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Persuasive effect of potential employees' names and photographs in a recruitment advertisement

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Revised: 25 January 2021

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FRENCH RESEARCH ARTICLE

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Abstract

While targeting job postings is a common practice for recruiters, they can now personalize their ads by embedding the recipients' names and photographs in the advertisement. Research shows divergent results on the effects of personalization. This experiment, conducted among 236 participants, assesses the combined effect of recruitment advertisement personalization and job targeting on attitudinal reactions. Our results show that personalization and targeting help increase self-referencing, which in turn positively influences the attitude about the advertisement, click intention, and job-pursuit intention. However, personalization has a negative main effect on these attitudinal reactions.

K E Y W O R D S

personalization, psychological reactance, recruitment advertising, self-referencing, targeting

Résumé

Alors que le ciblage d'une offre d'emploi est une pratique courante pour les recruteurs, ils peuvent désormais personnaliser leurs publicités en y intégrant le prénom et la photographie des destinataires. La recherche présentant des résultats contrastés sur les effets de la personnalisation, une expérimentation réalisée auprès de 236 participants évalue l'effet combiné de la personnalisation d'une publicité de recrutement et du ciblage de l'offre d'emploi sur leurs réponses attitudinales. Les résultats montrent que la personnalisation et le ciblage contribuent à générer de la référence à soi qui influence à son tour positivement l'attitude vis-à-vis de la publicité, l'intention de cliquer et l'intention de poursuivre le processus de recrutement. En revanche, la personnalisation exerce un effet négatif sur ces réponses attitudinales. This article is protected by copyright. All rights reserved.

MOTS-CLÉS

Ciblage, Personnalisation, Publicité de recrutement, Réactance psychologique, Référence à soi

JEL CLASSIFICATION M37, O15

1 | INTRODUCTION

When being identified as a top employer has become a strategic issue for organizations, recruiters are increasingly using marketing techniques for recruitment purposes to attract talent (Soulez & Poujol, 2020). Organizations are notably developing online advertising messages, particularly on social networks (SHRM, 2016; Soulez & Guillot-Soulez, 2011), which offer advertising solutions with a range of targeting options (e.g., geolocation, activity sector, education level). Targeting consists of recommending an offer based on consumers' measured individual preferences (Kramer, 2007). Marketing research agrees on the effectiveness of targeted advertising (Liu-Thompkins, 2019).

However, organizations still have a hard time recruiting on social networks (SHRM, 2016). It is not enough to target the right potential candidates; they must also be interested and persuaded to apply for a particular job. Social networks, which compete for advertising dollars, try to improve their advertising systems' effectiveness by innovating. For example, LinkedIn offers advertisers the opportunity to personalize recruitment advertisements by including recipients' first names and photographs in the ads. Personalization refers to the insertion of recognizable elements of a person in the advertisement (Dijkstra, 2008). With personalization, the factual content of the advertisement does not change (as is the case with offer targeting), but elements that allow the targeted person to recognize themselves personally are incorporated into the advertisement (e.g., their first name or photograph) (Hawkins et al., 2008; Maslowska et al., 2016).

Studies have already explored the persuasive power of personalization in recruitment communications (e.g., Pfiffelmann, 2020) and commercial communications (e.g., Ahn et al., 2017). From the research, it appears that personalization improves the effectiveness of advertising by increasing self-referencing (Ahn et al., 2017; De Keyzer et al., 2015; Maslowska et al., 2016) or perceived entertainment (Pfiffelmann, 2020), by reducing advertising skepticism (Baek & Morimoto, 2012) and perceived persuasion (Pfiffelmann et al., 2020), and by drawing the visual attention of recipients to advertisements (Bang et al., 2019; Bang & Wojdynski, 2016; Pfiffelmann et al., 2020). However, the effectiveness of personalization seems to depend on particular conditions, such as the perception of control over one's private life (Tucker, 2014), privacy concerns (Pfiffelmann et al., 2020), the social network (Pfiffelmann, 2020), and the relevance of the offer (Li & Liu, 2017; White et al., 2008).

Other research has also shown that personalization is perceived as intrusive (Pfiffelmann et al., 2020), induces psychological reactance (White et al., 2008), and leads to advertising avoidance (Ham, 2017) and a negative attitude toward the ad (Tsang et al., 2004). Indeed, recipients are sensitive to the use of their first name and photograph for marketing purposes (Markos et al., 2018). Consequently, personalization is a double-edged marketing tactic: it can be effective, notably through self-referencing (Ahn et al., 2017; De Keyzer et al., 2015), but it also generates a form of reactance, as it is perceived as intrusive in terms of privacy (van Doorn & Hoekstra, 2013; White et al., 2008). Therefore, personalization could prove to be a counterproductive marketing tactic if its negative effects outweigh the positive effects; we do not know which effect prevails.

Furthermore, despite researchers' interest in this topic, studies on personalized advertising have only paid scant attention to four important theoretical issues. Firstly, although the self-referencing effect is a frequently considered operating mechanism of personalization (e.g., Dijkstra, 2008), little research has empirically tested this effect (Ahn et al., 2017), and none has examined it in recruitment advertising. This study, therefore, investigates whether the personalization of a recruitment ad improves advertising effectiveness by increasing selfreferencing. We consider the attitude toward the ad, the intention to click on the advertisement, and the jobpursuit intention as dependent variables, which are indicators of advertising effectiveness in recruiting (Pfiffelmann, 2020). Second, studies that have explored the combined effect of advertising personalization and targeting (e.g., Aguirre et al., 2015; Tucker, 2014; White et al., 2008) have not tested this effect on self-referencing. Based on the additive effect proposed in the heuristicsystematic model of information processing (Chen & Chaiken, 1999), we test whether the effect of personalization on self-referencing is greater when advertising is targeted (i.e., when the job offer is perceived as relevant). The combination of advertising adaptation strategies could maximize the self-referencing effect (Maslowska et al., 2016). Third, when studies have explored the combined effect of advertising personalization and targeting, they have consistently overlooked the condition of personalized and non-targeted advertising (e.g., Aguirre et al., 2015; Tucker, 2014). However, ad targeting may explain the divergent results often reported in research (Dijkstra, 2008; Li & Liu, 2017). This issue is particularly significant since, in practice, personalization is a strategy that complements the recommendation of a job. Besides, research has not explored the interaction between these two methods of adapting advertisements on recipients' attitudinal responses. Therefore, this study tests the moderating role of targeting between personalization and self-referencing and its moderating role between personalization and the dependent variables. Fourth,

research has only rarely explored the integration of recipients' photographs in advertisements (Ahn et al., 2017; Pfiffelmann, 2020), the first name being more frequently studied (Dijksta, 2008; Sahni et al., 2018). Nevertheless, the inclusion of recipients' photographs is increasingly common in online advertisements. This study, therefore, uses the first name and photograph of the recipient to personalize recruitment advertisements.

Our research also contributes at the management level. Although online platforms for which a user account exists are technically and legally able to implement the personalization of advertisements, few offer this possibility in their advertising systems today. Personalization could have significant potential given the number of social network users (e.g., LinkedIn, Facebook, and Twitter) and recruitment platforms (such as Indeed, Monster, or Cadremploi). Suppose personalization proves to be a persuasive marketing tactic. In that case, these platforms could improve recruiters' performance and increase revenue by attracting more advertisers with more effective advertising systems.

2 | LITERATURE REVIEW AND HYPOTHESES

2.1 | Advertising personalization and targeting

Marketing research looks at different ways of personalizing advertisements (Vesanen, 2007). In this article, we rely on the definition proposed by Dijkstra (2008, p. 773): "Personalization refers to incorporating recognizable aspects of a person into the content information." The recognizable aspects of a person might be their first name or photograph (Hawkins et al., 2008). Thus, unlike the approach where personalized advertising is, in fact, a targeting method, personalization here refers exclusively to the inclusion of recognizable aspects of a person in the advertisement. The personalization elements as heuristic cues in a message (Petty et al., 2002) aim to increase recipients' attention and motivation to process messages by implying that the message is specifically directed at them (Hawkins et al., 2008).

Targeting an advertisement is fundamentally different from personalization. Advertisers recommend product offers based on the individual preferences of the recipients (Kramer, 2007). In recruitment advertising, ad targeting is communicating a job offer in line with potential employees' preferences. In this sense, targeting focuses on adapting the advertisement's factual content, that is, the job offer recommended in the advertisement, while personalization focuses on inserting personal elements that are ancillary to the offer in the advertisement (Dijkstra, 2008; Maslowska et al., 2016). Successful ad targeting is based on the assumption that recipients have preferences marketers can identify to propose offers to recipients (Kramer, 2007). While the effectiveness of targeting has been empirically verified in numerous studies (Liu-Thompkins, 2019), the effectiveness of personalization seems more mixed in commercial communication (Li & Liu, 2017; White et al., 2008), as well as in recruitment communication (Pfiffelmann et al., 2020).

2.2 | Self-referencing and self-positivity bias

The personalized elements integrated into advertising promote a psychological tendency in recipients to process new information by linking it to themselves (Ahn et al., 2017)—the self-referencing effect (Debevec & Romeo, 1992). Self-referencing, the process of encoding new information in relation to the self-schema (Burnkrant & Unnava, 1995), is a mechanism through which personalization exerts persuasive effects.

A person's first name is an important part of selfconcept, that is, the knowledge an individual has about themselves (Allport, 1937); personalized elements are integrated into self-schema (Dijkstra, 2008), selfknowledge based on past experience that organizes and guides processing of information about the self (Greenwald & Banjai, 1989). Personalization exerts persuasive effects by activating this self-schema (Dijkstra, 2008). The fact that personalized elements are at the core of the self-schema activates self-referent encoding of the message, that is, the processing of information about oneself (Symons & Johnson, 1997). Also, information related to the self is processed more quickly and easily (Dijkstra, 2008) and increases the message recall (Rogers et al., 1977). Several studies have shown that personalization draws recipients' visual attention to advertisements (Bang et al., 2019; Bang & Wojdynski, 2016; Pfiffelmann et al., 2020), indicating that individuals automatically pay attention to information related to themselves, such as their first name or photograph.

Information that refers to aspects of the self fosters a positive attitude through positive bias related to the self (Burnkrant & Unnava, 1995). Thus, self-referencing may activate the positive affect associated with the self and lead to more positive attitudinal responses (Debevec & Iyer, 1988; Debevec & Romeo, 1992). The general idea of self-positivity bias (Perloff & Brock, 1980) is that people value objects or ideas associated with them more than those that are not (Petty et al., 2002). For example, individuals prefer arguments they have generated to those generated by others (Greenwald & Albert, 1968); they even prefer the letter that corresponds to the first letter of their first name over the other letters of the alphabet (Nuttin, 1985). Therefore, information relating to the recipient's identity in an advertisement could serve as a cue that could have a persuasive effect.

In advertising, adding the recipient's first name in the subject line of an email increases the likelihood that the recipient will click to open the email by 20% (Sahni et al., 2018). Recipients also pay more attention to advertising when they see their first name in an advertisement, which produces more positive than negative thoughts, suggesting that personalization might induce a self-positivity bias (Maslowska et al., 2016). Other research has shown that self-referencing mediates the relationship between personalization and the attitude toward the brand or purchase intention (Ahn et al., 2017; De Keyzer et al., 2015). We anticipate these same mechanisms underlying the effects of personalization in recruitment advertising. Therefore, we formulate a first hypothesis:

Hypothesis 1 Personalization positively influences potential employees' attitude toward the ad, their intention to click on the advertisement, and their job-pursuit intention through the mediating effect of selfreferencing.

According to Dijkstra (2008), personalized elements are detected so that the self-schema is activated and blends in with the other information contained in the advertisement in the processing system. As a result, by triggering self-referent encoding, personalization acts as a Trojan horse since it is so related to the self that the entire advertisement is processed in the context of the self without even assessing the relevance of the offer in question (Dijkstra, 2008). As a result, personalization could contaminate the advertisement's evaluation in general by making it more relevant, whether or not the advertisement is targeted (Dijkstra, 2008; Petty et al., 2002).

Based on the heuristic–systematic model of information processing (Chen & Chaiken, 1999), Li and Liu (2017) showed that personalization exerts persuasive effects when recipients are not involved with the commercial offer because they are in a heuristic advertising processing mode and are influenced by the personalized elements. De Keyzer et al. (2015) had already shown that personalization could act through the peripheral processing of advertisements, based on the Petty and Cacioppo (1986) elaboration likelihood model.

It has also been shown that heuristic and systematic information processing can co-occur. This is the additivity effect proposed by Chen and Chaiken (1999). Personalization exerts stronger persuasive effects when recipients are involved with the commercial offer (Li & Liu, 2017). Therefore, because the heuristic and systematic processing modes occur simultaneously, recipients are more motivated to process all the information in the advertisement and form a judgment based on the evaluation of the advertising argument (i.e., the recommended offer) but also on the heuristic cues (i.e., the personalized elements). Other research has shown that personalization increases self-referencing more when used in combination with other advertising adaptation strategies (Maslowska et al., 2016). Therefore, personalization is likely to increase self-referencing when the offer is perceived as relevant than when it is not linked to individual preferences. Therefore, the following hypothesis is formulated:

Hypothesis 2 Ad targeting moderates the relationship between personalization and self-referencing so that the effect of personalization on self-referencing is stronger when the ad is targeted than when it is not targeted.

2.3 | Reactance to personalization

Personalization is a double-edged sword since it is also perceived as an invasion of privacy (van Doorn & Hoekstra, 2013; White et al., 2008). Personalization may suggest to ad recipients that the level of knowledge about the advertisements is inappropriate, as it goes beyond friendly recognition (White et al., 2008).

Advertisements containing identifying personal information can create a perceived risk for individuals who will feel under scrutiny (White et al., 2008). As a result, recipients may experience a psychological reactance, a state in which a person's freedom is perceived to be under threat (Brehm, 1966). The theory of psychological reactance posits that people react to attempts to control their behavior and threats to their freedom of choice by taking a position of withdrawal or rejection (Brehm, 1966). Therefore, personalization could provoke a form of reactance, especially when elements that allow users to be personally identified are used. Information that allows recipients to be identified is considered sensitive data, and its use is frowned upon by Internet users, whether in the hands of advertisers they trust or not (Markos et al., 2018). This state of reactance is more likely to occur in the absence of prior consent to personalization and leads to the formation of a negative attitude toward the ad (Tsang et al., 2004) and ad avoidance (Ham, 2017).

If personalization induces a psychological reactance because the advertisement is considered inappropriate, and the negative effects of personalization outweigh its positive effects, it would be better for recruiters not to use this marketing tactic. However, a significant body of research has focused on the paradox of personalization (Aguirre et al., 2015). This paradox finds that there is a balance between the benefits of personalization and the perception of privacy intrusion (van Doorn & Hoekstra, 2013). The negative effects of personalization can thus be compensated by presenting an advertising offer that is tailored to consumer preferences (van Doorn & Hoekstra, 2013; White et al., 2008). Personalization may therefore have different effects depending on the perceived relevance of the recommended job offer. White et al. (2008) described a similar mechanism whereby consumers respond differently to the personalization of a message depending on the perceived fit between the offer in the message and the recipient's personal preferences. It has thus been shown that consumers exhibit a psychological reactance to personalization when the perceived match of the offer is weak, resulting in reduced click intention. Personalization would therefore work through a balance between the reception of a too-strongly personalized message and the usefulness of receiving an offer adapted to one's individual preferences.

Personalization may only have persuasive effects when advertisements are targeted since a job that matches the recipients' preferences would be more likely to justify the inclusion of personal information in advertisements. On the other hand, personalization could have negative effects when advertisements are not targeted because a job that does not match recipient preferences would not justify using first names and photographs. We, therefore, formulate a third hypothesis based on an interaction effect between ad personalization and ad targeting:

Hypothesis 3 There is an interaction effect between ad personalization and ad targeting on potential employees' attitude toward the ad, their intention to click on the advertisement, and their job-pursuit intention so that personalization has positive effects when the ad is targeted and negative effects when it is not targeted.

Figure 1 presents our theoretical model.

3 | METHODOLOGY

3.1 | Participants

The study was carried out among 236 students in their final year of a master's degree at a French university. The

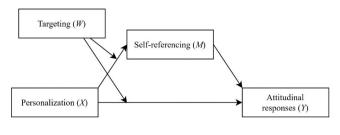


FIGURE 1 Theoretical model

sample is composed of students with an average age of 23.3 years ($S_{age} = 3.16$); 60.6% were women. Over 90% had more than three months' professional experience, and over 50% more than five months. Besides, almost 60% of participants were looking for a job or an internship during the study period. Although the sampling criterion used may be a potential limitation to the generalization of results, students' convenience samples are often used in marketing research (Bartikowski et al., 2011), and students represent a strategic target for recruiters (Soulez & Guillot-Soulez, 2011). In an economy increasingly focused on knowledge as a source of growth and innovation in the face of intense global competition, the growth of organizations depends on their ability to attract talent (Guillot-Soulez et al., 2019).

The student participants were recruited during classes and received a link to the online study. They had to have a Facebook account to participate in the study, as the advertising offered to each participant was automatically personalized based on their user profile. We used personal information from Facebook because it is the world's largest social network in terms of users, and only a few students do not have a user account. Furthermore, we wanted realistic personalization, and this procedure allowed us to extract first names and photographs from Facebook and insert them automatically into the advertisements.

3.2 | Experimental design and procedure

In October 2017, an online between-subjects experiment was set up to expose participants to a recruitment advertisement. Respondents were randomly assigned to each of the four experimental conditions: non-personalized and non-targeted advertising (N = 63), non-personalized and targeted (N = 55), personalized and non-personalized (N = 57), personalized and targeted (N = 61) (Appendix A).

The personalization of the advertisement was manipulated with a non-personalized condition and personalized condition in which students' names and photographs were inserted in the advertisements. Targeting was manipulated with a non-targeted condition and targeted condition based on their academic background and geographical location. The non-targeted condition presented a job offer for social life auxiliary based in a city far from their place of residence, as none of the students had followed an educational path related to this profession. On the other hand, the targeted condition presented a job adapted to the students according to their master's specialization and their city of residence.

After viewing a welcome page, the participants read a statement regarding study confidentiality and privacy. Then, students were asked to log in to the online study with their Facebook account to allow for the personalization of the advertisement. Approximately 5% of the students did not wish to authenticate via Facebook and could not participate in the study. Participants were then randomly exposed to one of the four experimental conditions. The advertisement presented a job offer from a fictitious employer, named Swish, to avoid potential confusion with previously formed brand attitudes (Geuens & De Pelsmacker, 2017). Finally, participants were redirected to the measurement scales that made up the questionnaire.

3.3 | Measures

All constructs were measured using Likert scales or seven-point differential semantics (Appendix B). Jobpursuit intention was measured with the Cable and Turban (2003) scale (M = 3.27, SD = 1.59, $\alpha = 0.89$), and intention to click with two items (e.g., "I am likely to click on this job advertisement," M = 3.76, SD = 2.09, $\alpha = 0.91$). We measured the attitude toward the ad with the Holbrook and Batra (1987) scale (M = 3.32, SD = 1.59, α = 0.90) and self-referencing with the Maslowska et al. (2016) scale (M = 2.73, SD = 1.39, $\alpha = 0.75$). In order to verify that participants' responses were not affected by a sense of uniqueness, which is a confounding variable with personalization (Franke & Schreier, 2008), sense of uniqueness was measured with the Simsek and Yalınçetin (2010) scale (M = 5.09, SD = 0.98, $\alpha = 0.75$). Participants were also asked whether they were currently looking for a job or an internship ("Yes/No"). In addition, the realism of the advertisement was measured using the Bechwati and Morrin (2003) scale (M = 4.50, SD = 1.41, $\alpha = 0.78$). To verify that respondents were not familiar with the fictitious company, familiarity with the employer was measured with the Cable and Turban (2003) scale (M = 1.51, SD = 0.82, $\alpha = 0.95$). To check ad targeting manipulation, the perceived job match was measured with five items (e.g., "The occupation of [job] is relevant to my work experiences," M = 3.64, SD = 2.12, $\alpha = 0.95$). Finally, to check for personalization, respondents were asked whether the advertisement included their first name and photograph ("Yes/No"). Respondents who did not correctly answer the question regarding the manipulation of personalization were excluded from the analyses.

4 | RESULTS

4.1 | Manipulation check and controls

No participant was familiar with the fictitious employer since all of them scored below the neutral point of 4 on the familiarity scale, which also had a very low average. Furthermore, a *t*-test for independent samples shows that there is no significant difference between the averages of perceived ad realism for the two personalization conditions ($M_{\text{non-personalized}} = 4.51$, $M_{\text{personalized}} = 4.49$, t = 0.112, p = 0.911) and for the two targeting conditions $(M_{\text{non-targeted}} = 4.60, M_{\text{targeted}} = 4.40, t = 1.059, p = 0.291),$ indicating that ad realism is not a confounding variable. Finally, to control for manipulations of the experimental conditions, a t-test for independent samples shows a significant difference between the means of the perceived job match for the two targeting conditions (M_{non-}) targeted = 1.67, M_{targeted} = 5.67, t = -43.178, p < 0.001), indicating that respondents well perceived the ad targeting manipulation.

4.2 | Method of analysis

The data were analyzed using the approach developed by Hayes (2018) with 5000 bootstrap samples. To test our first hypothesis and report the effects of personalization on the variables, we used model 4 of the PROCESS macro. Personalization was entered as a binary independent variable (X), self-referencing as a continuous mediator variable (M), and attitude toward the ad as a continuous dependent variable (Y). The model was estimated three times to test the set of dependent variables: attitude toward the ad (Y_1), intention to click (Y_2), and job-pursuit intention (Y_3). We performed these analyses a second time by replacing personalization with targeting as an independent variable to report the effects of targeting on the different variables.

To test our two other hypotheses, we used model 8 of the PROCESS macro. In this model, targeting was entered as a binary moderator variable (W) of the effects of personalization on self-referencing and the three dependent variables. Once again, the model was tested for the three dependent variables. Personalization and targeting were mean-centered.

4.3 | Hypothesis testing

The results of our first mediation analyses indicate that personalization has a positive effect on self-referencing (b = 0.824, p < 0.001) and that targeting also has a positive impact on self-referencing (b = 1.718, p < 0.001). The analyses also show that the indirect effects of personalization on the attitude toward the ad (b = 0.449, SE = 0.105), click intention (b = 0.703, SE = 0.154), and job-pursuit intention (b = 0.529, SE = 0.112), mediated by self-referencing are positive and significant, confirming Hypothesis 1.

The results of our moderated mediation analyses furthermore reveal a significant interaction effect between personalization and targeting on self-referencing (b = 0.557, p < 0.05) (Appendix C). More precisely, the effect of personalization on self-referencing is stronger when the ad is targeted (b = 1.022, p < 0.001) than when it is non-targeted (b = 0.465, p < 0.01), thus confirming Hypothesis 2. A graphical representation of the differences in means between the four experimental conditions for self-referencing is provided in Figure 2. As shown in the graph and the descriptive statistics (Table 1), the selfreferencing means are higher when the ad is personalized and targeted.

Self-referencing, in turn, has a positive influence on the attitude toward the ad (b = 0.176, p < 0.10), click intention (b = 0.270, p < 0.05), and job-pursuit intention (b = 0.156, p < 0.10). However, the direct influence of personalization is negative on the attitude toward the ad (b = -0.344, p < 0.05), click intention (b = -0.437, p < 0.05), and intention to continue (b = -0.423, p < 0.01). Finally, the interaction between personalization and targeting is not significant on the attitude toward the ad (b = -0.024, p = 0.941), click intention (b = -0.156, p = 0.684), and job-pursuit intention (b = -0.045, p = 0.872), rejecting Hypothesis 3.

To verify that the sense of uniqueness and the current job search do not play a role in these models, these variables were tested as covariates and moderating variables in further analyses. No significant direct or interaction effects were observed in the results of these analyses.

4.4 | Post-hoc qualitative study

In line with our hypotheses, results show that recruitment advertisement generates a greater self-referencing when the job presented in the advertisement is

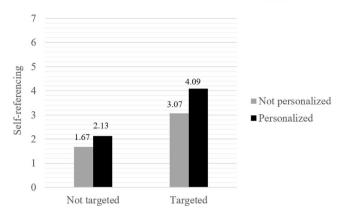


FIGURE 2 Means of self-referencing by experimental condition

considered relevant by potential employees. The quantitative study also highlights the mediating role of selfreferencing, which promotes a positive attitude toward the advertisement in potential employees and proves to be a determinant of click intention and job-pursuit intention. However, this study also highlights the negative impact of personalization. Since, on the one hand, the advertisement was not presented in an existing online environment and, on the other hand, the distinction between personalization using a first name and personalization using a photograph was not examined, a post-hoc qualitative study was carried out. This study attempts to understand better the negative effects of personalization in recruitment advertisements and the conditions under which these effects occur. We also investigate the positive effects of personalization that have not yet been considered in the context of recruitment.

4.5 | Method

Semi-structured interviews of an average duration of 40 min were conducted with 11 (potential) employees recruited using snowball sampling, which made it possible to generate a diversified sample (64% women, average age 26 years). Table 2 presents the interviewee profiles.

The procedure consisted of presenting each interviewee with two recruitment advertisements in succession, one non-personalized and the other personalized with the interviewee's first name and photograph (Appendix D). These advertisements invited people to discover job opportunities in a large French company offering a sufficient diversity of jobs to fit all respondents. Respondents were thus able to express themselves freely about these advertisements. The interviews were transcribed and analyzed using NVivo 11 software based on Bardin's (1996) thematic analysis method.

TABLE 1 Means and standard deviations by condition	s and standard d	eviations by condit.	lon						
Condition			Self-referencing	Attitude toward the ad	Click intention	Job-pursuit intention	Perceived ad realism	Sense of uniqueness	۷۱۲ ج
Not personalized	Targeting	Not targeted	1.67 (0.78)	2.54 (1.19)	2.45 (1.60)	2.31 (1.25)	4.66 (1.41)	5.10 (1.06)	E Y 63
		Targeted	3.07 (0.80)	4.34(1.30)	5.35 (1.28)	4.57 (0.92)	4.35 (1.37)	5.11 (0.89)	55
	Total		2.32 (1.05)	3.38 (1.53)	3.80 (2.05)	3.36 (1.59)	4.51(1.40)	5.10 (0.98)	118
Personalized	Targeting	Not targeted	2.13 (1.15)	2.29 (1.07)	2.22 (1.59)	1.98 (1.02)	4.54 (1.44)	5.08 (1.08)	57
		Targeted	4.09 (1.26)	4.16 (1.58)	5.11 (1.55)	4.29 (1.17)	4.45 (1.56)	5.08 (0.89)	61
	Total		3.14(1.55)	3.26 (1.65)	3.71 (2.13)	3.17 (1.59)	4.49(1.50)	5.08 (0.96)	118
Total	Targeting	Not targeted	1.89(0.99)	2.42 (1.14)	2.34 (1.59)	2.15 (1.16)	4.60 (1.42)	5.09 (1.07)	120
		Targeted	3.61 (1.18)	4.24 (1.45)	5.22 (1.43)	4.42 (1.06)	4.40 (1.47)	5.09 (0.88)	116
	Total		2.73 (1.39)	3.32 (1.59)	3.76 (2.09)	3.27 (1.59)	4.50(1.41)	5.09 (0.98)	236

TABLE 2 Participant profiles									
First Name	Gender	Age	Position						
Jérôme	Man	29	Account manager						
François-Xavier	Man	28	Project manager						
Marion	Woman	21	Customer service agent						
Yvanie	Woman	26	Operating agent						
Alix	Woman	23	Student						
Mélanie	Woman	27	Heritage agent						
Boris	Man	28	Financial security agent						
Jonathan	Man	26	Digital manager						
Judith	Woman	22	Student						
Sophie	Woman	36	Customer service manager						
Camille	Woman	20	Student						

5 | RESULTS

The thematic analysis highlights that the perception of considerate treatment by the sender of the advertisement, through personalization, is a positive consequence of personalization shared by the interviewees ("We really have that feeling of being privileged and that we have been chosen"; Judith). This perception seems to be valid among some interviewees even though they are aware that personalization is carried out by a computer and not by the employer themselves ("Even if computers did the work, they still took the time to look for the photo, my first name, and to dedicate a page per person, so I would feel more privileged"; Melanie). Among the positive consequences of personalization, we also note that almost all the interviewees declare that they intend to click on the personalized advertisement ("I really feel that they are searching, and I have my photo, I am happy and I click"; Jérôme), often because it seems like an intriguing innovation ("It makes me smile, it intrigues me, it is innovative. You click out of curiosity"; Jérôme). Finally, personalization might help attract the recipients' attention ("It catches my eye, of course, I saw it right away"; François-Xavier).

On the other hand, some interviewees expressed skepticism ("It is just a display of my photo, a trompel'oeil, they did not go and get the photo, it is not super"; François-Xavier). Some interviewees even felt manipulated and saw an attempt at persuasion ("Here it is really graphically personalized, it is almost to deceive me"; Boris). The main negative reaction, however, remains the feeling of intrusion into their private life ("It is too personal. I really feel like they have taken all my data like I am on file"; Alix). The feeling of invasion of privacy seems to be contextual and depends on the type of platform on which the personalized advertisement is displayed. For example, respondents did not express negative feelings when the personalized ad was published on LinkedIn, but some of them expressed an invasion of privacy if the personalized ad was published on Facebook or other platforms not related to recruitment ("On LinkedIn, I find it positive. On Facebook or Yahoo, it is negative because it is using personal data to put them on advertising pages. It bothers me"; Mélanie). The type of personalized element may also be another determinant of the perception of invasion of privacy, with photographs more likely to increase this negative perception than first names ("It bothers me when they use a picture of me. My first name, maybe, why not, but my photo I do not like"; Boris).

Thus, the qualitative study confirms that personalization can generate positive reactions, such as the perceived considerate treatment, and that the use of photographs is unlikely to be accepted, hence the observed direct negative effects of personalization in the experimentation.

6 | DISCUSSION

The study objective was twofold. The first was to test the effects of recruitment ad personalization on potential employees' attitudinal responses to verify personalization effectiveness in recruitment communications. The second objective was to understand better the psychological mechanisms responsible for the effects of personalization to theoretically contribute to the understanding of personalized advertising in human resources marketing.

6.1 | Scientific contributions

Because much of the previous research was conducted in fields other than recruitment communications, it was difficult to predict the effects of personalizing a recruitment ad on potential employees' decision-making and job-pursuit intention. Indeed, these decisions are important, with significant consequences for long-term career orientation. Furthermore, previous empirical research has mainly focused on the study of the use of first names in communications (Sahni et al., 2018) but has only rarely addressed the use of the recipient's photograph in advertising (e.g., Ahn et al., 2017; Bang et al., 2019). Furthermore, when the inclusion of photographs was studied, the stimuli did not use photographs from the participants' existing social networks (e.g., Bang et al., 2019), limiting the internal validity of these experiments. Finally, although personalization is a marketing tactic often combined with advertising targeting in

practice, little research has tested the interaction mechanisms between these two advertising individualization methods (White et al., 2008). Authors have often conducted experiments in which the personalized and nontargeted ad's condition is absent (e.g., Aguirre et al., 2015; Tucker, 2014). This is all the more critical given that a mechanism of interaction between personalization and the relevance of an offer has already been explored (e.g., van Doorn & Hoekstra, 2013; White et al., 2008).

The idea at the heart of this research was that advertisements containing information related to oneself are processed with self-referencing encoding (Ahn et al., 2017; Dijksta, 2008) and promote positive attitudinal responses due to a self-positivity bias (Perloff & Brock, 1980; Petty et al., 2002). Our results show that the personalization of a recruitment advertisement does improve the attitude of potential employees toward the ad and increases click intention and job-pursuit intention through the self-referencing effect. In line with the literature, we show that the influence of personalization on self-referencing is stronger when the advertisement is targeted, that is, when the job offered in the ad corresponds to the personal characteristics of the recipients. Personalization is a strategy whose effects are more pronounced when the recipients are involved in the commercial offer (Li & Liu, 2017) or when personalization is combined with another strategy for individualizing advertising (Maslowska et al., 2016).

At the same time, our results show that personalization has a direct negative influence on the attitudinal responses of future graduates. These results are consistent with the theory of psychological reactance (Brehm, 1966). Advertisements personalized with a first name and photograph signal too high a degree of knowledge about the recipients and lead them to reject the advertisements (White et al., 2008). On the other hand, our results showed no interaction effect between ad personalization and job offer targeting on the attitudinal responses of potential employees. According to the personalization paradox (Aguirre et al., 2015), the negative effects of personalization on perceived intrusion should be offset by the benefits of receiving a relevant advertising offer. However, our results indicate that personalization has a direct negative influence on attitudinal responses regardless of the perceived relevance of the job offer. It is possible that the use of photographs in advertising is perceived as highly intrusive or creates discomfort, which would explain why receiving a relevant job offer does not compensate for this perceived intrusiveness.

The post-hoc qualitative study provides a better understanding of potential employees' reactions to personalization, showing that personalization seems to be a good way of attracting recipients' visual attention and piquing their curiosity. Personalization also seems to be perceived as a show of considerate treatment by the recruiter, which could encourage potential employees to click on the advertisement. Conversely, personalization may be perceived by recipients as an attempt at persuasion, which is experienced negatively. Finally, most recipients state that they saw personalized ads as an intrusion into their private life. This perception seems to be more pronounced when the advertisement is displayed on a platform that represents a personal space and/or when it uses photography as a personalized element.

6.2 | Practical implications

Our research can benefit many managers. The aim of recruiters is to recruit the right candidates but also to optimize their advertising investments. Although personalization is a heuristic cue that positively biases the attitudinal responses of potential employees through the self-referencing effect, according to our results, personalization also promotes a more negative attitude toward the ad and reduces click intention and job-pursuit intention regardless of the perceived relevance of targeting the job offer. Therefore, personalization does not appear to be a marketing tactic for which recruiters should have high expectations. Nevertheless, web users' attention is a scarce resource, and personalization could prove to be a useful strategy for recruiters as it could help to draw visual attention to their advertisements. By providing relevant job offers, the addition of personalized elements in advertising could thus enable advertisers to stand out in crowded web environments (Pfiffelmann et al., 2020).

Besides, our research can benefit platform managers. In the online recruitment ecosystem, these platforms exist in the form of a social network (e.g., LinkedIn, Facebook, and Twitter) or a recruitment platform (e.g., Indeed, Monster, or Cadremploi). The objective of these platforms is to offer advertisers effective advertising systems to generate revenue based on the purchase of advertising space by recruiters. According to our research, investment in the development of an advertising system using personalization does not necessarily seem profitable since our results indicate that personalization degrades recipients' attitudinal responses. Platforms should nevertheless bear in mind that personalization can be useful to attract visual attention to an advertisement, which could benefit recruiters. It could be damaging not to offer this option to recruiters, representing a possible competitive advantage, especially given that personal data are available and easily used.

6.3 | Limitations and future research

Our research has several limitations that should be highlighted and that call for further research.

First of all, real-life behavior may differ from the statements reported in the questionnaires; this discrepancy is all the more possible in the absence of a real-life web browsing situation, which is the case in this experiment. Moreover, the participant sample is comprised solely of students. Future research could consider a more diversified respondent sample to improve the external validity of our study results.

Our research was intended to be realistic; the experiment using real information from a social network to personalize advertisements, thus improving its internal validity. Nevertheless, participants were placed in a situation of decontextualized exposure of a real platform, limiting the external validity of our results. Although this procedure has the advantage of making our results less contingent on the platforms and their specificities, the absence of context may have induced an exacerbated perception of intrusion, which would explain the negative effects of personalization. This could also explain the relatively average score for the perceived realism of the ads. Future experiments could expose participants to an advertisement on an imitation of a platform and measure real behaviors (e.g., click on the ad) or study the associations with the different platforms to improve the generalization of the results.

Another research limitation concerns variables that obtained relatively low means, such as self-referencing, attitude toward the ad, or job-pursuit intention. The experimental context and the decontextualized web environment should partly explain these scores, as evidenced by the low mean of perceived ad realism. Researchers should therefore improve the realism of their experiments by, for example, placing participants in more natural web browsing situations.

Perceptions of privacy intrusion or privacy concerns are two variables that would have been worth exploring in this research. Our study does not show that personalization generates a perception of intrusion, as the theoretical argumentation and post-hoc qualitative study suggest. Moreover, previous studies have shown that recipients who are less concerned about their privacy are more convinced by recruitment advertisements when personalized (Pfiffelmann et al., 2020).

One avenue of research to be encouraged would be to investigate the extent to which personalization induces psychological reactance when recipients deal more thoroughly with advertisements recommending irrelevant jobs. Recipients exposed to advertisements tend to process these advertisements in greater depth when personalized (De Keyzer et al., 2015; Pfiffelmann et al., 2020), but they may react negatively when they are forced to deal with advertisements with irrelevant offers (Dijkstra, 2008).

Finally, we encourage future research to explore further the mechanisms through which personalization works in the context of recruiting communication. Our post-hoc qualitative study highlights several interesting mechanisms. Therefore, it would seem relevant to integrate more mediating variables in future studies, including visual attention to the ad, perceived considerate treatment, perceived persuasion, and perceived privacy intrusion. Also, we recommend that researchers include moderators such as the platform on which the advertisement is displayed and the level of personalization.

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REFERENCES

- Aguirre, E., Mahr, D., Grewal, D., de Ruyter, K., & Wetzels, M. (2015). Unraveling the personalization paradox: The effect of information collection and trust-building strategies on online advertisement effectiveness. *Journal of Retailing*, 91(1), 34–49.
- Ahn, S. J., Phua, J., & Shan, Y. (2017). Self-endorsing in digital advertisements: Using virtual selves to persuade physical selves. Computers in Human Behavior, 71, 110–121.
- Allport, G. W. (1937). Personality: A psychological interpretation. Henry Holt.
- Baek, T. H., & Morimoto, M. (2012). Stay away from me. Journal of Advertising, 41(1), 59–76.
- Bang, H., Choi, D., Wojdynski, B. W., & Lee, Y.-I. (2019). How the level of personalization affects the effectiveness of personalized ad messages: The moderating role of narcissism. *International Journal of Advertising*, 38(8), 1–23.
- Bang, H., & Wojdynski, B. W. (2016). Tracking users' visual attention and responses to personalized advertising based on task cognitive demand. *Computers in Human Behavior*, 55, 867–876.
- Bardin, L. (1996). *L'analyse de contenu*. Presses Universitaires de France.
- Bartikowski, B., Walsh, G., & Beatty, S. E. (2011). Culture and age as moderators in the corporate reputation and loyalty relationship. *Journal of Business Research*, *64*(9), 966–972.
- Bechwati, N. N., & Morrin, M. (2003). Outraged consumers: Getting even at the expense of getting a good deal. *Journal of Consumer Psychology*, 13(4), 440–453.
- Brehm, J. W. (1966). *A theory of psychological reactance*. Academic Press.
- Burnkrant, R. E., & Unnava, H. R. (1995). Effects of self-referencing on persuasion. Journal of Consumer Research, 22(1), 17–26.
- Cable, D. M., & Turban, D. B. (2003). The value of organizational reputation in the recruitment context: A brand-equity perspective. *Journal of Applied Social Psychology*, 33(11), 2244–2266.

- Chen, S., & Chaiken, S. (1999). The heuristic-systematic model in its broader context. In S. Chaiken, & Y. Trope (Eds.), *Dual*process theories in social psychology (pp. 73–96). Guilford.
- De Keyzer, F., Dens, N., & De Pelsmacker, P. (2015). Is this for me? How consumers respond to personalized advertising on social network sites. *Journal of Interactive Advertising*, 15(2), 124–134.
- Debevec, K., & Iyer, E. (1988). Self-referencing as a mediator of the effectiveness of sex-role portrayals in advertising. *Psychology and Marketing*, *5*(1), 71–84.
- Debevec, K., & Romeo, J. B. (1992). Self-referent processing in perceptions of verbal and visual commercial information. *Journal of Consumer Psychology*, 1(1), 83–102.
- Dijkstra, A. (2008). The psychology of tailoring-ingredients in computer-tailored persuasion. Social and Personality Psychology Compass, 2(2), 765–784.
- Franke, N., & Schreier, M. (2008). Product uniqueness as a driver of customer utility in mass customization. *Marketing Letters*, 19(2), 93–107.
- Geuens, M., & De Pelsmacker, P. (2017). Planning and conducting experimental advertising research and questionnaire design. *Journal of Advertising*, 46(1), 83–100.
- Greenwald, A. G., & Albert, R. D. (1968). Acceptance and recall of improvised arguments. *Journal of Personality and Social Psychology*, 8(1), 31–34.
- Greenwald, A. G., & Banaji, M. R. (1989). The self as a memory system: Powerful, but ordinary. *Journal of Personality and Social Psychology*, 57, 41–54.
- Guillot-Soulez, C., Saint-Onge, S., & Soulez, S. (2019). Exploration des liens entre la communication de labels employeurs dans les annonces de recrutement, le mode de gouvernance et l'attractivité des organisations aux yeux des candidats. *Recherche et Applications en Marketing*, 34(3), 6–32.
- Ham, C.-D. (2017). Exploring how consumers cope with online behavioral advertising. *International Journal of Advertising*, 36(4), 632–658.
- Hawkins, R. P., Kreuter, M., Resnicow, K., Fishbein, M., & Dijkstra,A. (2008). Understanding tailoring in communicating about health. *Health Education Research*, 23(3), 454–466.
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis. *A regression-based approach*. New York: The Guilford Press.
- Holbrook, M. B., & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of Consumer Research*, 14(3), 404–420.
- Kramer, T. (2007). The effect of measurement task transparency on preference construction and evaluations of personalized recommendations. *Journal of Marketing Research*, 44(2), 224–233.
- Li, C., & Liu, J. (2017). A name alone is not enough: A reexamination of web-based personalization effect. *Computers in Human Behavior*, 72, 132–139.
- Liu-Thompkins, Y. (2019). A decade of online advertising research: What we learned and what we need to know. *Journal of Advertising*, 48(1), 1–13.
- Markos, E., Labrecque, L. I., & Milne, G. R. (2018). A new information lens: The self-concept and exchange context as a means to understand information sensitivity of anonymous and personal identifying information. *Journal of Interactive Marketing*, 42, 46–62.

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- Maslowska, E., Smit, E. G., & van den Putte, B. (2016). It is all in the name: A study of consumers' responses to personalized communication. *Journal of Interactive Advertising*, 16(1), 74–85.
- Nuttin, J. M. (1985). Narcissism beyond Gestalt and awareness: The name letter effect. *European Journal of Social Psychology*, 15(3), 353–361.
- Perloff, R. M., & Brock, T. C. (1980). And thinking makes it so: Cognitive responses to persuasion. In R. M. Roloff, & G. R. Miller (Eds.), *Persuasion: New directions in theory and research* (pp. 67–100). Sage.
- Petty, R. E., Barden, J., & Wheeler, C. (2002). The elaboration likelihood model of persuasion: Health promotions that yield sustained behavioral change. In R. J. DiClemente, R. A. Crosby, & M. C. Kegler (Eds.), *Emerging theories in health* promotion practice and research (pp. 71–99). Jossey-Bass.
- Petty, R. E., & Cacioppo, J. T. (1986). *The elaboration likelihood model of persuasion*. Springer.
- Pfiffelmann, J. (2020). Campagnes publicitaires de recrutement sur Facebook et LinkedIn : à quel niveau de personnalisation vautil mieux recourir? *Décisions Marketing*, 99, 17–36.
- Pfiffelmann, J., Dens, N., & Soulez, S. (2020). Personalized advertisements with integration of names and photographs: An eyetracking experiment. *Journal of Business Research*, 111, 196–207.
- Rogers, T. B., Kuiper, N. A., & Kirker, W. S. (1977). Self-reference and the encoding of personal information. *Journal of Personality and Social Psychology*, 35(9), 677–688.
- Sahni, N. S., Wheeler, S. C., & Chintagunta, P. (2018). Personalization in email marketing: The role of noninformative advertising content. *Marketing Science*, 37(2), 236–258.
- SHRM. (2016). Using social media for talent acquisition. Retrieved from https://www.shrm.org/hr-today/trends-and-forecasting/ research-and-surveys/Documents/SHRM-Social-Media-Recru iting-Screening-2015.pdf
- Şimşek, Ö. F., & Yalınçetin, B. (2010). I feel unique, therefore I am: The development and preliminary validation of the personal

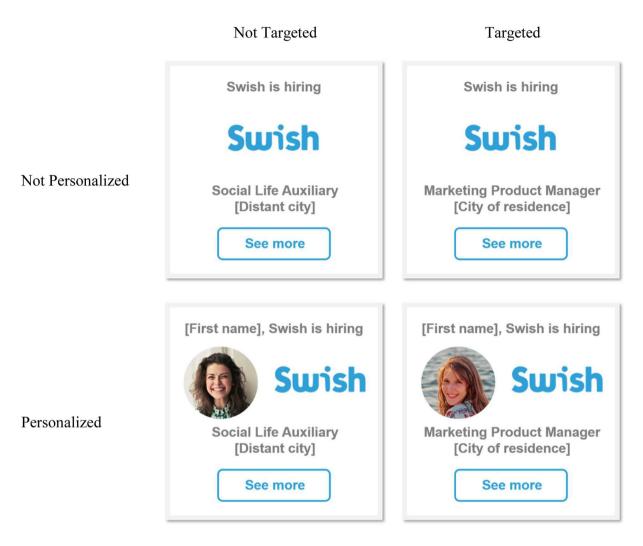
sense of uniqueness (PSU) scale. *Personality and Individual Differences*, 49(6), 576–581.

- Soulez, S., & Guillot-Soulez, C. (2011). Marketing de recrutement et segmentation generationnelle: Regard critique a partir d'un sous-segment de la generation Y. Recherche et Applications en Marketing, 26(1), 39–57.
- Soulez, S., & Poujol, F. (2020). Marketing et GRH: Un avenir commun? *Décisions Marketing*, *99*, 5–16.
- Symons, C. S., & Johnson, B. T. (1997). The self-reference effect in memory: A meta-analysis. *Psychological Bulletin*, 121(3), 371–394.
- Tsang, M. M., Ho, S.-C., & Liang, T.-P. (2004). Consumer attitudes toward mobile advertising: An empirical study. *International Journal of Electronic Commerce*, 8(3), 65–78.
- Tucker, C. E. (2014). Social networks, personalized advertising, and privacy controls. *Journal of Marketing Research*, *51*(5), 546–562.
- van Doorn, J., & Hoekstra, J. C. (2013). Customization of online advertising: The role of intrusiveness. *Marketing Letters*, 24(4), 339–351.
- Vesanen, J. (2007). What is personalization? A conceptual framework. *European Journal of Marketing*, 41(5/6), 409–418.
- White, T. B., Zahay, D. L., Thorbjørnsen, H., & Shavitt, S. (2008). Getting too personal: Reactance to highly personalized email solicitations. *Marketing Letters*, 19(1), 39–50.

How to cite this article: Pfiffelmann J, Soulez S. Persuasive effect of potential employees' names and photographs in a recruitment advertisement. *Can J Adm Sci.* 2021;1–15. <u>https://doi.org/10.1002/</u>cjas.1604

APPENDIX

Appendix A Experimental conditions



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Appendix B Measurement scales	
Scales, sources et items	Loadings
Attitude toward the advertisement ($\alpha = 0.90$) (Holbrook & Batra, 1987)	
• I dislike/like the advertisement.	0.913
• I react unfavorably/favorably to the advertisement.	0.887
• I feel negative/positive toward the advertisement.	0.875
• The advertisement is bad/good.	0.849
Click intention ($\alpha = 0.91$)	
• I would like to click on the job posting for more information.	0.957
• I am likely to click on the job posting.	0.957
Job-pursuit intention ($\alpha = 0.89$) (Cable & Turban, 2003)	
• I would exert a great deal of effort to work for this company.	0.857
• I would like to work for this company.	0.906
• I would be interested in gathering more information about this job opening.	0.863
• I would be willing to attend an information session about this job.	0.872
Self-referencing ($\alpha = 0.75$) (Maslowska et al., 2016)	
• I felt that the advertisement was addressed to me personally.	0.914
• It seemed that the advertisement contained personal information.	0.879
• The advertisement seemed to have been designed for me.	0.878
• I recognized myself in the group targeted by the advertisement.	0.768
Sense of uniqueness ($\alpha = 0.75$) (Şimşek & Yalınçetin, 2010)	
• As people get to know me more, they begin to recognize my special features.	0.623
• I feel unique.	0.778
• I cannot think of many special characteristics that distinguish me from others. ^a	0.691
• I think that the characteristics that make me up are different from others'.	0.698
• I feel that some of my characteristics are completely unique to me.	0.730
Perceived ad realism ($\alpha = 0.78$) (Bechwati & Morrin, 2003)	
• The advertisement is not realistic/realistic.	0.909
• The advertisement could exist unlikely/likely in real life.	0.909
Familiarity with the employer ($\alpha = 0.95$) (Cable & Turban, 2003)	
• I know this company.	0.961
• I am very familiar with this company.	0.953
• I am familiar with this company's products or services.	0.941
Perceived job match ($\alpha = 0.95$)	
• The occupation of [job] is relevant to my work experiences.	0.931
• The occupation of [job] matches my university education.	0.967
• The occupation of [job] corresponds to my skills.	0.941
• The occupation of [job] is aligned with my interests.	0.933
• The occupation of [job] fits my geographical location.	0.820

^aReverse coding.

Appendix C PROCESS results

	Consequence												
	Self-r	Self-referencing (M)			Attitude to the ad (Y_1)			Click intention (Y_2)			Job-pursuit intention (Y ₃)		
Antecedent	b	SE	t	b	SE	Т	b	SE	t	b	SE	t	
Constant	2.74	0.07	41.68***	2.85	0.28	10.12***	3.04	0.34	9.03***	2.86	0.25	11.26***	
Personalization (X)	0.74	0.13	5.66***	-0.34	0.17	-2.06*	-0.44	0.20	-2.15*	-0.42	0.15	-2.89**	
Targeting (W)	1.68	0.13	12.78***	1.54	0.23	6.77***	2.44	0.28	8.66***	203	0.20	9.96***	
Interaction (XW)	0.56	0.26	2.12*	-0.02	0.33	-0.07ns	-0.16	0.38	-0.41ns	-0.05	0.28	-0.16ns	
Self-referencing (M)				0.18	0.11	1.67^{\dagger}	0.27	0.12	2.17*	0.16	0.09	1.67^{\dagger}	
R ²	0.47,	F (3, 23	2) = 68.94**	* 0.35, .	F (4, 23	1) = 32.97***	0,50, F	(4, 231)	= 60,04* *	0,53, F ((4, 231)	= 75.43***	

Abbreviation: ns, non-significant.

*** = p < 0.001; ** = p < 0.01; * = p < 0.05; [†] = p < 0.10.

Appendix D Example of a personalized ad used in the post-hoc qualitative study

