

Do Employers Forgive Applicants' Bad Spelling in Résumés?

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Abstract

Spelling deficiencies are becoming a growing concern among employers, but few studies have quantified this phenomenon and its impact on recruiters' choice. This article aims to highlight the relative weight of the form (the spelling skills) in application forms, compared with the content (the level of work experience), in recruiters' judgment during the selection process. The study asked 536 professional recruiters to evaluate different application forms. The results show that the presence of spelling errors has the same detrimental impact on the chances of being shortlisted as a lack of professional experience, and recruiters' spelling skills also moderate their judgment.

Keywords

spelling errors, personnel selection, impression formation, résumé screening

Communication skills continue to be present on top recruiters' lists of needed skills in organizations (Alshare, Lane, & Miller, 2011). This phenomenon is particularly salient for writing skills, which have become a growing concern for employers (Craig & McKinney, 2010). In the information systems sector, recruiters rank these skills as highly as or more highly than technical or quantitative skills (Noll & Wilkins, 2002). Similarly, 7 of the top 10 skills needed by newly hired accounting graduates are related to writing skills (Christensen & Rees, 2002). Conservative estimates indicate that professionals in engineering and technology occupations spend as much as 40% of their time writing (P. V. Anderson, 2010). In this context, spelling skills are a core

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component of written communication skills, and an inadequate level of mastering in this domain is an important issue for many employers, who tend to agree that entry-level applicants have not adequately mastered basic writing skills (Barrington, Wright, & Casner-Lotto, 2006; Stevens, 2006). According to the National Commission on Writing (2004), only one third of employees possess the writing skills that organizations need.

The gap between employers' expectations and applicants' performance concerning spelling and grammar is growing (Jones, 2011). Achieve, Inc. (2004) found that more than 60% of employers consider graduates' spelling and grammar skills fair or poor. Spelling and grammar errors may cause direct or indirect costs, such as delays, training costs, lack of productivity, decrease in perceived quality of a website, or reduced intention to purchase from an online store (Everard & Galletta, 2005; Stiff, 2012). Even so, written communication skills can be easily assessed during the selection process. Recruiters widely use applicants' résumés and cover letters as initial selection tools in recruitment, spending an average of 10 to 30 seconds and a maximum of 3 minutes on a résumé (Bohn, 1994; Greenly, 1993, Hornsby & Smith, 1995).

When recruiters assess résumés and cover letters, they look for cues that enable them to evaluate the applicants' employability. That is, they form a general impression about the applicants' job-related knowledge, interpersonal skills, and general mental ability based on a few elements in résumés and cover letters (Chen, Huang, & Lee, 2011; Huang, Chen, & Lai, 2013). At the end of the process, these impressions influence the recruiters' decisions to shortlist an applicant.

Prior research has examined several cues, including aesthetic aspects of résumés (Arnulf, Tegner, & Larssen, 2010; Johnson, Podratz, Dipboye, & Gibbons, 2010; McElroy, Summers, & Moore, 2014), academic achievement (Kristof-Brown, 2000), extracurricular activities (Tanguay, Camp, Endres, & Torres, 2012), and length of résumé (Blackburn-Brockman & Belanger, 2001). Concerning the written expression of applicants, some impressions formed about spelling errors have not yet been investigated. In Kreiner, Schnakenberg, Green, Costello, and McClin's (2002) study, participants rated the author of an essay as having a lower intellectual ability when the essay contained a large number of spelling errors. Figueredo and Varnhagen (2005) have shown that readers of an essay containing spelling errors rated the author as having lower writing, proofreading, and spelling abilities and lower general intelligence. Authors of emails with many spelling errors are perceived as less friendly, less powerful in the organization (Jessmer & Anderson, 2001), and less conscientious (Morgan & Thompson, 2013). Spelling errors in emails are also considered as a cue producing an impression of a lack of trustworthiness (Vignovic & Thompson, 2010). Finally, grammatical errors indicate participants' lack of professionalism (Carr & Stefaniak, 2012).

These previously cited studies were mostly conducted on student samples. They also rely on Likert-type scales for assessing application forms rather than a binary decision of selection or rejection. Research has discussed these characteristics in the case of personnel selection because they imply a low external and ecological validity (Landy, 2008; Peterson & Merunka, 2014). In a real selection process, recruiters are generally well trained and used to making a binary choice after prescreening résumés.

In this study, we aim to address these limitations and expand the previous results. We intend to quantify the influence of spelling errors on professional recruiters' decisions and to highlight the relative impact of spelling errors, compared with another key element: professional experience, which has been found to be positively related to recruiters' perceptions of applicants' job knowledge (Huang et al., 2013).

Hypothesis Development

To quantify the relative impact of spelling errors on shortlisting decisions, we took into account two characteristics of the application form: the spelling errors, both grammatical and lexical, contained in the résumé and the cover letter and the level of work experience, which reflects the number of months working in prior jobs (Ford, Quiñones, Sego, & Sorra, 2006). The reason for choosing work experience is that it is one of the most important parts of a résumé on which recruiters base their judgments of applicants' suitability (Tsai, Chi, Huang, & Hsu, 2011). Moreover, by comparing the influence of both form (spelling errors) and content (work experience) of the application form and résumé, we aim to highlight a possible halo effect, in that spelling errors could hide or reduce the impact of a high level of work experience.

Studies to date have concluded that application forms with spelling errors receive lower appreciation scores than application forms without these errors (Charney, Rayman, & Ferreira-Buckley, 1992; Kreiner et al., 2002). We propose to expand these findings to the recruiter decision of whether or not they shortlist applicants. Thus, we propose the following:

Hypothesis 1: Application forms containing spelling errors have a higher rejection rate than application forms without spelling errors.

Concerning the interaction between spelling errors and work experience, some research suggests the existence of a possible halo effect. Charney et al. (1992) showed that recruiters rated error-free résumés with a limited work experience more positively than error-laden résumés with a high level of work experience. Thus, we propose the following:

Hypothesis 2: Application forms containing spelling errors and a high level of work experience have a higher rejection rate than application forms without spelling errors and with a low level of work experience.

Other variables can also potentially affect the relationship between spelling errors and recruiters' decisions. Thus, we consider the intensity of spelling deficiencies and the recruiter's spelling proficiency. The intensity of spelling deficiencies, measured by the number of spelling errors in a document, can negatively affect the reader's impression of the applicant's skills. Kreiner et al. (2002) found that readers judged a text containing 12 spelling errors more negatively than an essay containing only four errors. Applying this finding to the case of professional recruiters, we propose the following:

Hypothesis 3: Application forms containing a large number of spelling errors receive more rejections than application forms with few spelling errors.

Recruiters' spelling proficiency must also be taken into account in the context of personnel selection, and we argue that it has an impact on their ability to assess the quality of an application form. Unlike Kreiner et al. (2002), who found that participants' ratings of the author were unrelated to their ability to detect spelling errors, we propose that this variable can affect the relationship between the spelling mistakes and the recruiter's judgment, partly because a recruiter with strong spelling ability will be able to detect a larger number of errors. Thus, we propose the following:

Hypothesis 4: The rejection rate of application forms is higher when assessed by a recruiter with strong spelling abilities than a recruiter with weak spelling abilities.

Method

Participants and Material

The study took place in France. In total, 536 French professionals involved in the recruitment process were contacted by an online market research company for an electronic survey. Using online panels (e.g., Qualtrics, GfK, StudyResponse) is a common strategy for obtaining convenience samples in market research, and its use is now expanding in organization studies. The external validity of results based on online panel samples is still debated (see Landers & Behrend, 2015), but recent empirical works provide arguments in favor of this sampling strategy in organizational studies (Roulin, 2015; Weinberg, Freese, & McElhattan, 2014). For example, Weinberg et al. (2014) found very similar results in a field experimentation conducted on a crowdsource-recruited sample and a panel data sample. Roulin (2015) found that the results and quality of data (range restriction, reliability, and normality) obtained from a sample recruited on Qualtrics online panels in response to an attitudinal survey was comparable to those drawn from existing research conducted on student and general population samples, although restriction range appeared to be greater on the Qualtrics sample. The panel proposed by the online market research company contained 450,143 French participants. We used a filter question to select the profile of our respondents ("Do you regularly take part in the recruitment process in your organization?"). The survey was administered to the selected respondents, and the data collection was closed when 550 filled surveys were collected. Twenty-four responses were deleted due to missing information or mistakes in experimental procedure.

The participants were asked to read a job offer for a banking account manager position and then to assess four application forms responding to this offer. Table 1 provides the sample characteristics.

The recruiters needed to decide whether to reject or invite the applicant for an interview for each of the four application forms. At the end of the procedure, we collected demographic information and invited the participants to take a spelling test containing

Table I. Sample Characteristics.

Variable	Characteristics				
Gender	Female: 63.4%; male: 36.6%				
Age	From 23 to 64 years; $M = 39.7$; $SD = 9.8$				
Number of employees at the	Fewer than 10 employees: 15.4%				
participant's company	Between 10 and 30 employees: 17.8%				
	More than 30 employees: 66.8%				
Spelling test score (40-point scale)	Minimum score: $10/40$; Maximum score: $40/40$ M = 25.9; SD = 6.3				
Number of recruitments per year	1: 13%; from 2 to 5: 30.4%; more than 5: 56.6%				
Number of application forms assessed per recruitment	From I to 270; $M = 22.6$; $SD = 35.1$				

40 sentences to identify possible spelling errors. This online application form assessment corresponds to common practices among recruiters, especially in banking activities, and the résumé screening performed by recruiters in the real world closely resembles the process we followed in our experiment (Copus, Ugelow, & Sohn, 2005).

We created six fictive application forms containing a résumé and a cover letter in response to a real job offer for a banking account manager position, following the usual model requested in the French context. The résumé contained five sections: applicant's identification (name, age, contact information, photo), education, experience, competency statement (foreign language, software skills, special skills related to the job), and extracurricular activities. The cover letter contained the reference to the advertisement, the applicant's interest in the offer, the listing of the benefits of hiring the candidate (regarding experience and skills), and the expectation of further contact. The application forms' features varied in two ways. First, half of the application forms were free from spelling errors, and the other half contained grammatical and lexical errors. Second, the application forms varied in the level of job experience. Candidates with a low level of work experience had relevant work experience of 6 months while candidates with a high level of work experience had an average relevant work experience of 30 months.

We held constant all other attributes in the application forms. That is, they displayed similar educational background, gender, appearance, extracurricular activities, presentation, length, and style.

Measures

After reading the forms, the recruiters were asked to make a binary decision of rejection or acceptance for an interview. The manipulated factors were spelling errors and work experience; thus, we had a 2×2 within-subject factorial design. We added the number of spelling errors (5 or 10) as a between-subjects factor to design six different

	Error-free application form	Application form with 5 errors	Application form with 10 errors
Strong experience	18%	36.1%	38.8%
Limited experience	37.2%	49.4%	51.2%

Table 2. Rejection Rates on the Six Application Forms.

application forms representing all possible combinations. Application forms with 5 or 10 errors were randomly distributed.

We assessed the recruiters' spelling abilities using a spelling test scored on a 40-point scale, with results recoded in three levels: strong, medium, and weak spelling abilities. The median time taken by the respondents for completing the experiment and the spelling test was 19 minutes.

Statistical Procedure

We relied on the generalized estimating equations (GEE) procedure adapted to our model's characteristics. The GEE is an extension of logistic regression, recommended when some of the variables of interest are ordinal and repeatedly measured (Liang & Zeger, 1986). This is the case in our model, which requires a logistic regression analysis with nonindependent observations; every participant must evaluate four application files in a row. Estimation with GEE allows for comparison between alternative models using the quasi-likelihood under information criterion (QICC) as a goodness-of-fit indicator. The QICC, derived from the 2 log-likelihood used to assess the accuracy of logistic regression estimation, penalizes complex models (Barnett, Koper, Dobson, Schmiegelow, & Manseau, 2010). For the test of the moderating variables, we introduced interaction effects between the independent variable of interest and the two moderators.

Results

Rejection rates varied from to 18% to 51% (Table 2), showing that the relative impact of spelling errors and job experience is not easy to untangle at first sight. Except for "extreme" situations (application forms with both a lack of experience and a high prevalence of spelling errors versus application forms with strong spelling skills and a high level of work experience), rejection rates were relatively close (between 36.1% and 38.8%).

To test our hypothesis, we estimated a series of models, beginning with the entire model at the first stage, and dropping predictors and interactions iteratively when they were not statistically significant. We compared the models using QICC as a fit indicator (the lower, the better). We present the iterative testing results in Table 3 and the parameter estimates for the final model retained in Table 4.

We found that spelling errors and work experience strongly influence the recruiters' decisions of whether or not to shortlist applicants, in support of Hypothesis 1. The

Table 3. Model Comparison.

Models	Variables included/excluded	QICC
Model I	Within subjects: Spelling errors, experience	2642.8
	Between subjects: Spelling level, number of errors	
	Interactions: Spelling errors × experience, spelling errors × number of errors, spelling errors × spelling level	
Model 2	Variables dropped: Number of errors, spelling errors × number of errors	2635.33
Final model	Variables dropped: Number of errors, spelling level, spelling errors × number of errors	2635.3
	Variables and interactions retained in the final model: Spelling errors, experience, spelling errors × experience, spelling errors × spelling level	

Note. QICC = quasi-likelihood under information criterion.

Table 4. Final Model Parameters (Generalized Estimation Equations).

	В	Standard error	$\frac{\text{Hypothesis}}{\text{testing}}$ Wald χ^2	OR	95% CI for OR	
Parameters					Lower	Upper
Error-laden application form	1.295	.188	47.26***	3.65****	2.524	5.281
Inexperienced applicant	.997	.139	50.85***	2.71***	2.061	3.565
Interaction: error-laden application form × inexperienced applicant	−.467	.161	8.30**	.63**	.457	.861
Interaction: error-laden application form × recruiter with weak spelling abilities	685	.196	12.11***	.50***	.343	.741
Interaction: error-laden application form × recruiter with medium spelling abilities	−.354	.151	5.44*	.70*	.522	.945

Note. OR = odds ratio; CI = confidence interval. Reference (baseline): Experienced applicant, error-free application form, recruiter with high spelling level.

 $^*p < .05 *^*p < .01 *^*p < .001$

odds ratio indicated that the odds of rejecting an application form were 3.65 times higher when the form was error laden. The applicant's experience also affected rejection rates. The odds of rejecting an application form were 2.7 times higher when the form indicated a low level of work experience.

^aOdds of being rejected for an error-laden application form are 3.65 times higher than the odds of being rejected when the application form is error free (taken as the reference).

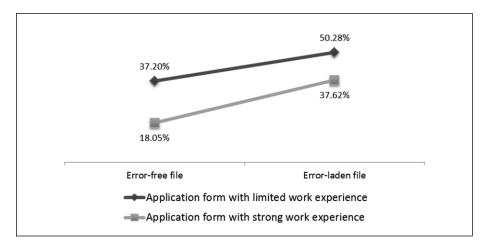


Figure 1. Spelling errors × experience interaction (rejection rates on application forms depending on work experience).

We also found support for Hypothesis 4: The rejection rate of error-laden application forms was higher when assessed by a recruiter with strong spelling abilities. The odds of rejecting an error-laden application form when assessed by a recruiter with weak spelling abilities were two times lower than the odds of rejecting this form when evaluated by a recruiter with strong spelling abilities (and 1.43 times lower when the recruiter showed medium spelling abilities).

In contrast, we found no support for Hypothesis 3. The intensity of spelling deficiencies (measured by the number of errors) had no statistically significant effects on rejection rates. The recruiters' spelling ability did not influence the rejection rate directly but rather indirectly in the interaction with spelling errors. This significant interaction shows the presence of a pure moderating effect (Sharma, Durand, & Gur-Arie, 1981).

Figures 1 and 2 illustrate the interaction between work experience and spelling errors and the moderating effect of the recruiter's spelling ability. As Figure 1 shows, the gap between rejection rates is larger for the error-free application forms than for the error-laden ones. When the application forms contained spelling errors, the level of work experience became less important for recruiters' decisions. Table 3 displays this effect: The odds of rejecting an error-laden application form were 1.6 times lower (1/0.63) when this form showed limited work experience.

We proposed Hypothesis 2 to highlight a possible halo effect: We predicted that application forms with spelling errors and a high level of work experience would have higher rejection rates than application forms without spelling errors and with a low level of work experience. This hypothesis is not supported. A McNemar test for repeated measures conducted on the two application forms shows no statistically significant difference ($\chi^2 = .07$; p = .80).

Regarding the impact of recruiters' spelling abilities on their decisions (Hypothesis 4), Figure 2 shows that spelling abilities were positively related to recruiters' assessment

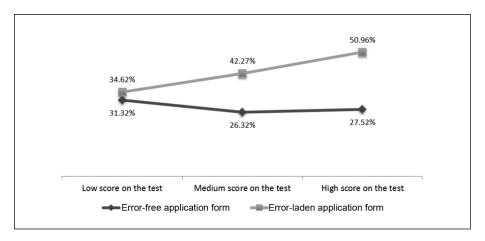


Figure 2. Moderator effect associated with spelling skills (rejection rate on application forms and score obtained on the spelling test).

of the error-laden application forms. Recruiters with high scores on the spelling test penalized the error-laden application forms (all other things being equal). This was not the case for recruiters with low spelling scores. The rejection rate difference was highly significant for recruiters with strong spelling abilities ($\chi^2 = 42.18$; p < .001) but not significant for recruiters with weak spelling abilities ($\chi^2 = 0.45$; p = .289).

Discussion and Conclusion

Our results expand prior research: Spelling errors are cues that lead to an adverse impression about applicants' employability when application forms are assessed by professional recruiters, and their rejection or selection decision is moderated by their own spelling level.

When comparing the importance of form (spelling errors) with the content (a low level of work experience) using odds ratio, we show that spelling disabilities have a stronger influence on recruiters than the amount of professional experience. We also show that the presence of spelling errors is particularly detrimental when applicants have a high amount of work experience. Compared with applicants with less experience, recruiters rejected experienced applicants more often when their résumés and cover letters contained spelling errors. One explanation of this phenomenon could be that spelling ability became, in this case, the only criterion that recruiters could use to differentiate these applications. Thus, recruiters' spelling abilities became a moderating variable: Participants with low spelling scores were less able to discriminate between the error-free and error-laden application forms.

However, some assumptions received no support. First, the results provide no support for the impact of the intensity of spelling errors (measured by the number of spelling errors). Rejection rates were not significantly different when the résumé and

cover letter contained 5 or 10 errors (34.6% vs. 35.7%). One explanation for this result could be our choice of quantification. According to a recent survey by Accountemps (n.d.), most of the staffing managers (76%) stated that they rejected résumés when they found one or two errors, which could mean that our threshold of five spelling errors was too liberal. However, our results showed that participants accepted most of the application forms even when they contained spelling errors (48.8% of the inexperienced and error-laden applications were shortlisted). The difference between the Accountemps survey and our experimental study could be explained by the declarative nature of the survey. In the Accountemps survey, the participants were asked about their reactions when they were facing spelling errors. We cannot exclude social desirability in this case: Subjects may have believed that a particular answer was expected from them. On the other hand, we did not provide any information about our research hypotheses in the experiment. Another explanation for this difference is the gap between the behavioral intention and the behavior itself: The intention to reject an application form because of spelling errors does not always lead recruiters to a rejection when they have to make an actual decision. Meta-analysis on the attitude/behavior link showed that attitudes accounted for 40% to 50 % of the variance in behavioral intentions and that these intentions accounted for 19% to 38% of the variance in behavior (Sutton, 1998).

Second, the halo effect of spelling errors was not demonstrated: Recruiters did not overwhelmingly accept the inexperienced and error-free applications. They seemed to take the spelling criterion into account, but not enough to obliterate the job experience criterion, which remains one of the most important factors in résumé screening (Quiñones, Ford, & Teachout, 1995).

In our study, we demonstrate that spelling abilities are one of the criteria taken into account in the shortlisting process. From a practical perspective, these findings have implications for both applicants and employers. Our results suggest that an applicant can significantly affect the impression made upon an employer with a résumé and cover letter containing five spelling errors. This result advocates for the notification of "a spelling skills signal" in applicants' résumés. An increasing number of recruiters in France require applicants to take a test that can measure spelling abilities. These tests, provided by specialized companies, display a certified score which can be used as a signal of writing skills in candidates' résumés. This type of procedure allows employers to increase the accuracy of their selection process without bearing the costs of testing. Our results also suggest that spelling skills are essential for career development: Spelling deficiencies could harm employees with high levels of experience. These findings are consistent with Zekeri (2004), who concluded that former students reported written communication skills as most essential for career development. A 2004 survey suggested that correct spelling influences professional promotions: Businesses "frequently" or "almost always" took into account writing in professional promotions (National Commission on Writing, 2005). These findings highlight the need for organizations to provide remedial basic skills training to bring graduates up to their expectations, which implies costs and time. They also underline the need for programs to improve students' writing skills (Gray, Emerson, & MacKay, 2005),

especially in business communication education, which is known to affect students' skills and performance outcomes in professional writing (Tarasovich & Boyer, 2013; Zhao & Alexander, 2004).

Limitations

This study takes a step toward a better understanding of the impact of spelling on recruiters' decisions, relative to work experience. Nevertheless, it is important to acknowledge its limitations, particularly external validity issues commonly associated with experimental designs.

First, our résumés were fictive to limit the number of manipulated factors. We homogenized them by controlling for factors such as facial appearance, name, gender, and age. In contrast with the participants in this study, recruiters in the real world must screen less homogeneous application forms. The impact of spelling errors on the likelihood of being invited to an interview may not be as direct and clear as in this study. Prior research has demonstrated the halo effects of facial appearance and ethnicity, and their impact on selection can be decisive (Luxen & Van De Vijver, 2006; Oreopoulos, 2011)

Second, the study examined recruiters' decisions for one type of job, and thus the findings may not generalize to other occupations. We know that written communication skills are needed for the position we examined (Moatty & Rouard, 2010), and therefore recruiters pay attention to spelling skills. However, further research is necessary to replicate our results in other job contexts.

Third, this research was conducted in France, and the results should not be generalized. Employers from other countries might have different attitudes and behaviors when they are judging spelling errors in a recruitment process. A recent study (Martin-Lacroux, 2015) concluded that French recruiters make specific attributions (e.g., lack of politeness, dyslexia, or lack of respect) when they are facing spelling errors. These attributions are not the same as those made by participants in previous studies conducted in the United States (e.g., lack of professionalism, lower intellectual ability; see Carr & Stefaniak, 2012; Kreiner et al., 2002). These differences highlight the need for replication in other countries and different languages.

Future Research Directions

This study sheds light on the impact of spelling on the selection process. The literature would benefit from research that examines this subject in the context of IT recruitment management tools. Evaluation of spelling is a growing practice in organizations because it facilitates prescreening by allowing automatic sorting of applications. Several studies have examined the question of spelling criterion for e-recruiting (Mohamed, Orife, & Wibowo, 2002; Stone, Lukaszewski, Stone-Romero, & Johnson, 2013), but the problem of misspelled information in résumés and their treatment by automatic algorithms has not yet been studied.

Last, another worthwhile research avenue involves applicants' fairness perceptions of selection procedures. For most job applicants, the selection process is their first

contact with an organization; they can develop a positive impression if they feel treated with fairness at this stage. It is well established in the field of organizational justice that candidates' perceptions influence their future job performance (Cohen-Charash & Spector, 2001), their organizational behavior (Ambrose, Seabright, & Schminke, 2002), and their job satisfaction (Masterson, Lewis, Goldman, & Taylor, 2000). Moreover, previous research has shown that selection decisions based on résumés are perceived favorably in both France and the United States (Steiner & Gilliland, 1996) and in many other contexts (N. Anderson, Salgado, & Hülsheger, 2010). Applicants' perceptions of recruiters' résumé judgments tend to be positive. However, further research should examine applicants' fairness perceptions when recruiters' decisions to shortlist applicants are based on the spelling criterion.

Authors' Note

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References

- Accountemps. (n.d.). Have a keen eye for derail: One resume error can ruin employment prospects, executive survey shows. Retrieved from http://accountemps.rhi.mediaroom.com/resume_typos?_ga=1.220211546.396052183.1436596095
- Achieve, Inc. (2004). *Ready or not: Creating a high school diploma that counts* (American Diploma Project). Retrieved from http://www.achieve.org/files/ReadyorNot.pdf
- Alshare, K. A., Lane, P. L., & Miller, D. (2011). Business communication skills in information systems (IS) curricula: Perspectives of IS educators and students. *Journal of Education for Business*, 86, 186-194.
- Ambrose, M. L., Seabright, M. A., & Schminke, M. (2002). Sabotage in the workplace: The role of organizational injustice. *Organizational Behavior and Human Decision Processes*, 89, 947-965.
- Anderson, N., Salgado, J. F., & Hülsheger, U. R. (2010). Applicant reactions in selection: Comprehensive meta-analysis into reaction generalization versus situational specificity. *International Journal of Selection and Assessment*, 18, 291-304.
- Anderson, P. V. (2010). Technical communication (7th ed.). Independence, KY: Cengage Learning.
- Arnulf, J. K., Tegner, L., & Larssen, Ø. (2010). Impression making by résumé layout: Its impact on the probability of being shortlisted. European Journal of Work and Organizational Psychology, 19, 221-230.

- Barnett, A. G., Koper, N., Dobson, A. J., Schmiegelow, F., & Manseau, M. (2010). Using information criteria to select the correct variance–covariance structure for longitudinal data in ecology. *Methods in Ecology and Evolution*, *1*(1), 15-24.
- Barrington, L., Wright, M., & Casner-Lotto, J. (2006). Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century U.S. workforce. Retrieved from http://www.p21.org/storage/documents/ FINAL REPORT PDF09-29-06.pdf
- Blackburn-Brockman, E., & Belanger, K. (2001). One page or two? A national study of CPA recruiters' preferences for résumé length. *International Journal of Business Communication*, 38(1), 29-45.
- Bohn, S. J. (1994). Writing a winning résumé. *Healthcare Financial Management: Journal of the Healthcare Financial Management Association*, 48, 108-109.
- Carr, C. T., & Stefaniak, C. (2012). Sent from my iPhone: The medium and message as cues of sender professionalism in mobile telephony. *Journal of Applied Communication Research*, 40, 403-424.
- Charney, D. H., Rayman, J., & Ferreira-Buckley, L. (1992). How writing quality influences readers' judgments of résumés in business and engineering. *Journal of Business and Technical Communication*, 6, 38-74.
- Chen, C.-C., Huang, Y.-M., & Lee, M.-I. (2011). Test of a model linking applicant résumé information and hiring recommendations. *International Journal of Selection and Assessment*, 19, 374-387.
- Christensen, D. S., & Rees, D. (2002). An analysis of the business communication skills needed by entry-level accountants. *Mountain Plains Journal of Business and Economics*, 3, 1-13.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 86, 278-321.
- Copus, D., Ugelow, R. S., & Sohn, J. (2005). A lawyer's view. In F. J. Landy (Ed.), *Employment discrimination litigation: Behavioral, quantitative, and legal perspectives* (pp. 450-502). San Francisco, CA: Jossey-Bass.
- Craig, R., & McKinney, C. N. (2010). A successful competency-based writing skills development programme: Results of an experiment. Accounting Education, 19, 257-278.
- Everard, A., & Galletta, D. F. (2005). How presentation flaws affect perceived site quality, trust, and intention to purchase from an online store. *Journal of Management Information* System, 22, 55-95.
- Figueredo, L., & Varnhagen, C. K. (2005). Didn't you run the spell checker? Effects of type of spelling error and use of a spell checker on perceptions of the author. *Reading Psychology*, 26, 441-458.
- Ford, J. K., Quiñones, M. A., Sego, D. J., & Sorra, J. S. (2006). Factors affecting the opportunity to perform trained tasks on the job. *Personnel Psychology*, 45, 511-527.
- Gray, F. E., Emerson, L., & MacKay, B. (2005). Meeting the demands of the workplace: Science students and written skills. *Journal of Science Education and Technology*, 14, 425-435.
- Greenly, R. (1993). How to write a résumé. Technical Communication, 40(1), 42-48.
- Hornsby, J. S., & Smith, B. N. (1995). Resume content: What should be included and excluded. SAM Advanced Management Journal, 60, 4-9.
- Huang, Y.-M., Chen, C.-C., & Lai, S.-Y. (2013). Test of a multidimensional model linking applicant work experience and recruiters' inferences about applicant competencies. *International Journal of Human Resource Management*, 24, 3613-3629.

- Jessmer, S. L., & Anderson, D. (2001). The effect of politeness and grammar on user perceptions of electronic mail. *North American Journal of Psychology*, *3*, 331-346.
- Johnson, S. K., Podratz, K. E., Dipboye, R. L., & Gibbons, E. (2010). Physical attractiveness biases in ratings of employment suitability: Tracking down the "beauty is beastly" effect. *Journal of Social Psychology*, 150, 301-318.
- Jones, C. G. (2011). Written and computer-mediated accounting communication skills: An employer perspective. Business Communication Quarterly, 74, 247-271.
- Kreiner, D. S., Schnakenberg, S. D., Green, A. G., Costello, M. J., & McClin, A. F. (2002). Effects of spelling error on the perceptions of writers. *Journal of General Psychology*, 129, 5-17.
- Kristof-Brown, A. L. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person-job and person-organization fit. *Personnel Psychology*, 53, 643-671.
- Landers, R. N., & Behrend, T. S. (2015). An inconvenient truth: Arbitrary distinctions between organizational, Mechanical Turk, and other convenience samples. *Industrial and Organizational Psychology*, 8, 142-164.
- Landy, F. J. (2008). Stereotypes, bias, and personnel decisions: Strange and stranger. *Industrial and Organizational Psychology*, 1, 379-392.
- Liang, K.-Y., & Zeger, S. L. (1986). Longitudinal data analysis using generalized linear models. *Biometrika*, 73, 13-22.
- Luxen, M. F., & Van De Vijver, F. J. R. (2006). Facial attractiveness, sexual selection, and personnel selection: When evolved preferences matter. *Journal of Organizational Behavior*, 27, 241-255.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. Academy of Management Journal, 43, 738-748.
- Martin-Lacroux, C. (2015). La prise en compte des fautes d'orthographe dans les dossiers de candidature par les recruteurs: Une étude empirique par la méthode des protocoles verbaux [Recruiters' assessment of spelling errors in application forms: Report of a study using verbal protocols]. @GRH, 14, 73-97.
- McElroy, J. C., Summers, J. K., & Moore, K. (2014). The effect of facial piercing on perceptions of job applicants. *Organizational Behavior and Human Decision Processes*, 125, 26-38.
- Moatty, F., & Rouard, F. (2010). L'écrit au travail et ses déterminants chez les salariés en France en 2005 [Writing activity and its determinants among French employees]. Travail et Emploi, 122, 39-52.
- Mohamed, A. A., Orife, J. N., & Wibowo, K. (2002). The legality of key word search as a personnel selection tool. *Employee Relations*, 24, 516-522.
- Morgan, K. E., & Thompson, L. F. (2013, April). Attributions in mobile computer-mediated communication. Paper presented at the 28th annual conference of the Society for Industrial and Organizational Psychology, Houston, TX.
- National Commission on Writing. (2004). Writing: A ticket to work... Or a ticket out? A survey of business leaders. Retrieved from http://www.collegeboard.com/prod_downloads/writingcom/writing-ticket-to-work.pdf
- National Commission on Writing. (2005). Writing: A powerful message from state government. Retrieved from http://www.collegeboard.com/prod_downloads/writingcom/powerful-message-from-state.pdf
- Noll, C. L., & Wilkins, M. (2002). Critical skills of IS professionals: A model for curriculum development. *Journal of Information Technology Education*, 1, 143-154.
- Oreopoulos, P. (2011). Why do skilled immigrants struggle in the labor market? A field experiment with thirteen thousand resumes. *American Economic Journal: Economic Policy*, 3, 148-171.

- Peterson, R. A., & Merunka, D. R. (2014). Convenience samples of college students and research reproducibility. *Journal of Business Research*, 67, 1035-1041. doi:10.1016/j. jbusres.2013.08.010
- Quiñones, M. A., Ford, J. K., & Teachout, M. S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *Personnel Psychology*, 48, 887-910.
- Roulin, N. (2015). Don't throw the baby out with the bathwater: Comparing data quality of crowdsourcing, online panels, and student samples. *Industrial and Organizational Psychology*, 8, 190-196.
- Sharma, S., Durand, R. M., & Gur-Arie, O. (1981). Identification and analysis of moderator variables. *Journal of Marketing Research*, 18, 291-300.
- Steiner, D. D., & Gilliland, S. W. (1996). Fairness reactions to personnel selection techniques in France and the United States. *Journal of Applied Psychology*, 81, 134-141.
- Stevens, A. C. (2006). Effects of altering grammar and spelling on perceived author credibility. Retrieved from http://www.clemson.edu/cujo/manuscript.php?manuscript ID=142
- Stiff, C. (2012). Watch what you write: How errors in feedback influence consumer attitudes and behavior. *Journal of Internet Commerce*, 11, 41-67.
- Stone, D. L., Lukaszewski, K. M., Stone-Romero, E. F., & Johnson, T. L. (2013). Factors affecting the effectiveness and acceptance of electronic selection systems. *Human Resource Management Review*, 23, 50-70.
- Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28, 1317-1338.
- Tanguay, D. M., Camp, R. R., Endres, M. L., & Torres, E. (2012). The impact of sports participation and gender on inferences drawn from resumes. *Journal of Managerial Issues*, 24, 191-206.
- Tarasovich, B. M., & Boyer, B. N. (2013). Introducing a writing skills intervention into an undergraduate financial accounting course. *Journal of the Academy of Business Education*, 14, 85-96.
- Tsai, W.-C., Chi, N.-W., Huang, T.-C., & Hsu, A.-J. (2011). The effects of applicants résumé contents on recruiters' hiring recommendations: The mediating roles of recruiter fit perceptions. *Applied Psychology*, 60, 231-254.
- Vignovic, J. A., & Thompson, L. F. (2010). Computer-mediated cross-cultural collaboration: Attributing communication errors to the person versus the situation. *Journal of Applied Psychology*, 95, 265-276.
- Weinberg, J. D., Freese, J., & McElhattan, D. (2014). Comparing data characteristics and results of an online factorial survey between a population-based and a crowdsource-recruited sample. *Sociological Science*, 1, 292-310.
- Zekeri, A. A. (2004). College curriculum competencies and skills former students found essential to their careers. *College Student Journal*, *38*, 412-422.
- Zhao, J. J., & Alexander, M. W. (2004). The impact of business communication education on students' short- and long-term performances. *Business Communication Quarterly*, 67(1), 24-40.

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