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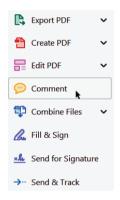
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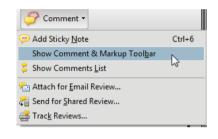


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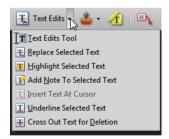


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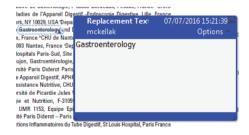
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# Article

# The Tacit Dimension of Public Sector Attraction in Multi-Incentive Settings

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# 1.15 Abstract

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The public sector provides a broad range of incentives to apply for jobs, but these incentives have rarely been studied in concert. The present study disentangles how job candidates form intentions to apply for a public sector job in multi-incentive settings and how this process depends on public service motivation (PSM). Using a speeded categorization task in an experimental vignette methodology with 340 current job seekers in the United Kingdom, we focus on perceptions that potential applicants have, or do not have, of a range of employment attributes (i.e., extrinsic, intrinsic, and prosocial) when they screen job advertisements. Results of multilevel analyses suggest that perceptions of intrinsic and extrinsic attributes are similarly strong predictors of the intent to apply for public sector jobs, whereas perceptions of prosocial employment attributes do not yield such an overall effect. However, PSM moderates the relationship between perceptions of prosocial attributes and application intentions, but only among nonstudents. Theoretical implications for the alignment of PSM with extrinsic rewards are discussed. Findings are also important for human resource managers in the public sector who want to adjust their recruitment strategies to specific target groups.

### Introduction

Over the past decades, scholars have been intrigued by the idea that there is a special motivational disposition that substantially accounts for job choice decisions in favor of the public sector (e.g.,, Bright 2016; Ritz and Waldner 2011; Wright, Hassan, and Christensen 2017). Such "public service motivation" (PSM) has been defined as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990, 368). One of the founding hypotheses in this stream of research is that people with high levels of PSM feel attracted to public sector jobs because employment in the public sector provides them with the opportunity to do meaningful work for the sake of societal benefit (Perry and Wise 1990). Although this hypothesis has not been confirmed in all subsequent studies

(Korac, Saliterer, and Weigand 2018; Ritz, Brewer, and Neumann 2016), accumulated evidence broadly provides support (Asseburg and Homberg 2018; Perry, Hondeghem, and Wise 2010). However, the preoccupation with PSM as a predictor of job choice decisions has also directed attention away from the many other reasons why people may want to seek employment in the public sector. Therefore, there has been a call for more investigations of multi-incentive settings where PSM is one of many contributing factors, including extrinsic incentives such as compensation and job security (Perry 2014; Perry and Vandenabeele 2015). Since these incentives may interfere with PSM, further research on how multiple incentives operate in concert during the attraction process will advance the field (e.g., Banuri and Keefer 2013; Chen, Chen, and Xu 2018; Dal Bó, Finan, and Rossi 2013; Tschirhart et al. 2008).

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The present study addresses these gaps and explores in detail how job candidates form intentions to apply for a public sector job when they are exposed to job advertisements in multi-incentive settings and how this process depends on the potential applicant's level of PSM. With this research design, we join a stream of recent PSM studies using job advertisements as experimental stimuli in simulated recruitment experiences (e.g., Ballart and Rico 2018; Carpenter, Doverspike, and Miguel 2012; Christensen and Wright 2011; Neumann 2016; Weske et al. 2018). This study, however, is the first to measure perceptions of employment attributes (i.e., extrinsic, intrinsic, and prosocial) that rapidly and quasi-automatically emerge from the memory when potential applicants screen job advertisements and decide whether or not to apply. For this purpose, we use a speeded categorization task (e.g., Ranganath, Smith, and Nosek 2008) that prevents from bias arising from self-reported statements of more explicit and conscious intentions (Fazio et al. 1995; Greenwald, McGhee, and Schwartz 1998). Measuring stated preferences of respondents makes the phenomena of interest subject to conscious reflections but largely misses the tacit dimension of human information processing and attitude formation (e.g., Slabbinck et al. 2018). This problem is particularly evident in fields where fast and unconscious processing of information plays a pivotal role, which applies to the reception of marketing and recruitment messages.

Our study makes three distinct contributions. First, by considering extrinsic, intrinsic, and prosocial employment attributes simultaneously, it responds to calls for further investigation of PSM in multi-incentive settings (Perry 2014; Perry and Vandenabeele 2015). In particular, we elaborate the role of multiple incentives in the attraction to public sector jobs and disentangle how PSM affects these processes. Second, we add to further cross-fertilization between PSM and human resource management (HRM; Christensen, Paarlberg, and Perry 2017; Homberg and Vogel 2016). One of the practical implications most frequently derived from previous research is to consider PSM in human resource (HR) marketing and branding, for example, by putting emphasis on public service values in recruitment messages (Asseburg, Homberg, and Vogel 2018; Christensen, Paarlberg, and Perry 2017; Neumann 2016; Ritz, Brewer, and Neumann 2016; Ritz and Waldner 2011). Yet, if and how recruitment practices that purposefully address PSM yield the desired consequences in terms of an enlarged pool of applicants who bring appropriate qualifications to the job, or if other incentives should rather be emphasized, is only starting to be explored (Linos 2018). Third, by using rapid response measures in an experimental vignette methodology (EVM; Aguinis and Bradley 2014), we apply

recent methodological advances in public administration research that are in line with the broader agenda of behavioral public administration (James, Jilke, and Van Ryzin 2017).

We proceed as follows: In the next section, we develop the theoretical framework of our research, building on related streams of literature on job marketing, social cognition, and motivation. In the third section, we introduce our data and methods. The speeded categorization task was conducted with 340 respondents in the United Kingdom. The sample was mixed with regard to the respondents' employment status, thus allowing for conclusions on how recruitment messages resonate in different target groups. In the fourth section, we present the results of multilevel modeling. Findings suggest that perceptions of intrinsic and extrinsic employment attributes are similarly strong predictors of the intent to apply for public sector jobs while perceptions of prosocial job attributes do not yield such an overall effect. However, PSM moderates the relationship between perceptions of prosocial characteristics and application intentions, but only among nonstudents. In the fifth section, we discuss the theoretical and practical implications of these findings as well as limitations and an agenda for future research.

# **Research Framework**

#### Job Advertising and Information Processing

Job choices are decisions under high uncertainty for which only limited amounts of information are available to the job seeker. This particularly applies to the early stages of recruitment when prospective applicants often have only little more information about the characteristics of a specific job and more general employment policies than what is provided in the job advertisements (Harold, Uggerslev, and Kraichy 2014). Advertising jobs online and in print is still highly important as an external recruitment source because early attitudes of potential applicants are difficult to change afterwards and thus affect all subsequent stages of the process (Breaugh 2013; Walker and Hinojosa 2014). Employers use job advertisements to send signals about the vacancy to create favorable attitudes on the part of job seekers, who use the received signals to extend their knowledge about the job and the employer and, at best, form initial intentions to apply (Rynes, Bretz, and Gerhart 1991). Given the limited space allotted to job advertisements and the unidirectional flow of information from sender to receiver, the employer is challenged to reduce recruitment messages to a few core signals that promise to elicit the desired responses of applicants with appropriate qualifications. Sending attractive signals is particularly important for public sector recruitment as public sector employers often

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face negativity from citizens in the form of anti-public sector bias (e.g., Marvel 2015).

Related streams in social cognition and decision sciences provide a general account of how humans receive and process such signals (Fiske and Taylor 2017). Since information processing is an effortful human activity, the perceptual system reduces the amount and complexity of received information to large extents and triggers rapid and automatic responses to only few cues. Dual process theory (Kahneman 2013) suggests that implicit and unconscious mental processes arise from "System 1" and result in "fast thinking." Similarly, Lieberman (2007) refers to the neural system responsible for automatic, implicit, and nonconscious processing of social information as the "X-System," the term referring to the "x" in reflexive as opposed to the "c" in reflective. These and other theories and models share the view that a broad range of mental activities are based on intuition and affect; they occur tacitly and associatively and result in spontaneous behavior. This is in contrast to processes arising from "System 2" (Kahneman 2013) or the "C-System" (Lieberman 2007), which refer to more explicit and controlled thinking. These processes are responsive to logic and facts, subject to consciousness, follow rules and trigger reflective behavior. While explicit processing of social information is slow and effortful, implicit processing is very fast and saves mental processing capacity.

It follows from the conceptualization of fast and reflexive thinking as a general mode of human information processing that it is present in the specific context of job marketing, too. While HRM scholarship has long conceptualized organizational attraction as an overly rational and reflective process guided by goals and regulated through self-monitoring (Highhouse and Hoffman 2001; Kanfer, Wanberg, and Kantrowitz 2001), research has more recently begun to account for other psychological mechanisms along this process (Breaugh 2013; Walker and Hinojosa 2014). Given that advertising jobs online and in print is a low-information recruitment practice (Baum and Kabst 2014), job advertisements often do not provide information that is sufficiently detailed to trigger rule-based reasoning grounded in logic and facts. Moreover, job seekers, particularly those with high levels of qualification, often face many job openings because such labor markets are increasingly supply-driven. When screening a large number of job advertisements that present only little or piecemeal information about the job and the employer, associative information processing is advantageous (Kahneman 2013; Lieberman 2007). It is therefore little surprising that previous research has found that job seekers often selectively respond to only few cues and process information superficially and subconsciously when they receive signals from job

advertisements (Highhouse and Hoffman 2001; Rynes, Bretz, and Gerhart 1991).

There is supporting evidence that such implicit responses, once they occur, have important attitudinal and behavioral consequences. Reeve, Highhouse, and Brooks (2006) demonstrate that immediate affective reactions to organizational previews have a substantial influence on how job seekers perceive the image and attractiveness of an organization. Kraichy and Chapman (2014) provide evidence that recruitment messages triggering affective responses translate into higher perceptions of person-organization fit and preferences for an advertised job than messages that promote the consideration of more factual-based information. Similarly, Asseburg, Homberg, and Vogel (2018) show that job seekers who evaluate job offerings in the public sector respond more strongly to emotionally framed recruitment messages than to rational messages. Since affective responses predominantly occur in System 1 or the X-System, cumulative evidence suggests paying more attention to the role of rapid and quasi-automatic mental processes in the attraction of potential applicants to public organizations.

# Employment Attributes, General Work Motivation, and Application Intentions

To examine in practice how job seekers implicitly process information cues from job advertisements, we focus on a range of employment attributes that job seekers infer from the advertisements. By employment attributes, we mean attributes of the working environment that an organization in general and a job more specifically offers (Ployhart and Kim 2014). Recruitment research suggests that employers deliberately modify such attributes "for the explicit purpose of enhancing the attractiveness of a job to potential applicants" (Rynes and Barber 1990, 294). Besides the brand and reputation of an organization, employment attributes are among the organizational inducements that determine the quantity and quality of the applicant pool (Ployhart and Kim 2014). Improving employment attributes is a core strategy of organizational attraction and combines with recruitment practices when signals about such attributes are incorporated into recruitment messages (Rynes and Barber 1990). Job postings, then, convey messages about the advantages the job seeker will gain upon entering the organization. The textual and visual framing of such messages has therefore attracted some attention in the job marketing literature (for an overview, see Walker and Hinojosa 2014).

Focusing on the employer as the sender of signals about employment attributes, however, ignores the role of the job seeker as the receiver of such signals (Highhouse and Hoffman 2001). In line with information processing theory and supporting evidence

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outlined above, we expect that prospective applicants who screen job advertisements will perceive employment attributes and that these perceptions will translate into application intentions depending on their valence. Previous research has confirmed that perceptions of employment attributes are important determinants of job application decisions (Harold, Uggerslev, and Kraichy 2014; Lievens and Highhouse 2003). However, this still small body of literature has not yet accounted for the tacit processes through which employment attributes become relevant in application decisions.

Our focus is on perceptions of intrinsic, extrinsic, and prosocial employment attributes and their impact on intentions to apply for an advertised job. Public management research has recently been preoccupied with societal impact and the well-being of others as an attractor to public sector jobs (Korac, Saliterer, and Weigand 2018). This stream of research suggests that job seekers are likely to respond to employment attributes that address and elevate their PSM. It follows from this, and from our reasoning above, that stronger perceptions of employment attributes that are desirable in terms of expected motivational effects are likely to translate into higher intentions to apply for a job. However, since the desire to do good for others and for society is only one of many reasons why to work in the public sector, job seekers make application decisions in a multi-incentive setting and consider a broader range of employment attributes, including those that address more general work motivations (Perry 2014; Perry and Vandenabeele 2015). Accordingly, they will form expectations as to what degree an advertised job will be motivating in various respects and satisfy different kinds of needs.

We broadly classify employment attributes that do not address the specific motivational disposition of PSM into extrinsic and intrinsic attributes, which corresponds to two types of general motivation as described in self-determination theory (SDT) that drive behaviors across all fields of human activity (Deci and Ryan 2000). Examples of extrinsic employment attributes are career prospects, social prestige as well as monetary and nonmonetary benefits. Such attributes relate to extrinsic motivation, which refers to doing something to achieve a certain outcome (Deci and Ryan 2000). In this case, it is not the activity itself that is rewarding but the separable consequences of it. Extrinsically driven behaviors do not arise from one's sense of self but must initially be triggered by tangible incentives and are often accompanied by perceptions of pressure and control. However, extrinsically motivated behaviors can vary considerably in the extent to which values and behavioral regulations are internalized and integrated (Deci and Ryan 2000).

In the field of public management, scholars have called for a greater consideration of extrinsic rewards as provided by jobs in the public sector. For example, Van de Walle, Steijn, and Jilke (2015) acknowledge that "research should take into account the fact that people want to work in the public sector not only to serve the public good, but that factors such as money or job security also play a role" (850). Lee and Choi (2016), in a study on Korean college students, show that job security, rather than PSM and prosocial behavior, is an important driver for public sector employment. Similarly, Lewis and Frank (2002), using survey data from the United States, demonstrate that job security is the strongest predictor of the preference to work for the government. This is consistent with the finding of Ritz and Waldner (2011), who demonstrate that the promise of a "safe future" is an important antecedent of attraction to the public sector among students at a University of the Armed Forces in Germany. These and a few other studies on reward preferences and work values suggest that it is important to consider extrinsic incentives in the attraction of job candidates to public sector jobs more closely (Perry 2014; Perry and Vandenabeele 2015). Thus, our first hypothesis is:

H<sub>1</sub>: Stronger perceptions of extrinsic employment attributes will lead to increased intentions to apply for an advertised job.

Intrinsic employment attributes address intrinsic motivation, which means that individual needs are satisfied directly (Osterloh and Frey 2000). Human motivation is said to be intrinsic when the reward consists of the activity itself rather than the achievement or avoidance of separable outcomes (Deci and Ryan 2000). Previous research has yielded mixed findings as to whether intrinsic motivation is related to preferences for public sector employment. Van de Walle, Steijn, and Jilke (2015), in a comparative study across 26 countries, find that intrinsic work values are associated with a preference for private rather than public sector jobs. However, Crewson (1997), using secondary survey data from the United States, shows that public sector employees prioritize intrinsic over extrinsic rewards. This is consistent with the findings of Georgellis, Iossa, and Tabvuma (2011), who conclude from longitudinal data that employees in the United Kingdom are attracted to the public sector more by intrinsic than by extrinsic rewards. Evidence is thus inconclusive with regard to the role of intrinsic motivation in the attraction to public sector jobs. Analogous to our reasoning above, we expect potential applicants to evaluate an employer and an advertised job favorably when they perceive attributes that address their intrinsic motivation. Just as extrinsic motivation, intrinsic motivation is a general motivation with broad relevance to many, if not all, fields of human

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activity (Deci and Ryan 2000). Jobs that promise to be intrinsically motivating will thus attract applicants independently of the sector in which the job is vacant. We thus hypothesize that perceptions of intrinsic employment attributes, if and once they occur, will increase the intent to apply for a vacancy:

H<sub>2</sub>: Stronger perceptions of intrinsic employment attributes will lead to increased intentions to apply for an advertised job.

# Prosocial Employment Attributes, PSM, and **Application Intentions**

We do not hypothesize a general effect of perceived prosocial attributes on the intent to apply for an advertised job. Research on PSM suggests that there is a special motivation to do good for others and to have a positive impact on society; yet, this motivational disposition is not widely distributed across the general population (Perry and Wise 1990). While intrinsic and extrinsic motivation have been theorized as being rooted in basic individual needs that are relevant to all humans (individual differences in motivational levels notwithstanding), not all people will seek employment for the sake of societal benefit. We, therefore, consider these types of general work motivation to be more broadly relevant to the general population than PSM. The tradition of research on work values supports such reasoning [e.g., Twenge et al. (2010), and, with respect to public-private sector differences, see Dur and Zoutenbier (2014)]. Hence, perceptions of prosocial employment attributes should translate much less into application intentions than perceptions of intrinsic and extrinsic attributes.

This suggests considering PSM as a moderator of the relationship between perceptions of prosocial employment attributes and application intentions. Put differently, the attraction effect of prosocial attributes is likely to occur only among job seekers with high levels of PSM. This is because individuals with high levels of PSM will appreciate jobs that have beneficial outcomes for public welfare and thus allow them to fulfill their perceived obligations, while individuals with lower levels of PSM will be indifferent towards such opportunities or even avoid them. This is broadly in line with the original hypothesis on the sorting effect of PSM in the choice of the employment sector (Perry and Wise 1990) and supportive findings in the literature (Asseburg and Homberg 2018). Introducing PSM as a moderator also accounts for the fact that PSM is unlikely to vary with situational cues (Georgellis and Tabvuma 2010; Oberfield 2014; Vogel and Kroll 2016) and, given the short-term character of information processing from job advertisements, does not figure meaningfully as an endogenous variable in our research framework. Thus, our third hypothesis is:

H<sub>3</sub>: Public service motivation will moderate the relationship between perceptions of prosocial employment attributes and intentions to apply for an advertised job such that there will be a positive effect for individuals with high levels of public service motivation.

It is of particular interest to investigate whether the proposed effects hold for both students and nonstudents (including employed, unemployed, and self-employed people). Previous research on the role of PSM in the attraction to public sector employment has made extensive use of student samples (e.g., Christensen and Wright 2011; Piatak 2016; Wright, Hassan, and Christensen 2017), but it remains unclear whether the findings generalize beyond students. We, therefore, test our research model in a mixed sample taking into account respondents' employment status.

#### **Data and Method**

# Sampling

We commissioned a professional panel provider to sample among job-seeking graduates in the United Kingdom. The sample consists of 340 randomly selected respondents who were either final-year students looking for a job or already holding an academic degree and stating that they are looking for a new job. Using this sample should increase the external validity of the results because participants were faced with a scenario that corresponded to their situation in real life at the time. Data were collected in two waves in April and May 2017, with demographics and survey items measured in the first wave and the speeded categorization task conducted in the second wave. Sample characteristics are presented in table 1.

#### Procedure and Measurements

We implemented an EVM to test our research model. EVM addresses the dilemma of conducting true experiments that maximize internal validity but are threatened by external validity concerns versus nonexperimental research that provides higher levels of external validity but is weak in explaining causal relationships (Aguinis and Bradley 2014). The flow chart of the experimental procedure is displayed in figure 1.

# Step 1. Independent and Control Variables

In the first wave, participants were asked to respond to a number of demographic questions and to report their

1 For data collection, we commissioned a professional panel provider with a pool of participants who signed up voluntarily to conduct surveys with the company. Depending on the duration of their membership in the pool, they often conduct surveys and therefore are familiar with questionnaires. For conducting the survey (e.g., at the computer, smartphone, or tablet), the respondents receive credits, for which they can either receive a cash value or coupons.

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Table 1. Sample Characteristics

Variable	Category	N	%
Employment status	Student	50	14.71
1 /	Employed	245	72.06
	Self-employed	21	6.18
	Unemployed	24	7.06
Work experience	(Less than) 5 years	79	27.24
(nonstudents only)	6–10 years	82	28.28
· ·	More than 10 years	129	44.48
Study subject	Geography	23	6.76
•	Engineering	30	8.82
	Law	22	6.47
	Medicine	14	4.12
	Social sciences	51	15.00
	Business sciences	46	13.53
	Public administration	7	2.06
	Other	147	43.24
Parental influence	Mother and/or father in public sector	114	33.53
	No parent in public sector	226	66.47
Gender	Male	148	43.53
	Female	192	56.47
Age $(M = 32.78; SD = 7.69)$	n/a	n/a	n/a
Total		340	100.00

agreement with PSM items. *PSM* was measured with the international scale developed by Kim et al. (2013). Responses were given on a 7-point Likert scale from 1 = "strongly disagree" to 7 = "strongly agree," and a mean index across all 16 items of the instrument was generated. A confirmatory factor analysis supported the theoretically expected four dimensions of the construct (Appendix 1).

We controlled for several demographic characteristics because our research design is not a true randomized controlled trial (RCT) experiment that can rely on fully randomized assignment to control for effects other than the treatment effects (step 3). Employment status is a dummy variable with a value of 1 if a respondent was a student and 0 otherwise. Furthermore, we controlled for parental influence by asking respondents for the jobs of their parents. The dummy is 0 if neither mother nor father worked or had worked in the public sector and 1 otherwise. Previous studies have shown that parental socialization at young ages may have an impact on later job choices (e.g., Pedersen 2013; Stritch and Christensen 2016). Finally, we included age and gender in our measurements, as these demographics have exhibited effects on job choice decisions in previous research (e.g., Choi 2017).

#### Step 2. Practical Exercise

The second wave started with a practical exercise in the functionality of the experimental tool. We adapted a speeded categorization task to the purposes of our study (step 5). To practice the use of the categorization task, participants were exposed to pictures and subsequently asked if a descriptive term correctly denoted the subject of the picture (e.g., "woman" for a picture showing a woman). They were briefed to reply intuitively and as fast as possible by placing their index fingers on the keys "A" and "L." By pressing the letter "A" on the keyboard, participants indicated a match between the word and the picture, while the "L"-button indicated a mismatch. This training was repeated several times to allow participants to become comfortable with the tool, to automatize their reactions, and to increase their response times.

# Step 3. Stimulus

The experimental stimuli were hypothetical advertisements of public sector jobs (see Appendix 2 for the vignette dimensions, Appendix 3 for a sample vignette, and the Supplementary Appendix for all vignettes). To ensure credibility and realism of the vignettes, we carried out a content analysis of job advertisements in the United Kingdom, identified three recurring themes in the texts (i.e., "benefit," "effects of work," and "stakeholder relations") and adopted exemplary excerpts from each of these dimensions. We added work-related pictures to enrich the resulting texts with visual cues. We identified these pictures in a pretest with 22 students at a British university, who were asked to select the image that best fitted the job advertisements. The order of the varied picture and paragraphs in the text corresponded to conventions in job advertising and was the same in all vignettes. In total, we generated 32

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Table 2. Attributes Used in Speeded Categorization Task (step 5)

Category	Attributes	Source Grant (2008); Kim (2016)		
Prosocial employment attributes	Helping others Policy making Social contribution Meaningfulness			
Intrinsic employment attributes	Appeal Engagement Enjoyment	Grant (2008)		
Extrinsic employment attributes	Benefits Prestige Career	Lievens and Highhouse (2003); Vogel, Keppeler, and Papenfuß (2017)		

vignettes, grouped them randomly into 11 vignette sets of three vignettes each<sup>2</sup> and assigned each participant to one of these sets. The participants were randomly assigned to 1 of the 11 vignette sets and saw all vignettes within their set in randomized order. This complies with a mixed research design of EVM, where "different groups of participants receive different sets of vignettes; however, within each group, participants see the same vignettes" (Aguinis and Bradley 2014, 361).

#### Step 4. Attention Check

After each vignette was presented, the participants were asked a question about the content of the job advertisement. This control question was intended to indicate whether respondents paid attention to the text and understood it correctly. If a wrong answer was given, the vignette was presented again, and the control question was repeated.<sup>3</sup> If a respondent gave a wrong answer twice, he or she was excluded from the survey.

# Step 5. Speeded Categorization Task

Once respondents completed the attention check successfully, they were redirected to the speeded categorization task, a computer-based rapid sorting task (e.g., Ranganath, Smith, and Nosek 2008). In this type of response time-based test, participants are exposed to words and have to categorize each of these words under speeded conditions. Due to this time pressure, evaluations are more spontaneously and less controllably activated than by survey instruments, and therefore more likely to reflect intuitive and associative attitudes toward the object of evaluation. Such measures better resist attempts of deliberate adjustment through self-report because they capture processes that operate to some extent at subconscious levels and thus beyond full introspective access. In our application of

2 Since 32 is not divisible by 11, one vignette was present in two sets.

the test, the words that appeared successively on the screen were intrinsic, extrinsic, and prosocial employment attributes as possible descriptors of the previously presented job advertisement (step 3). To avoid long response times, we selected employment attributes from the literature that were as brief and concise as possible (table 2). Respondents categorized each word according to two options: "match" and "no match." As opposed to the attention check (step 4), no "right" or "wrong" answers were requested because the extent to which an attribute is perceived as an appropriate description of a job is a subjective evaluation that cannot be assessed against objective criteria. The instruction was to respond quickly and without much reflection by pressing the corresponding button ("A" for "match" or "L" for "no match"). The attributes were presented in randomized order and remained visible until the participants pressed either of the specified keys.

We considered responses within a time span of 300 to 10,000 ms for further evaluation (Greenwald, Nosek, and Banaji 2003). By following this convention, we ensured that the observations complied with what is widely acknowledged in the literature as quasi-automatic and largely implicit reactions to stimuli. Furthermore, we regarded response times that exceeded the mean plus 2 standard deviations (SDs) as outliers and deleted them (e.g., Golombek and Raknerud 1997; Greenwald, Nosek, and Banaji 2003). In total, 137 outliers were excluded, which resulted in a final sample containing 889 responses from 340 participants. The average speed of these remaining responses was 1013.2 ms (1.01 s) with an SD of 346.9 ms (0.35 s).

Perceptions of *extrinsic, intrinsic, and prosocial employment attributes* are count variables that reflect the number of attributes for which respondents indicated a match with the job advertisement. For example, the value of the variable for extrinsic employment

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<sup>3</sup> In supplemental analyses, we tested for differences between mean scores of participants who failed the attention check in the first attempt and mean scores of respondents who passed the test. We found no such differences.

<sup>4</sup> To check the robustness of our findings, we estimated all models with and without outliers. The findings revealed no substantial differences in the estimations.

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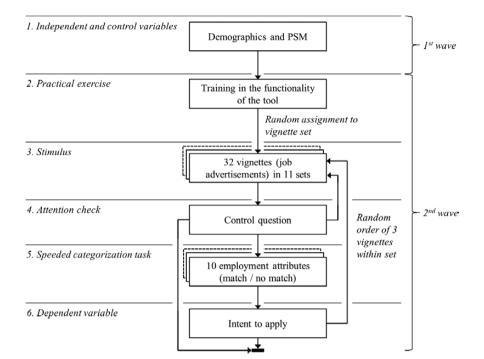


Figure 1. Experimental Procedure

attributes is 0 if a respondent found none of the corresponding attributes (i.e., "benefits," "prestige," and "career"; table 2) to be descriptive of the advertised job, and the value is 3 if a respondent indicated that all three attributes matched the advertised job. Accordingly, the value of the variable for prosocial employment attributes is 0 if a respondent found none of the corresponding prosocial attributes to match and 4 if all prosocial attributes matched.<sup>5</sup>

# Step 6. Dependent Variable

After each cycle of a vignette, attention check, and categorization task, the dependent variable "intent to apply" was measured with the single item "If I saw this job opening, I would apply for it," which has only been slightly modified compared with the original item suggested by Collins (2007). Responses were measured on a 7-point Likert scale from 1 = "strongly disagree" to 7 = "strongly agree."

#### Manipulation Check

We conducted a manipulation check to assess if and to what extent the measured perceptions of employment attributes were indeed elicited by the experimental stimuli. For this purpose, we decomposed the observed variance in the perceptions by means of a two-level random effects analysis of variance (ANOVA) with the

presented job advertisements at level 1 and the respondents at level 2 (table 3). Intraclass correlation coefficients (ICCs) fall between 0.233 and 0.354, indicating that between 64.6% and 76.7% of the variance in the dependent variable resides on the level of the vignettes. This suggests that the treatments had been effective because a substantial proportion of the observed variance should originate from the experimental stimuli at level 1. However, it has to be noted that perceptions of employment attributes still vary substantially and significantly between individuals, independently of the job that was actually advertised. We will return to this finding at the end of the discussion section.

# Estimation Strategy

We used multilevel mixed-effects linear regression to test our hypotheses. This procedure accounts for our nested data structure, which results from the fact that each respondent was exposed to three vignettes and thus completed the speeded categorization task three times (figure 1). The intercept-only model (not reported) shows an ICC of 0.485, which means that 48.5% of the variance in the dependent variable resides on level 2 (i.e., the level of respondents). Hence, we have reason to assume that multilevel analysis is an adequate estimation approach.

#### Results

We begin the presentation of results with some descriptive information. Table 4 provides mean, SD, and

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<sup>5</sup> We also ran supplemental models including the response times but found no substantial direct and moderating effects on application intentions.

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Table 3. Manipulation Check: Two-Level Random Effects ANOVA

correlations of all study variables. Figure 2 shows the

network of perceived employment attributes after

participants were exposed to the job advertisements.

The network was generated on the basis of frequency

counts and shows the 10 employment attributes as nodes and the number of co-occurrences as ties. By

	P	erceptions of Employment Attribut	tes
	Extrinsic Estimate (SE)	Intrinsic Estimate (SE)	Prosocial Estimate (SE)
Level 1 (vignettes)	0.741***	1.066***	1.600***
, ,	(0.048)	(0.070)	(0.111)
Level 2 (respondent)	0.409***	0.383***	0.487***
, ,	(0.062)	(0.072)	(0.105)
ICC	0.355	0.264	0.233

p < .05, p < .01, p < .001.

application intentions when they are implicitly associated with the advertised job. In terms of substantial effects, the impact of intrinsic employment attributes is stronger than the impact of extrinsic employment attributes, yet this difference is small and decreases stepwise in alternative specifications. However, since the effects hold across all models, we find strong support for  $H_1$  and  $H_2$  (i.e., perceptions of extrinsic and intrinsic employment attributes lead to an increased intention to apply).

co-occurrence, we mean the joint appearance of perceptions when participants evaluated a job posting. Two or more perceptions co-occurred when respondents indicated them as matching the same job advertisement. We aggregated this information over all respondents and vignettes and arrived at a symmetrical matrix with the 10 attributes as row and column heads and the frequencies of co-occurrences as values. The network in figure 2 is a visual transformation of this numerical similarity information. The size of the network nodes indicates the number (in parentheses) of observed perceptions of the respective attribute. On average, respondents most frequently associated prosocial employment attributes with the advertised jobs. This still applies even when "policy making" is excluded as outlier. This attribute was least frequently associated and, consequently, is located farthest away from all other attributes. The coordinates of the nodes were determined by multidimensional scaling. Accordingly, proximities in the network reflect similarities in terms of co-occurring perceptions (additionally signified by varying tie strengths). Except for the outliers, and dense interrelations among all employment attributes notwithstanding, the three classes (i.e., prosocial, intrinsic, extrinsic) cluster in different regions of the network, which shows that participants perceived

The level 2 predictor is entered in Model 2. PSM exerts a positive and significant influence on the intent to apply (b = 0.320, p < .001). The original hypothesis that PSM facilitates self-selection into public service (Perry and Wise 1990) thus finds preliminary support. It has to be noted that this effect is substantially smaller than the attraction effects of extrinsic and intrinsic employment attributes. However, the association between PSM and application intentions disappears once interaction effects are included. Model 3 extends the analysis to include cross-level two-way interactions between perceptions of employment attributes, PSM, and the respondent's status as a student. None of these interactions yield significant effects except for one: perceptions of prosocial employment attributes interact positively with PSM (b = 0.110, p <.05). Put differently, for highly public service motivated individuals, the intent to apply increases the more salient individual perceptions of prosocial employment attributes become. Hence, H<sub>3</sub> predicting such a moderation effect finds support.

them as to some extent distinct from each other. The results of the multilevel mixed-effects linear regressions are presented in table 5. Model 1 is a restricted model with a random intercept but fixed predictor effects, including only level 1 and control variables. The model thus shows how perceptions of various employment attributes translate into the intent to apply for an advertised job without further consideration of PSM. Both extrinsic (b = 0.529, p < .001) and intrinsic employment attributes (b = 0.628, p < .001) have strong and significant positive effects on

Model 4 also considers cross-level three-way interactions among perceptions of employment attributes, PSM, and student status. The interaction term involving perceptions of prosocial employment attributes shows a negative effect at a conventional level of statistical significance (b = -0.469, p < 0.05). This finding implies that the two-way interaction between perceptions of prosocial employment attributes and PSM disappears in the subsample of students. To illustrate this finding and facilitate interpretation, figure 3 shows the interaction plots for the subsamples of students and nonstudents. Respondents were categorized

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		7							1.00	-0.02	0.15*
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10.15		5					1.00	0.01	*60.0	-0.03	*60.0
		4				1.00	0.20*	0.03	-0.02	-0.03	0.02
10.20		3			1.00	0.66*	0.21*	0.05	-0.05	-0.01	0.02
10.25		2		1.00	0.63*	0.45*	0.14*	0.03	-0.05	-0.01	0.05
		1	1.00	0.50*	0.61*	0.46*	0.26*	0.04	-0.05	0.01	-0.05
10.30		Max		3	3	4	_	09	1	_	1
10.35		Min	П	0	0	0	_	17	0	0	0
		SD	1.846	1.073	1.205	1.447	1.07	69.7	n/a	n/a	n/a
10.40	rrelations	M	3.877	1.809	1.838	2.451	5.281	32.700	n/a	n/a	n/a
10.45	i <b>ble 4</b> . Descriptive Statistics and Correlations	Variable	lly	Extrinsic employment attributes	Intrinsic employment attributes	Prosocial employment attributes			rence (d)		
10.50	ıble 4. Descript		Intent to apply	Extrinsic em	Intrinsic emp	Prosocial em	PSM	Age	Parental influence (d)	Student (d)	Female (d)

Note: Cross-level correlations are unweighted \*p < .05.

along three criteria: First, we drew a distinction between participants with high and low levels of PSM by splitting the sample at the mean value of PSM. Second, we categorized respondents into two groups: respondents that had strong and respondents that had weak perceptions of prosocial employment attributes. We considered respondents who perceived more than two matches of prosocial attributes with the advertised job as having had strong perceptions of these attributes, while respondents with less than two matches fell into the group of those who had weak perceptions. Third, we used demographic information to distinguish between students and nonstudents. The right-hand graph shows that the lines for students with high and low PSM are almost parallel, indicating no interaction between PSM and perceptions of prosocial employment attributes. In contrast, the left-hand graph shows that non-students with high levels of PSM respond much more strongly to prosocial employment attributes than their counterparts with low levels of PSM.

Figure 4 displays the contrasts of margins of perceived versus not perceived prosocial, intrinsic, and extrinsic employment attributes. Each dot indicates the average contrast in percent to form an increased intention to apply of the respective group compared with those group members who did not perceive the specific attribute. For example, the contrast of enjoyment is 0.438 for nonstudents. This means that non-students who perceived the enjoyment attribute are on average about 43.8% more likely to articulate a high application intention than nonstudents who did not perceive the enjoyment attribute.<sup>6</sup> All displayed contrasts of margins are significant in statistical terms.

# **Discussion and Conclusion**

This study has explored the tacit dimension of attraction to public sector jobs in multi-incentive settings. Previous research on PSM as a driving force to apply for government jobs has tended to neglect the many other employment incentives that the public sector offers. A further shortcoming of prior studies is the use of explicit measurements, most commonly in survey designs (Groeneveld et al. 2015). Such questionnaires trigger reflective and conscious thinking, which may lead to biased results, as they are, for example, more susceptible to socially desirable response patterns. Our study has pioneered the measurement of perceptions of various employment attributes using a speeded categorization task. This approach accounts for the fact

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<sup>6</sup> To estimate the contrasts of margins, we generated a binary variable of the application intention, where "0" indicates a low application intention (values 1–4) and "1" means a high application intention (values 5–7).

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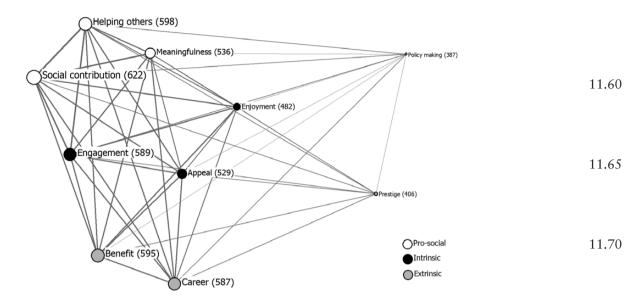


Figure 2. Associative Network of Employment Attributes<sup>a</sup>
<sup>a</sup>Nodes are perceptions of employment attributes, ties are co-occurrences (i.e., joint appearances) of these perceptions when participants were exposed to job advertisement. In parentheses: Number of observations. Node sizes vary with number of observations, tie strenghts indicate number of co-occurrences. Coordinates of nodes were determined in multidimensional scaling (the closer the distance between nodes, the more frequently the perceptions co-occurred).

that a broad range of mental activities in human information processing and decision making, including the context of job marketing, occurs tacitly, particularly under conditions of incomplete information and low attention spans (e.g., Slabbinck et al. 2018).

Several implications for both theory and practice arise from our findings. Most generally, the results support calls for more research on public sector attraction in multi-incentive settings because they confirm that incentives other than prosocial impact substantially account for the attraction to public sector jobs (e.g., Georgellis, Iossa, and Tabvuma 2011; Lee and Choi 2016; Lewis and Frank 2002; Linos 2018; Van de Walle, Steijn, and Jilke 2015). In a field experiment on minority recruitment for police jobs, Linos (2018), for example, finds that recruitment messages with a focus on personal benefits are three times as effective as those with a focus on serving or impacting others. Similarly, our results suggest that perceptions of prosocial employment attributes do not have an overall impact on intentions to apply for public sector jobs, while both extrinsic and intrinsic attributes yield such effects. This is all the more noteworthy as descriptive analyses revealed that perceptions of prosocial employment attributes were stronger than perceptions of intrinsic and extrinsic attributes. A possible explanation is that some attributes of public sector jobs, including prosocial impact, may be obvious to an extent that they do not need particular emphasis and have no incremental effect when they are nonetheless emphasized in job advertisements (De Cooman and Pepermans 2012; Linos 2018). This would suggest not

using recruitment messages that focus on prosocial impact when advertising public sector jobs because other message contents may be less self-evident and therefore more effective.

We deviate from this line of reasoning because our results show a more nuanced picture. In the field experiment by Linos (2018), it was not possible to collect personal information on all recipients of recruitment messages, including their individual levels of PSM or any other type of motivation. It is thus not clear from this study if and how recruitment campaigns resonate differently in different target groups. The results of our moderation analyses establish an interaction between PSM and perceptions of prosocial employment attributes among nonstudents. In contrast to Linos (2018), we conclude that it is still worth sending such messages because they foster the self-selection of strongly public service motivated candidates into public sector jobs. Triggering such sorting effects by adjusting HRM practices accordingly is among the most frequently mentioned practical implications of PSM research (Christensen, Paarlberg, and Perry 2017; Ritz, Brewer, and Neumann 2016). According to our results, designing appropriate recruitment messages is one means to create this effect.

It is striking that PSM matters for the translation of perceptions of prosocial attributes into application intentions only among participants who already have work experience (i.e., nonstudents). This result echoes previous findings that employment status is relevant to how PSM affects job choice decisions (Jin 2013). More precisely, it is consistent with findings that PSM

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Table 5. Results of the Multilevel Analysis

	Model 1	Model 2	Model 3	Model 4	
	b (SE)	b (SE)	b (SE)	b (SE)	12 (0
Level 1 <sup>a</sup>					12.60
Extrinsic employment attributes	0.529***	0.522***	0.565***	0.568***	
•	(0.073)	(0.072)	(0.078)	(0.077)	
Intrinsic employment attributes	0.628***	0.614***	0.579***	0.574***	
	(0.072)	(0.072)	(0.076)	(0.076)	12.65
Prosocial employment attributes	0.026	0.017	-0.013	-0.011	12.65
- '	(0.051)	(0.051)	(0.053)	(0.052)	
Level 2					
PSM		0.320***	-0.247	-0.217	
		(0.092)	(0.196)	(0.182)	
Cross-level two-way interactions					12.70
Extrinsic employment attributes × PSM			-0.056	-0.058	
			(0.074)	(0.076)	
Intrinsic employment attributes × PSM			0.131	0.107	•
			(0.076)	(0.079)	
Prosocial employment attributes × PSM			0.110*	0.134*	12.75
			(0.054)	(0.056)	12.75
Extrinsic employment attributes × Student			-0.195	-0.237	•
			(0.190)	(0.195)	•
Intrinsic employment attributes × Student			0.101	0.146	<b>,</b>
. ,			(0.196)	(0.208)	<b>,</b>
Prosocial employment attributes × Student			0.287	0.293	12.80
1 ,			(0.162)	(0.163)	
PSM × Student			0.235	0.595	<b>,</b>
			(0.259)	(0.833)	,
Cross-level three-way interactions			,	,	,
Extrinsic employment attributes × PSM × Student	t.			0.150	12.05
Distillation of the property o				(0.296)	12.85
Intrinsic employment attributes × PSM × Student	r			0.244	•
membre employment access and a large				(0.227)	
Prosocial employment attributes × PSM × Student	•			-0.469*	•
Trosocial employment actions to a 2011				(0.218)	
Controls				(0.210)	12.90
Student (d)	0.412	0.455	-0.209	-0.228	1∠₀, ∕ ∪
Student (d)	(0.301)	(0.292)	(0.637)	(0.642)	<b>,</b>
Parental influence (d)	0.056	0.012	0.076	0.069	•
Parental innuence (u)	(0.194)	(0.188)	(0.183)	(0.184)	
Female (d)	, ,	, ,	, ,	, ,	<b>,</b>
remaie (a)	-0.315 (0.193)	-0.377* (0.188)	-0.357 (0.182)	-0.393* (0.183)	12.95
A	(0.193)	(0.188)	(0.182)	(0.183)	<b>,</b>
Age	0.010	0.009	0.007	0.008	<b>,</b>
<u></u>	(0.013)	(0.013)	(0.013)	(0.013)	<b>,</b>
Constant	0.852*	1.051**	1.026	1.075	
and the second of the second	(0.365)	(0.360)	(0.356)	(0.356)	12100
N (level 1/level 2)	193/480	193/480	193/480	193/480	12100
Within-vignette variance (level 1)	1.954	1.038	0.981	0.964	<b>,</b>
Intercept variance (level 2)	1.805	1.131	0.910	0.987	•
Slope variance (level 2)	n/a	n/a	0.121	0.011	<b>,</b>
Intercept-slope covariance	n/a	n/a	0.113	0.103	•
BIC	1693.954	1706.586	1712.126	1726.061	12105
AIC	1648.416	1638.597	1625.396	1630.057	******
−2 × Log likelihood	1628.416	1616.597	1593.396	1584.063	,

<sup>&</sup>lt;sup>a</sup>Perceptions of employment attributes after presentation of job advertisements (vignettes). \*p < .05, \*\*p < .01, \*\*\*p < .001.

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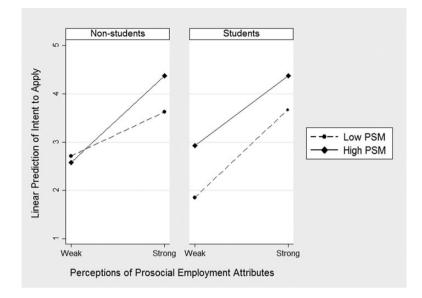


Figure 3. Cross-LevelThree-Way Interaction

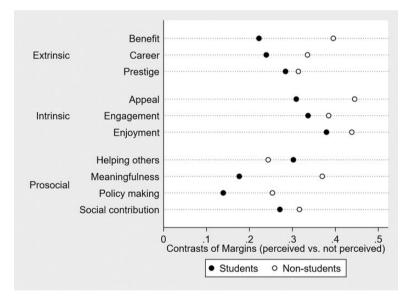


Figure 4. Contrasts of Margins of Employment Attributes

does not matter for the choice of the first job but is only relevant to subsequent job changes (Lee and Choi 2016; Wright and Christensen 2010). A possible explanation is "reality shocks" after job entry (Kjeldsen and Jacobsen 2013; Schott, Steen, and Van Kleef 2018): Graduates frequently experience a disconfirmation of their work-related expectations once they have started their first job. To regulate their identity (Burke and Stets 2009) and to regain self-congruence (Higgins 1987), young professionals may develop turnover intentions and seek a job with a better fit. If the perceived misfit occurs because the current job does not offer the expected opportunities to help others and to contribute to society, the valence of prosocial employment

attributes is likely to increase and to guide the search for a new job that better addresses the job seeker's PSM. As a result, recruitment messages triggering perceptions of prosocial attributes may resonate particularly well with public service motivated job seekers who have work experience.

While we find interactions between PSM and perceptions of prosocial employment attributes, we do not find PSM to moderate the relationships between both intrinsic and extrinsic attributes and the intent to apply for public sector jobs. This finding sheds new light on the compatibility of PSM with extrinsic incentives. Common wisdom often assumes that extrinsic rewards are harmful to the attractiveness of

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public organizations because they may discourage individuals with high levels of PSM to apply. Banuri and Keefer (2016), in an experiment among Indonesian students, provide support for this view. They show that mission-based organizations attract significantly less prosocially motivated applicants when they provide stronger extrinsic incentives (i.e., high wages). In contrast, the field experiment by Dal Bó, Finan, and Rossi (2013) yields no significant effects of extrinsic incentives on the PSM of applicants for government jobs in Mexico. Ashraf Bandiera, and Lee (2018), employing a field experiment in Zambia, demonstrate that there is an average decrease in the applicants' prosocial motivation when extrinsic incentives are advertised, but this effect only occurs among candidates with low talent.

The latter study may explain why we do not find an interaction effect between PSM and perceptions of extrinsic employment attributes: Since we sampled exclusively among job seekers with high levels of qualification, the lower end of the general ability distribution is not covered by our sample. Christensen and Wright (2011) also built their experimental vignette study on a sample of highly qualified respondents (i.e., students of legal studies) and reported no interaction between PSM and salary in the choice of public sector jobs. An explanation for this nonfinding is that different dimensions of PSM may push preferences for extrinsic employment attributes in different directions, balancing each other out on an aggregated level. Ballart and Rico (2018), in an experimental vignette study with undergraduate students in Spain, find such opposite effects for job security. Therefore, more research on possible adverse selection effects of extrinsic incentives on PSM is needed. This research should examine different types of extrinsic incentives separately because PSM may trigger heterogeneous responses to incentives as different as high pay and job security (Chen and Hsieh 2015). Our results echo preliminary findings that such incentives may be less detrimental to PSM than is often (over-)generalized from motivation crowding theory (Kroll and Porumbescu 2017; Stazyk 2013).

Ultimately, it is important to see the results in the UK context. Considering the increased levels of student debts in the United Kingdom due to changes in tuition schemes, applicants may have a preference for higher paid jobs, which potentially biased our results. However, recent evidence by Callender and Mason (2017), who compare debt-averse attitudes of students using data from 2002 and 2015, shows that the majority of students in 2015 was less debt-averse than the student body in 2002. One explanation of this finding is that students are clear about the fact that student loan repayment is contingent on their earnings, which may level the preference for higher paid entry-level

jobs. Taking these findings into account, we consider this potential bias negligible.

#### Implications for Practice

Our results provide guidance for HR managers who wish to develop targeted recruitment practices for public sector jobs. Such practical implications are particularly relevant in labor markets where there is a lack of applicants, which is increasingly the case in many subfields of the public sector due to demographic changes. We need to recall, however, that the goal of recruitment is not merely to enlarge the pool of job candidates (i.e., the quantity of applicants) but to attract a sufficient number of candidates who bring the necessary qualifications to the job (i.e., the quality of applicants).

First, if HR managers wish to facilitate sorting effects between candidates with high and low levels of PSM already at the early stages of the recruitment process, messages in job advertisements should highlight prosocial employment attributes. High levels of PSM are beneficial to desired outcomes in many public sector jobs (Harari et al. 2017; Homberg, McCarthy, and Tabvuma 2015) and hence an indication of an applicant's quality. Our finding that neither extrinsic nor intrinsic but only prosocial incentives yield these sorting effects is broadly in line with conclusions drawn in previous studies (e.g., Ritz and Waldner 2011).

Second, our results suggest that highlighting prosocial attributes of public sector jobs (such as societal impact, public values, higher purposes) is advisable only as a supplemental rather than an exclusive strategy because employment incentives that are perceived as extrinsic and intrinsic are considerably more appealing to potential applicants. It is important to note that our results do not suggest negative impacts arising from emphasis on extrinsic incentives (such as pay, job security, pension schemes, or flexible working hours) in terms of discouragement of candidates with high levels of PSM. HR managers thus do not need to be concerned about combinations of extrinsic and prosocial incentives in job advertisements.

Third, recruiters who aim to attract public service motivated applicants should send prosocial signals preferably to candidates with work experience. The same recruitment strategy is largely ineffective among students because sorting effects between individuals with high and low levels of PSM do not occur in this target group. Since job advertising is costly and since attention is limited, HR managers should highlight extrinsic and intrinsic advantages of public sector jobs, rather than prosocial characteristics, when students are the targets of recruitment.

Fourth, and related to the previous point, there is little benefit in emphasizing prosocial incentives when

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PSM is of limited relevance for an advertised job. Not all jobs in the public sector require employees with high levels of PSM. Jobs, for example, that require high technical skills and entail little contact with citizens, such as IT services in the back office, are often similar in the public and private sector. When HR managers recruit for such jobs, sorting effects between candidates with high and low levels of PSM are not of primary concern. Accordingly, when the target group is rather unspecific in terms of PSM, personnel marketing should emphasize the extrinsic and intrinsic characteristics of the vacancy.

#### Limitations

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Despite these theoretical and practical implications, some limitations of our study are worth considering. First, we measured perceptions of employment attributes but we cannot exactly determine the triggers of these perceptions beyond the presented job advertisements. To derive more detailed implications for the design of job signals, a deeper understanding of those attributes of public sector jobs is required that are largely taken for granted and thus do not need special emphasis throughout the recruitment process (De Cooman and Pepermans 2012; Linos 2018). Second, our focus was on the formation of application intentions at an early stage of recruitment, that is, when job seekers form initial intentions to apply or not. Since such perceptions may play different roles at subsequent stages of recruitment, that is, when applicants decide whether to maintain their status or withdraw and whether to accept or reject a job offer, we cannot claim generalizability of our findings across these stages. Third, although EVM mitigates problems of external validity as compared with laboratory experiments, inference to real-life settings is still problematic. In the setup of our study, we made extensive arrangements to ensure external validity, particularly by adopting texts from real job advertisements and by sampling among current job seekers. However, experimental tools such as association tests always put participants into somewhat artificial, technically driven situations. Further, a mixed design of EVM (Aguinis and Bradley 2014), as applied in this study due to the large vignette universe, cannot fully rely on random assignment to control for alternative explanations. Finally, although our results establish positive and highly significant effects of intrinsic and extrinsic attributes without considering individual levels of intrinsic and extrinsic motivation, exploratory power and conceptual implications would have been even richer if such measures were included. As our survey did not provide sufficient space to this end, we suggest future research to include global motivation scales as proposed in the self-determination literature (Chen, Chen, and Xu 2018; Tremblay et al. 2009).

#### Outlook and Further Research

Previous research on PSM has made important contributions to our understanding of why employees wish to enter the public sector (Korac, Saliterer, and Weigand 2018), but the large number of studies published on this subject over the past decades have sometimes left the impression that the altruistic desire to do good for others and society is the main (or even only) driver to apply for public sector jobs. Our study shows that expectations of extrinsic and intrinsic rewards are stronger predictors of the intent to apply for public sector jobs than PSM. Recruitment for public sector jobs should thus not neglect rewards that address general work motivations, including extrinsic incentives that have often been considered as being at odds with PSM. While we do not find that PSM interacts negatively with extrinsic nor positively with intrinsic rewards, it increases the receptivity of potential applicants toward prosocial employment attributes (vet only among candidates with work experience). This is important for HR managers who want to adjust their recruitment strategies to specific target groups.

Our study also has conceptually and empirically disentangled the process of public sector attraction in going beyond the direct link between PSM and job choice decisions established in many previous studies. A next step forward would be to consider an even broader range of employment attributes that job candidates may receive signals from job advertisements. Future research could also study which of these signals create the desired perceptions under what conditions. For this purpose, more specific job advertisements could be used as stimuli and the advertised jobs could be varied across different professional subfields of the public sector.

It is also of interest which perceptions may have origins other than received recruitment messages, for example, the socialization, education, or experience of the receiver. A peripheral yet noteworthy finding of our manipulation check is that between 23.34% and 35.40% of the variance in perceptions of employment attributes resides at the level of the respondent who has these perceptions independently of the actual job advertisement. This is consistent with the fact that fast processing of social information builds on stereotypes in the long-term memory (Kahneman 2013; Lieberman 2007). Prejudices toward public sector employers and employees may influence the evaluation of job openings, but it is unclear which person has which type of prejudices. We also do not know how prejudices emerge, how strong they are and which recruitment practices may be effective in modifying existing or creating new stereotypes. If this perspective were pursued further, recent research on anti-public sector bias (Marvel 2015) would become even more relevant to HRM in the public sector.

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# Appendix 1

# Results of CFA

Variable		Item	Cronbach's Alpha	Goodness-of-Fit	16.6
PSM Kim	APS	I admire people who initiate or are involved in activities to aid my community	0.92		
et al.		It is important to contribute to activities that tackle social problems		CFI: 0.995	
(2013)		Meaningful public service is very important to me		RMSEA: 0.087	
		It is important for me to contribute to the common good		SRMR: 0.009	16.6
	CPV	I think equal opportunities for citizens are very important	0.92		
		It is important that citizens can rely on the continuous provision of public services		CFI: 0.997	
		Ît is fundamental that the interests of future generations are taken		RMSEA: 0.067	
		into account when developing public policies			16.7
		To act ethically is essential for public servants		SRMR: 0.007	10./
	COM	I feel sympathetic to the plight of the underprivileged	0.93		
		I empathize with other people who face difficulties		CFI: 0.999	
		I get very upset when I see other people being treated unfairly		RMSEA: 0.018	
		Considering the welfare of others is very important		SRMR: 0.003	
	SS	I am prepared to make sacrifices for the good of society	0.91		16.7
		I believe in putting civic duty before self		CFI: 0.999	
		I am willing to risk personal loss to help society		RMSEA: 0.032	
		I would agree to a good plan to make a better life for the poor, even if it costs me money		SRMR: 0.005	

# Appendix 2

# Experimental Stimulus (step 3)

Vignette dimension	Content of the job advertisements
Effects of work	You'll contribute to projects and issues that make a difference to everyone. You'll make a constructive contribution and create an added value to society by creating solutions that better meets the need of the people it serves. <sup>a</sup> (Empty)
Benefits	We offer you attractive benefits, for example, a job bonus and a broad operational health management inclusive an active sports community. You will join the Civil Service pension scheme. Of course, you will have flexible working options to promote a good work-life balance. We expect that you do not regard your job as 9-to-5 job, but that you are poised to emerge into the work. <sup>a</sup>
Stakeholder relations	Our organization cooperates closely with relevant national and international authorities in the completion of tasks. We attach importance to a bi- and multilateral cooperation with other states and with a stakeholder community.  (Empty) <sup>a</sup>
Pictures	Flags <sup>a</sup> Stamps Hands (Empty)

<sup>&</sup>lt;sup>a</sup>Content of the sample vignette in Appendix 3.

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# **Appendix 3**

We are a public organization with more than 2.500 employees in a city.

You'll contribute to projects and issues that make a difference to everyone. You'll make a constructive contribution and create an added value to society by creating solutions that better meets the need of the people it serves.

We expect that you do not regard your job as 9-to-5 job, but that you are poised to emerge into the work.

Sample Vignette (step 3).ª

<sup>a</sup>All vignettes are provided in Supplementary Appendix.

# **Supplementary Material**

Supplementary data are available at *Journal of Public Administration Research and Theory* online.

#### References

Aguinis, Herman, and Kyle J. Bradley. 2014. Best practice recommendations for designing and implementing experimental vignette methodology studies. Organizational Research Methods 17:351–71.

Ashraf, Nava, Oriana Bandiera, and Scott S. Lee. 2018. Losing prosociality in the quest for talent? Sorting, selection, and productivity in the delivery of public services. London: London School of Economics and Political Science.

Asseburg, J., and F. Homberg. 2018, forthcoming. Public service motivation or sector rewards? Two studies on the determinants of sector attraction. Review of Public Personnel Administration.

Asseburg, J., F. Homberg, and R. Vogel. 2018. Recruitment messaging, environmental fit and public service motivation: Experimental evidence on intentions to apply for public sector jobs. *International Journal of Public Sector Management* 31:689–709.

Ballart, Xavier, and Guillem Rico. 2018. Public or nonprofit? Career preferences and dimensions of public service motivation. *Public Administration* 96:404–20.

Banuri, Sheheryar, and Philip Keefer. 2013. *Intrinsic motivation, effort and the call to public service*. Policy Research Working Paper 6729. Washington, DC: The World Bank.

Banuri, Sheheryar, and Philip Keefer. 2016. Pro-social motivation, effort and the call to public service. *European Economic Review* 83:139–64.

Baum, Matthias, and Rüdiger Kabst. 2014. The effectiveness of recruitment advertisements and recruitment websites: Indirect and interactive effects on applicant attraction. *Human Resource Management* 53:353–78.

Breaugh, James A. 2013. Employee recruitment. *Annual Review of Psychology* 64:389–416

Bright, Leonard. 2016. Is public service motivation a better explanation of nonprofit career preferences than government career preferences? *Public Personnel Management* 45:405–24.

Burke, Peter J., and Jan E. Stets. 2009. *Identity theory*. New York: Oxford Univ. Press.

Callender, Claire, and Geoff Mason. 2017. Does student loan debt deter higher education participation? New evidence from England. The Annals of the American Academy of Political and Social Science 671:20–48. Carpenter, Jaqueline, Dennis Doverspike, and Rosanna F. Miguel. 2012. Public service motivation as a predictor of attraction to the public sector. *Journal* of Vocational Behavior 80:509–23.

Chen, Chung-An, Don-Yun Chen, and Chengwei Xu. 2018. Applying self-determination theory to understand public employee's motivation for a public service career: An East Asian case (Taiwan). *Public Performance & Management Review* 41:365–89.

Chen, Chung-An, and Chih-Wei Hsieh. 2015. Does pursuing external incentives compromise public service motivation? Comparing the effects of job security and high pay. *Public Management Review* 17(8):1190–213.

Choi, Yujin. 2017. Work values, job characteristics, and career choice decisions: Evidence from longitudinal data. American Review of Public Administration 47(7):779–96.

Christensen, Robert K., Laurie Paarlberg, and James L. Perry. 2017. Public service motivation research: Lessons for practice. Public Administration Review 77(4):529–42.

Christensen, Robert K., and Bradley E. Wright. 2011. The effects of public service motivation on job choice decisions: Disentangling the contributions of person-organization fit and person-job fit. *Journal of Public Administration Research and Theory* 21(4):723–43.

Collins, Christopher J. 2007. The interactive effects of recruitment practices AQ6 and product awareness on job seekers' employer knowledge and application behaviors. *Journal of Applied Psychology* 92:180–90.

Crewson, Philip E. 1997. Public-service motivation: Building empirical evidence of incidence and effect. *Journal of Public Administration Research and Theory* 7:499–518.

Dal Bó, Ernesto, Frederico Finan, and Martín A. Rossi. 2013. Strengthening state capabilities: The role of financial incentives in the call to public service. *Quarterly Journal of Economics* 128:1169–218.

De Cooman, Rein, and Roland Pepermans. 2012. Portraying fitting values in job advertisements. *Personnel Review* 41:216–32.

Deci, Edward L., and Richard M. Ryan. 2000. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry* 11(4):227–68.

Dur, Robert, and Robin Zoutenbier. 2014. Working for a good cause. *Public Administration Review* 74:144–55.

Fazio, Russell H., Joni R. Jackson, Bridget C. Dunton, and Carol J. Williams. 1995. Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social* Psychology 69(6):1013–27.

Fiske, Susan T., and Shelley E. Taylor. 2017. Social cognition: From brains to culture. Los Angeles, CA: Sage.

Georgellis, Yannis, and Vurain Tabvuma. 2010. Does public service motivation adapt? *Kyklos* 63:176–91.

Georgellis, Yannis, Elisabetta Iossa, and Vurain Tabvuma. 2011. Crowding out intrinsic motivation in the public sector. *Journal of Public Administration Research and Theory* 21:473–93.

Golombek, Rolf, and Arvid Raknerud. 1997. Do environmental standards harm manufacturing employment? Scandinavian Journal of Economics 99:29–44.

Grant, Adam M. 2008. Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology* 93:48–58.

Greenwald, Anthony G., Debbie E. McGhee, and Jordan L. K. Schwartz. 1998. Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology* 74:1464–80.

Greenwald, Anthony G., Brian A. Nosek, and Mahzarin R. Banaji. 2003. Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology* 85:197–216.

Groeneveld, Sandra, Lars Tummers, Babette Bronkhorst, Tanachia Ashikali, and Sandra van Thiel. 2015. Quantitative methods in public administration: Their use and development through time. *International Public Management Journal* 18:61–86.

Harari, Michael B., David E. L. Herst, Heather R. Parola, and Bruce P. Carmona. 2017. Organizational correlates of public service

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- motivation: A meta-analysis of two decades of empirical research. *Journal of Public Administration Research and Theory* 27:68–84.
- Harold, Crystal M., Krista L. Uggerslev, and David Kraichy. 2014. Recruitment and job choice. In *The Oxford handbook of recruiting*, eds. Daniel M. Cable, and Kang Yang Trevor Yu, 47–72. Oxford: Oxford Univ. Press.
- Higgins, E. Tory. 1987. Self-discrepancy—A theory relating self and affect. Psychological Review 94:319–40.
- Highhouse, Scott, and Jody R. Hoffman. 2001. Organizational attraction and job choice. In *International review of industrial and organizational psychology*, eds. Cary L. Cooper and Ivan T. Robertson, 37–64. Manchester: Wiley.
- Homberg, Fabian, Dermot McCarthy, and Vurain Tabvuma. 2015. A metaanalysis of the relationship between public service motivation and job satisfaction. *Public Administration Review* 75(5):711–22.
- Homberg, F., and R. Vogel. 2016. Human resource management (HRM) and public service motivation (PSM): Where are we, and where do we go from here? *International Journal of Manpower* 37:746–63.
- James, Oliver, Sebastian R. Jilke, and Gregg G. Van Ryzin, eds. 2017.
  Experiments in public management research: Challenges and contributions. Cambridge: Cambridge Univ. Press.
- Jin, Myung. 2013. Comparing employed and unemployed workers' job motivations for sector choice in East Asia: Does employment status matter? International Journal of Public Administration 36:305–19.
- Kahneman, Daniel. 2013. *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.
- Kanfer, Ruth, Connie R. Wanberg, and Tracey M. Kantrowitz. 2001. Job search and employment: A personality—Motivational analysis and metaanalytic review. *Journal of Applied Psychology* 86:837–55.
- Kim, Sangmook. 2016. Job characteristics, public service motivation, and work performance in Korea. Gestion et Management Public 5:7–24.
- Kim, Sangmook, Wouter Vandenabeele, Bradely E. Wright, Lotte Bøgh Andersen, Francesco Paolo Cerase, Robert K. Christensen, Céline Desmarais, Maria Koumenta, Peter Leisink, Bangcheng Liu, et al. 2013. Investigating the structure and meaning of public service motivation across populations: Developing an international instrument and addressing issues of measurement invariance. Journal of Public Administration Research and Theory 23:79–102.
- Kjeldsen, A. M., and C. B. Jacobsen. 2013. Public service motivation and employment sector: Attraction or socialization? *Journal of Public Administration Research and Theory* 23:899–26.
- Korac, Sanja, Iris Saliterer, and Benedikt Weigand. 2018, forthcoming. Factors affecting the preference for public sector employment at the pre-entry level: A systematic review. *International Public Management Journal*.
- Kraichy, David, and Derek S. Chapman. 2014. Tailoring web-based recruiting messages: Individual differences in the persuasiveness of affective and cognitive messages. *Journal of Business and Psychology* 29:253–68.
- Kroll, Alexander, and Gregory A. Porumbescu. 2017, forthcoming. When extrinsic rewards become "sour grapes": An experimental study of adjustments in intrinsic and prosocial motivation. Review of Public Personnel Administration.
- Lee, Geon, and Do Lim Choi. 2016. Does public service motivation influence the college students' intention to work in the public sector? Evidence from Korea. Review of Public Personnel Administration 36:145–63.
- Lewis, Gregory B., and Sue A. Frank. 2002. Who wants to work for the government? *Public Administration Review* 62:395–404.
- Lieberman, M. D. 2007. The X- and C-systems. The neural basis of automatic and controlled social cognition. In Social neuroscience. Integrating biological and psychological explanations of social behavior, eds. Eddie Harmon-Jones and Piotr Winkielman, 290–315. New York: Guilford Press.
- Lievens, Filip, and Scott Highhouse. 2003. The relation of instrumental and symbolic attributes to a company's attractiveness as an employer. *Personnel Psychology* 56:75–102.
- Linos, Elizabeth. 2018. More than public service: A field experiment on job advertisements and diversity in the police. *Journal of Public Administration Research and Theory* 28:67–85.

- Marvel, John D. 2015. Public opinion and public sector performance: Are individuals' beliefs about performance evidence-based or the product of antipublic sector bias? *International Public Management Journal* 18:209–27.
- Neumann, Oliver. 2016. Does misfit loom larger than fit? Experimental evidence on motivational person-job fit, public service motivation, and prospect theory. *International Journal of Manpower* 37:822–39.
- Oberfield, Zachary. 2014. Motivation, change, and stability: Findings from an urban police department. American Review of Public Administration 44:210–32.
- Osterloh, Margit, and Bruno S. Frey. 2000. Motivation, knowledge transfer, and organizational forms. *Organization Science* 11:538–50.
- Pedersen, Mogens Jin. 2013. Public service motivation and attraction to public versus private sector employment: Academic field of study as moderator? International Public Management Journal 16:357–85.
- Perry, James L. 2014. The motivational bases of public service: Foundations for a third wave of research. Asia Pacific Journal of Public Administration 36:34–47.
- Perry, James L., Annie Hondeghem, and Lois Recascino Wise. 2010. Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future. *Public Administration Review* 70:681–90.
- Perry, James L., and Wouter Vandenabeele. 2015. Public service motivation research: Achievements, challenges, and future directions. *Public Administration Review* 75:692–9.
- Perry, James L., and Lois Recascino Wise. 1990. The motivational bases of public service. *Public Administration Review* 50(3):367–73.
- Piatak, Jaclyn Schede. 2016. Public service motivation, prosocial behaviours, and career ambitions. *International Journal of Manpower* 37:804–21.
- Ployhart, Robert E., and Youngsang Kim. 2014. Strategic recruiting. In *The Oxford handbook of recruiting*, eds. Daniel M. Cable, and Kang Yang Trevor Yu, 5–20. Oxford: Oxford Univ. Press.
- Ranganath, K. A., C. T. Smith, and B. A. Nosek. 2008. Distinguishing automatic and controlled components of attitudes from direct and indirect measurement methods. *Journal of Experimental Social Psychology* 44:386–96
- Reeve, Charlie L., Scott Highhouse, and Margaret E. Brooks. 2006. A closer look at reactions to realistic recruitment messages. *International Journal of Selection and Assessment* 14:1–15.
- Ritz, Adrian, Gene A. Brewer, and Oliver Neumann. 2016. Public service motivation: A systematic literature review and outlook. *Public Administration Review* 76:414–26.
- Ritz, Adrian, and Christian Waldner. 2011. Competing for future leaders: A study of attractiveness of public sector organizations to potential job applicants. Review of Public Personnel Administration 31:291–316.
- Rynes, Sara L., and Alison E. Barber. 1990. Applicant attraction strategies—An organizational perspective. Academy of Management Review 15:286–310.
- Rynes, Sara L., Robert D. Bretz, and Barry Gerhart. 1991. The importance of recruitment in job choice—a different way of looking. *Personnel Psychology* 44:487–521.
- Schott, Carina, Trui Steen, and Daphne D. Van Kleef. 2018, forthcoming. Reality shock and public service motivation: A longitudinal, qualitative study among Dutch veterinary inspectors. *International Journal of Public Administration*.
- Slabbinck, Hendrik, Arjen van Witteloostuijn, Julie Hermans, Johanna Vanderstraeten, Marcus Dejardin, Jacqueline Brassey, and Dendi Ramdani. 2018. The added value of implicit motives for management research development and first validation of a Brief Implicit Association Test (BIAT) for the measurement of implicit motives. PLoS One 13.
- Stazyk, Edmund C. 2013. Crowding out public service motivation? Comparing theoretical expectations with empirical findings on the influence of performance-related pay. Review of Public Personnel Administration 33:252–74.
- Stritch, Justin M., and Robert K. Christensen. 2016. Raising the next generation of public servants? Parental influence on volunteering behavior and public service career aspirations. *International Journal of Manpower* 37:840–58.

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