology*, 29(6), 420-433. doi:10.1016/j.appdev.2008.07.003
- Suen, H.-Y. (2018). How passive job candidates respond to social networking site screening. *Computers in Human Behavior*, 85, 396-404. doi:10.1016/j.chb.2018.04.018
- Tufts, S. H., Jacobson, W. S., & Stevens, M. S. (2015). Status Update: Social Media and Local Government Human Resource Practices. *Review of Public Personnel Administration*, 35(2), 193-207. doi:10.1177/0734371X14558066
- Tulu, D. T. (2017). Should online social Medias (OSMs) be banned at work? The impact of social Medias on employee productivity in Ambo University, a case study. *Research in International Business and Finance*, 42, 1096-1102. doi:10.1016/j.ribaf.2017.07.044
- Vetráková, M., Hitka, M., Potkány, M., Lorincová, S., & Smerek, L. (2018). Corporate sustainability in the process of employee recruitment through social networks in conditions of Slovak small and medium enterprises. *Sustainability (Switzerland)*, 10(5). doi:10.3390/su10051670

- Wang, S., Luo, C., & Jiang, P. (2018). *Empirical study about the motivations for using multifunctional social media: Based upon the uses and gratifications theory*.
- Won, J., & Seo, D. (2017). Relationship between self-disclosure and cyberbullying on SNSs. *299*, 154-172.
- Zide, J., Elman, B., & Shahani-Denning, C. (2014). LinkedIn and recruitment: how profiles differ across occupations. *Employee Relations*, *36*(5), 583-604. doi:10.1108/er-07-2013-0086.