

Research Article

How Does Sector Matter in Job Preferences? An Adaptive Choice-Based Conjoint Analysis

Rick Vogel*, Alina Bender*, Jana Oetken*

Abstract: Despite considerable research on attraction to public service jobs, it remains challenging to determine the extent to which the employment sector influences job choice decisions and how the public sector compares to other sectors in these decisions. This study tackles this scholarly and practical issue by employing an adaptive choice-based conjoint (ACBC) design to analyze job preferences among young and highly educated professionals in Germany, an attractive recruitment target. ACBC is advantageous compared to other conjoint designs as it more comprehensively accounts for job search as a multi-incentive, multi-stage process, in which candidates consider many attributes simultaneously and apply both compensatory and non-compensatory decision rules. The results demonstrate that the employment sector has relatively low importance in job preferences and is negotiable for the vast majority of respondents. However, when the sector matters, the public sector is more attractive than the private and nonprofit sectors. By further transitioning from a variable- to a person-centered approach, we identify three subgroups, one of which—termed impact-driven individualists—assigns considerably higher importance to the employment sector and greater utility to the public sector than others. These results hold important implications for adjusting recruitment strategies to different target groups.

Keywords: Adaptive Choice-Based Conjoint Analysis; Behavioral Public Administration; Employer Attractiveness; Human Resources Management; Recruitment

Demographic changes and the growing demand for highly skilled employees have made talent acquisition a top priority for many organizations in the Western world and beyond (Beechler & Woodward, 2009). This ‘war for talent’ affects public sector organizations just as much, if not more so, than employers in the private and nonprofit sectors. Despite considerable research on recruitment and selection for public service jobs (Jakobsen et al., 2023), however, the role of the employment sector in job attraction remains puzzling. While previous research suggests that the sector does matter in job preferences (e.g., Cordes & Vogel, 2023; Fowler & Birdsall, 2020; Ritz et al., 2022), it largely leaves open the question of to which extent it matters. Focusing primarily or exclusively on the sectoral affiliation of employers, to the neglect of the many other work attributes considered simultaneously by job seekers, can easily lead to an overestimation of how important the sector actually is. This tendency is exacerbated by the ongoing fixation on significance testing in empirical research (Schwab & Starbuck, 2025), which makes it easier to conclude that the employment sector matters even if its attraction effect might be substantially small or negligible.

Recently, scholars have begun to unravel the role of the employment sector in job preferences. In a discrete choice experiment, Ripoll and colleagues (2023) demonstrate that while the sector has a stand-alone effect on the attraction to a job, this effect is considerably smaller than that of other attributes. Lee and Jilke (2024), also

* University of Hamburg

Address correspondence to Rick Vogel at rick.vogel@uni-hamburg.de

Copyright: © 2025. The authors license this article under the terms of the Creative Commons Attribution 4.0 International License.

utilizing a choice-based conjoint design, show that the employment sector indeed matters for the initial attraction to a job, but only as long as little additional information about job attributes is available. These studies indicate that sector signals may be less significant to job seekers than the literature on the attractiveness of public employers often implies (e.g., Cordes & Vogel, 2023; Fowler & Birdsall, 2020; Ritz et al., 2022). However, both studies assess sector signals alongside only a limited number of other work attributes, which could still result in an overestimation of how important the sector is. This limitation creates issues of generalization to later stages of the attraction process, beyond the application phase, when additional work attributes become apparent and candidates must decide whether to accept or decline a job offer.

We conclude that the role of the employment sector in job attraction remains insufficiently understood in PA scholarship. A deeper understanding of this role is crucial for both theoretical and practical reasons. Theoretically, sector attraction is central to prominent theories in public administration (PA) scholarship, particularly in the literature on public service motivation (PSM; Perry & Wise, 1990). However, it remains unclear whether these attraction effects stem from the sector itself or from the information that the sector signal conveys about other, often instrumental, work attributes (Lee & Jilke, 2024). Consequently, scholars are only beginning to understand the variations in how the sector influences the attraction process as candidates gradually receive more information (Jakobsen & Homberg, 2025; Lee & Jilke, 2024). Practically, existing findings provide public sector human resource managers with inconclusive guidance on the optimal timing and manner of sending sector signals during recruitment. While some studies suggest downplaying a public sector affiliation to avoid triggering negative stereotypes (Jakobsen & Homberg, 2025), others recommend emphasizing it (Cordes & Vogel, 2023). Moreover, these recommendations lack further segmentation of the candidate market, whereas practitioners strive to efficiently allocate resources by employing recruitment strategies tailored to specific target groups.

The present study tackles these shortcomings by examining the role of the employment sector within the multi-incentive setting and multi-stage process of job attraction. How important is the employer's sector affiliation in job preferences, and what utilities do candidates assign to the public, private, and nonprofit sectors? By addressing this question through a sample of young and educated individuals in Germany ($n = 300$), our study makes three contributions: First, we further clarify the role of sector signals throughout the recruitment process. We shift our focus from the screening and application stages of organizational attraction, which have been the primary focus of previous studies (Lee & Jilke, 2024; Ripoll et al., 2025), to the hiring stage, where candidates consider whether to accept or reject job offers. At this stage, the employment sector is one of an even broader array of known work attributes, and the decisions made are more consequential. Second, we move from a variable-centered to a person-centered approach by employing cluster analysis to further segment the candidate market. While many studies on recruitment and selection in the public sector conclude with practical implications for employer branding strategies tailored to specific target groups (Jakobsen et al., 2023), to our knowledge, none have focused on identifying subgroups within their samples that require distinct recruitment strategies. Our clustering approach reveals distinct groups with specific job preference configurations. Third, this is the first study to apply adaptive choice-based conjoint (ACBC) analysis in PA scholarship (Toubia et al., 2004). This recent advancement in the family of conjoint designs offers the capacity to process a larger number of attributes than more traditional designs. A further advantage is the higher realism achieved by acknowledging that some work attributes are non-negotiable for job seekers (i.e., 'must-haves' and 'no-gos'), while others can be traded off against each other.

Data and Methods

Sample

Similar to other studies in PA (e.g., Bright & Graham, 2015; Cordes & Vogel, 2023; Fowler & Birdsall, 2020), our sampling focused on young and educated applicants, as they represent an attractive and competitive target group for recruiting. At the same time, job choices should reflect the real-life situations of young professionals, given their high career mobility. We engaged a professional panel provider to sample university graduates aged 25 to 40 years living in Germany. Data collection occurred during the COVID-19 pandemic in January 2021; we later discuss how this timing might have influenced our findings. The final sample consisted of 300 respondents with an average age of 32.7 years ($SD = 4.1$). All participants were either pursuing a Master's degree

or held a Master's or PhD degree. Appendix A presents the sample characteristics alongside demographic information on the German population within the same age group (where available). While the sample fairly reflects the composition of the population in terms of gender, age, and employment, we cannot claim statistical representativeness. The study was not preregistered.

Adaptive Choice-Based Conjoint Design

Conjoint designs have recently gained momentum in PA research, including studies focusing on job choice decisions (e.g., Hansen et al., 2023; Lee & Jilke, 2024; Ripoll et al., 2025). An important advancement within the conjoint design family is ACBC, which merges the advantages of choice-based conjoint (CBC) and adaptive conjoint analysis (ACA). Traditional CBC assumes compensatory decision-making, where all attributes within static, predefined choice sets are tradeable against one another. In contrast, ACBC recognizes that some attributes are negotiable while others are non-negotiable for decision-makers. For instance, a job seeker might reject a job offer due to a single deal-breaking attribute, such as a salary below a certain threshold, even if other factors are highly appealing. The ACBC process captures such non-compensatory decision-making, where specific attributes serve as absolute cut-offs that job seekers will not compromise on, by incorporating screening questions at the beginning of a multi-stage process. The procedure then adapts based on the respondent's answers and focuses on the most pertinent trade-offs for each individual. Consequently, ACBC mirrors the hierarchical nature of preferences and aligns with real-world scenarios by simulating the actual thought processes job seekers experience.

Whereas ACBC is capable of handling a greater number of attributes compared to conventional conjoint designs, it effectively reduces (rather than increases) response fatigue (Sawtooth Software, 2020), contributing to higher validity (Jervis et al., 2012). This benefit arises from its multi-stage process, which incorporates more elements of 'gamification,' thus providing more task variety for respondents. Indeed, although the ACBC procedure takes longer than standard CBC designs, participants rate it as more pleasant (Cunningham et al., 2010). As the process focuses attention on attributes identified as important trade-offs early on, the number of repetitive tasks in later stages is reduced. In our survey, the average response time was 13:51 minutes, which falls within a common time frame where response fatigue should not be a serious concern (Brand & Baier, 2020).

We utilized 11 attributes with a total of 30 attribute levels (Table 1). The attributes and their levels were identified by reviewing literature on job preferences, largely from PA scholarship. In this process, we leveraged our extensive expertise gained from long-standing research in the field of employer attractiveness. Relevant publications, if not already familiar to the authors, were identified through a search in academic databases, such as Web of Science, Google Scholar, and EBSCOhost. After reviewing and discussing these studies, we selected attributes that were previously recognized as relevant to job preferences and logically distinct from one another, although we could not exclude that some may empirically intercorrelate. Additionally, we consulted three human resource management experts specializing in recruitment, one from each of the sectors (i.e., public, private, and nonprofit). While these consultations do not warrant labeling our research as co-designed with practitioners, the discussions helped ensure the relevance of the selected attributes. No cross-sector differences were observed in the experts' assessments. However, it is important to note that we sought feedback on the general relevance of the attributes, rather than asking for a ranking of their importance. The attributes also meet the efficiency criteria of conjoint analytic research (Sawtooth Software, 2013).

Experimental Procedure

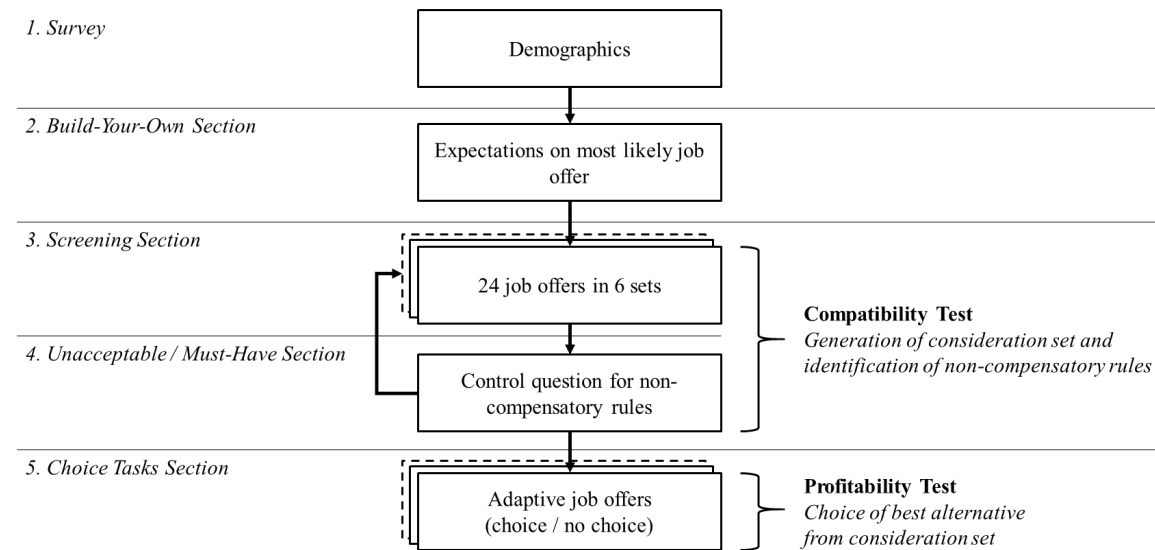
We followed the standard ACBC procedure (Ronda et al., 2021), which consists of four steps—build-your-own, screening, must-have/unacceptable, and choice tasks section—preceded by survey questions (Figure 1, Online Appendix). This procedure aligns with image theory (Beach, 1990), which proposes that job choice decisions are not a singular event but include distinct screening and choice phases. The experiment was pre-tested with 20 individuals from the target group, mostly students and alumni of a master's program in human resource management. The focus of the pretest was on the organization and layout of the questionnaire, the clarity of questions, the distinctness and consistency of attributes and levels, and the response time. Only minor adjustments were required upon the participants' feedback.

Table 1: Attributes and corresponding attribute levels included in the ACBC

Attributes	Attribute levels
Autonomy (Cantarelli et al., 2020)	• 60-80% of the decisions are made autonomously • 20-40% of the decisions are made autonomously
Contract type (Lievens & Highhouse, 2003)	• Unlimited contract • Limited to two years • Limited to one year
Ethics and social responsibility (Ronda et al., 2021)	• Accepted ethics and social responsibility policy • Disputed ethics and no social responsibility policy
Job impact (Cantarelli et al., 2020)	• High impact on target group • Low impact on target group
Personal contact (Grant, 2008)	• Many contacts with target group and physical proximity • Few contacts with target group and physical distances
Task complexity (Montgomery & Ramus, 2011)	• Known problems, less complex tasks • Need for creative and innovative approaches, complex tasks • Quick decisions and crisis management, chaotic/challenging tasks
Team and work atmosphere (Montgomery & Ramus, 2011)	• Mutual support, flexible people, and trusted relationships • Lone wolves, competitive people, and formal relationships
Salary (Montgomery & Ramus, 2011)	• Expected salary +20% • Expected salary +10% • Expected salary • Expected salary -10% • Expected salary -20%
Sector affiliation (Cordes & Vogel, 2023)	• Private sector • Nonprofit sector • Public sector
Visibility (Cantarelli et al., 2020)	• Many opportunities for public visibility • Few opportunities for public visibility
Workplace flexibility (Ronda et al., 2021)	• >10 days/month workplace flexibility • 6-10 days/month workplace flexibility • 3-5 days/month workplace flexibility • 1-3 days/month workplace flexibility • 0 day/month workplace flexibility

Survey. First, participants of the main test were asked to provide demographic information, including age, gender, educational level, study program, and employment status (Appendix A). Previous studies on job choice decisions and sector preferences have also controlled for these characteristics because they may explain preferences for or against public sector jobs (e.g., Cordes & Vogel, 2023).

Build-Your-Own Section. Second, the ACBC began with the “Build-Your-Own” Section (BYO), in which respondents were required to choose from the attribute levels (rather than attributes) presented in Table 1. Specifically, they were asked to construct a job that they would likely be offered in real-world job choice situations (i.e., “Please select the characteristics that you would most likely be offered in your next job”). This step aimed to enhance realism in the subsequent stages of the procedure by prioritizing potential job offers with realistic attributes. Moreover, the task involved participants in reflections on their job market status, thus increasing the salience of the decision-making scenario.

Figure 1: Experimental Procedure

Screening Section. Third, participants reviewed a total of 24 job offers, each representing a specific combination of the attribute levels outlined in Table 1. While all attribute levels were considered in the automated generation of the job offers, the algorithm prioritized levels that respondents selected in the BYO section or those that were similar to these levels (“near neighbors”) (for details, see Brand & Baier, 2020; Sawtooth Software, 2014). The job offers were organized into eight sets of three jobs, allowing participants to compare the jobs directly. They expressed their preferences for each job separately by indicating whether it was “acceptable” or “not acceptable” (i.e., “Please indicate for each offer whether you would consider accepting it”). The aim at this stage was to gather preliminary information on non-compensatory attributes. Through an iterative process, the software learned which attribute levels respondents were likely to avoid or require.

Unacceptable/Must-Have Section. Fourth, respondents were directly asked to confirm whether the attribute levels identified in the previous step were non-negotiable. If a level was deemed a no-go, all job offers containing that attribute were excluded from further consideration. The same applied to offers that did not include a must-have, as they also failed to meet the respondent’s cut-offs.

Choice Tasks Section. Fifth, the adaptively designed job offers were subjected to choice tasks consistent with CBC designs (e.g., Lee & Jilke, 2024) or, equivalently, discrete choice experiments (e.g., Hansen et al., 2023; Ripoll et al., 2025). CBC builds on random utility theory (McFadden, 1974), assuming that decision-makers follow their underlying preferences when they maximize their utility through choices between alternatives. Participants received choice sets featuring three offers each and were required to select one job from each set (i.e., “Which of the three job offers presented can you most likely imagine accepting?” with forced choice). The subsequent rounds were designed as a tournament in which the previously selected job offers competed against one another until the job offer with the highest utility was ultimately identified as the best option.

Data Analysis

The data was prepared for analysis using the built-in features of Sawtooth Lighthouse Studio 9.9.2 (Sawtooth Software, 2020). In Hierarchical Bayes analyses, the software calculates two key variables that are instrumental for further analysis: First, part-worth utilities quantify the strength of respondents’ preferences for each level within the attributes. These utilities indicate the weight that job seekers assign to a particular level (e.g., one-year contract) compared to other levels (e.g., two-year and unlimited contracts) of the same attribute. For comparison purposes, the utility scores are rescaled using a zero-centered difference method, where positive values indicate above-average preferences and negative values signify below-average preferences (Sawtooth

Software, 2017). The total utility of a job offer is then determined by summing the individual part-worth utilities of its attribute levels.

Second, relative importance is defined as the degree to which each attribute influences the overall preference for a job offer. The relative importance of an attribute (e.g., contract type) thus reveals its contribution to the total utility of the job offer. It is calculated as the absolute difference between the utility of the level with the lowest score (e.g., one-year contract) and that of the level with the highest score (e.g., unlimited contract). The relative importance scores of all attributes aggregate to 100%.

Results

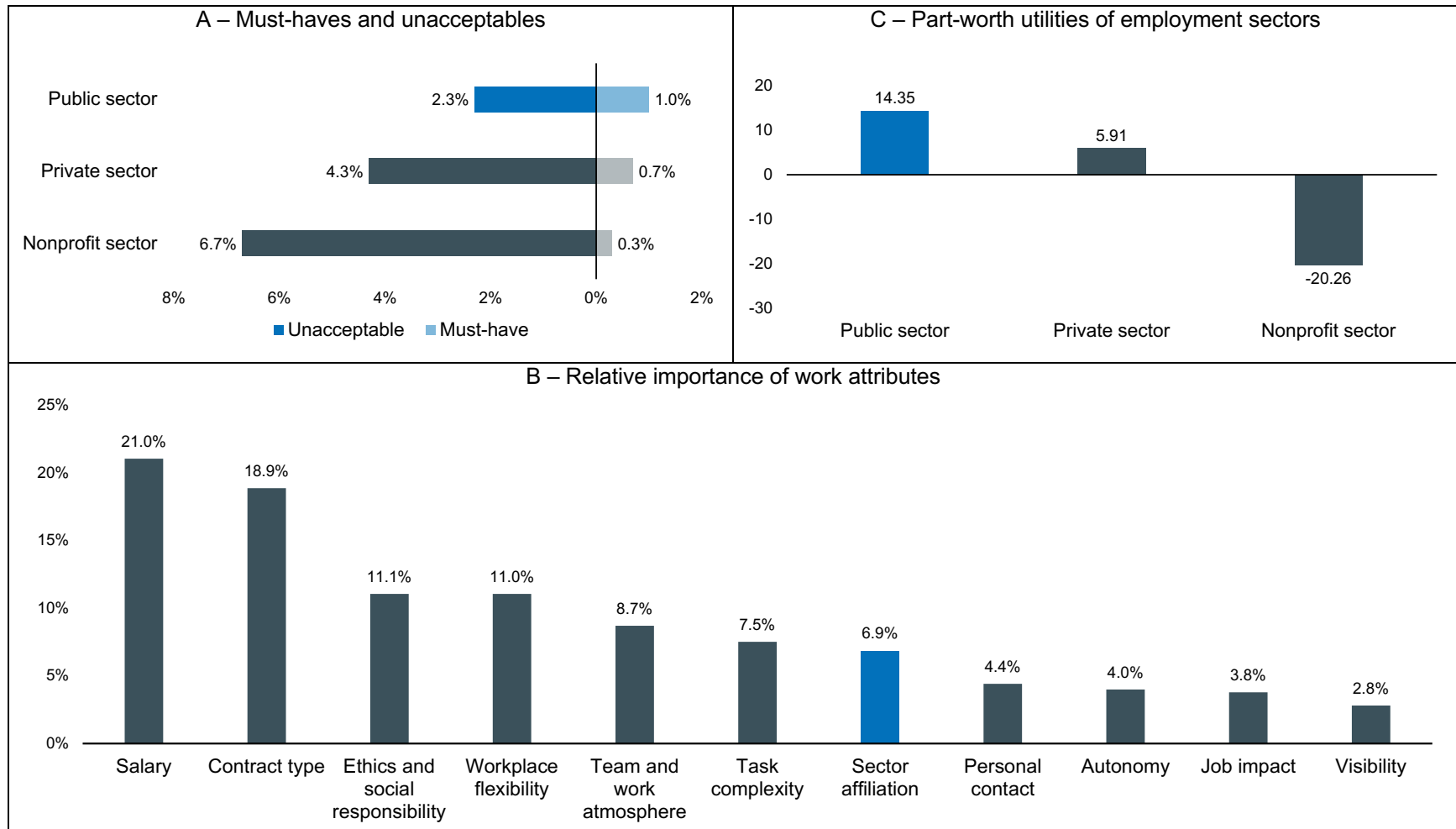
The results from the consideration phase of the experimental procedure, particularly the screening and unacceptable/must-have sections, provide initial insights into the role of the employment sector in job preferences. Figure 2A illustrates the number of respondents who identified each sector—public, private, and nonprofit—as either a must-have or a no-go. When respondents view an employment sector as non-negotiable, significantly more participants classify it as a no-go rather than a must-have, suggesting that avoidance motivations in sector choice are stronger than approach motivations (Elliot & Church, 1997). Specifically, only 1.0% of participants insist on working in the public sector, whereas 2.3% consider employment with a public employer unacceptable. These low percentages provide a preliminary indication that the employment sector is not a major factor in job preferences, especially in comparison to other, less negotiable attributes (Appendix B).

The role of the employment sector can be more precisely assessed by examining its importance relative to other attributes in the overall evaluation of a job offer. Figure 2B illustrates the relative importance of each attribute varied within the job offers, with the total importance summing to 100%. The employment sector ranks among attributes of low to medium importance, carrying a weight of 6.9%. While the sector is considerably more important than attributes such as job impact (3.8%) and visibility (2.8%), it is far less significant compared to the two attributes with the greatest weights: salary (21.0%) and type of contract (18.9%). Consequently, although the employment sector is not completely irrelevant, it is fair to conclude that it does not hold much weight in candidates' evaluations of job offers.

The results from the unacceptable/must-have section of the experimental procedure suggest that, when the sector matters, the public sector is perceived as more attractive than the private and nonprofit sectors. More respondents identified the public sector as a must-have and fewer as a no-go compared to the other sectors (Figure 2A). This finding is further substantiated by an analysis of the part-worth utilities of the three sectors. Figure 2C shows that the utility of the public sector (14.4) is higher than that of the private (5.9) and nonprofit sectors (−20.3), thus being the most attractive option among the alternatives. Appendix B presents the utilities of all attribute levels.

The results presented thus far reflect average preferences within the sample but do not account for inter-individual differences in attributing importance and utility to employment sectors. The regression analyses in Appendices C-D provide such insights. By using the importance scores as dependent variables, the analysis in Appendix C demonstrates how demographic characteristics affect the overall relevance of the employment sector in job choice decisions. As indicated by an insignificant model fit, the importance of the employment sector cannot be meaningfully explained by respondents' characteristics, including their educational background. The same applies to the part-worth utility of the public sector (Appendix D). We conclude from this finding that the public sector offers relevant jobs to all groups within our sample. In contrast, educational background is significantly related to the utility of the private and nonprofit sectors (Appendix D), suggesting that jobs in these sectors are more closely linked to specific educational trajectories.

Figure 2: Importance and Utilities of Employment Sectors



While these results suggest that the importance of the employment sector as well as the utility of an employer's affiliation with the public sector do not vary meaningfully with individual characteristics of job candidates, there might still be subgroups in the sample in which it matters more and differently than in others. However, regression analysis is a variable-centered approach that does not facilitate further segmentation of the sample. Clustering procedures, in contrast, provide a person-centered approach (Kaufman & Rousseeuw, 2005), enabling the identification of homogeneous subgroups based on similar preferences in the job market. Table 2 presents the results of a K-Means clustering analysis using the attributes from the ACBC (Ronda et al., 2021). We computed several cluster solutions ($k = 1, 2, \dots, 5$) and found three to be the optimal number of subgroups (Appendix E). Appendix F additionally shows how demographic characteristics and the part-worth utilities of work attributes differ between these clusters.

Table 2: Cluster Z-Score Means ^a

Attribute	Cluster 1 <i>Impact-driven Individualists</i> (n = 88)	Cluster 2 <i>Material Pragmatists</i> (n = 113)	Cluster 3 <i>Social Idealists</i> (n = 99)	ANOVA	
				F	p
Autonomy	.60	-.17	-.33	26.95	< 0.001
Contract type	-.20	.64	-.56	54.86	< 0.001
Ethics and social responsibility	-.49	-.53	1.03	168.85	< 0.001
Job impact	.47	-.44	.08	24.32	< 0.001
Personal contact	.25	-.30	.11	8.94	< 0.001
Task complexity	.65	-.35	-.18	32.81	< 0.001
Team and work atmosphere	-.22	-.49	.75	60.65	< 0.001
Salary	-.73	.79	.24	100.52	< 0.001
Sector affiliation	.73	-.08	-.55	51.55	< 0.001
Visibility	.36	-.12	-.18	8.56	< 0.001
Workplace flexibility	.67	-.33	-.21	34.27	< 0.001

Note: ^a Row-wise highest scores in bold.

We categorize these subgroups based on their differing priorities in the job market as impact-driven individualists (cluster 1), material pragmatists (cluster 2), and social idealists (cluster 3). *Impact-driven individualists* have the most complex set of preferences (Table 2 and Appendix F). They are motivated by the opportunity to engage in tasks with high job impact in publicly visible roles that involve personal interaction with the target audience. These preferences are accompanied by a desire for high autonomy and flexibility. Impact-driven individualists place greater emphasis on the employment sector and show a stronger preference for the public sector compared to other groups (Appendix F). This cluster is imbalanced toward men.

Material pragmatists exhibit a less complex profile, as they prioritize only two attributes: salary and job security (Table 2 and Appendix F). This clear focus on utilitarian aspects suggests that individuals in this subgroup primarily view work as having instrumental value. This cluster has the highest employment rate among all subgroups. Although the gender distribution is relatively balanced, men are still slightly overrepresented.

Finally, *social idealists* place significant emphasis on their employers' adherence to ethical standards and social responsibility and highly value good social relationships at work (Table 2 and Appendix F). Unlike impact-driven individualists, social idealists do not actively pursue social values through their work; they place less importance on job impact and are relatively indifferent to the employment sector. This cluster is strongly skewed toward women and has the lowest employment rate among all subgroups. Individuals with an educational background in medicine are more prevalent in this cluster than in others.

Discussion and Conclusion

Overall Importance of the Sector in Job Preferences

Most importantly, this study is among the first to disentangle the importance of the sector from other work attributes in job choice decisions (Lee & Jilke, 2024; Ripoll et al., 2025). While previous studies have focused on the screening and application stages of the recruitment process, our study extends this research to the hiring stage, when even more work attributes are known to job seekers, their willingness to evaluate those attributes carefully is higher, and their choices are more consequential. By focusing on this stage, we address calls for further research throughout the recruitment process beyond its initial phases (Jakobsen et al., 2023). At the hiring stage, the sector holds relatively low importance among the attributes included in our study (i.e., 6.9%). For the vast majority, an employer's sector affiliation is a negotiable attribute that can be traded off against other attributes. Our results lead to the conclusion that young professionals make job choices rather than sector choices, consistent with the spread of boundaryless careers in young generations (Wiernik & Kostal, 2019). This finding cautions against overestimating the sector's importance in job searches, a tendency to which PA can easily fall prey due to the widespread sector attraction hypothesis in PSM scholarship (Perry & Wise, 1990). Beyond expanding to the hiring stage, our study provides evidence from an empirical setting in which the role of the employment sector has not previously been isolated (Christensen & Wright, 2011; Jakobsen & Homberg, 2025; Lee & Jilke, 2024; Ripoll et al., 2025). Given the international variations in how employer attractiveness differs between sectors (Van de Walle et al., 2015), our findings contribute to the consolidation of this field of research.

Attractiveness of the Public Sector

Notably, job seekers assign significantly higher utility to the public sector compared to the private and nonprofit sectors. A common assumption in PA scholarship is that the public sector lacks appeal, particularly among young and highly educated job seekers, and several studies support this assumption (Bright & Graham, 2015; Fowler & Birdsall, 2020; Lewis & Frank, 2002; Linos, 2018; Ng & McGinnis Johnson, 2020; Pedersen, 2013; Pepermans & Peiffer, 2024; Santinha et al., 2021). However, our study joins a growing body of research showing the contrary (Cordes & Vogel, 2023; G. Lee & Choi, 2016; Ng & Gossett, 2013; Ripoll et al., 2025; Vogel & Satzger, 2023; Weske et al., 2020). Regardless of the need to account for the national, organizational, and professional context, this finding is encouraging for human resource managers in the public sector.

Interestingly, the nonprofit sector is less of an alternative to the public sector than PA scholarship sometimes suggests (Ballart & Rico, 2018; LeRoux & Feeney, 2013). We find that the public and nonprofit sectors occupy the opposite ends in the distribution of utilities of employment sectors, with the public sector being the most attractive and the nonprofit sector being the least attractive option (everything else being equal). It is important to note, however, that interdependencies among the attributes may have contributed to this finding. In particular, sector and salary are interdependent, as nonprofit organizations typically do not have a reputation for offering high salaries. The corresponding signals might undermine the credibility of offers that combine the nonprofit sector with high salaries, leading participants to reject such offers despite their attractive salaries. While no job offer was logically inconsistent, and none was deemed unrealistic in the pretest, these interdependencies may have affected the perceived utilities of specific attribute levels.

Similarly, another interdependency may exist between sector and security. It is important to reiterate that our data collection occurred during the COVID-19 pandemic. This context may not only have heightened the importance of salary and security but also, indirectly, the perceived utility of public sector employment. Given that job security is one of the most common associations with the public sector (Neo et al., 2024), public employers may convey more trustworthy signals of stability compared to private and nonprofit employers. This perception of stability may arise not only from the type of contract but also from other attributes that we did not explicitly vary. For instance, individuals might infer extensive employee rights and strong unions from the sector signal. However, it remains unclear from the literature how work preferences change during times of crisis and how these changes affect the attractiveness of the public sector. For example, Piatak (2017) finds that federal government employees are more likely to switch into the private sector during economic instability.

Importance of the (Public) Sector Across Target Groups

While our results indicate that several work attributes are considerably more important than the sector, they do not imply that an employer's sectoral affiliation is irrelevant to all job candidates. Rather, the significance of the sector varies across different segments of the candidate market. Impact-driven individualists place substantially greater importance on the employment sector than the other groups and assign the highest utility to the public sector. Although we did not measure motivational dispositions directly, the profile of impact-driven individualists aligns closely with highly public-service motivated candidates (Perry & Wise, 1990). Our findings remind scholars and practitioners not to overstate the role of PSM in job attraction and recruitment, nor to decontextualize it from other work-related preferences. Employment in the public sector appears to be significant primarily among impact-driven individualists; however, even within this segment, sectoral affiliation is just one factor among many. The motivation to join public service and have an impact coincides with more individualistic orientations that prioritize autonomy and flexibility when working on complex tasks. Job choice in favor of the public sector is best understood as occurring within a multi-incentive setting where both self- and other-oriented motives are at play (Asseburg et al., 2020; Perry, 2014).

Besides impact-driven individualists, social idealists also exhibit work preferences that indicate prosocial orientations. However, both subgroups display different patterns in how these orientations manifest. Impact-driven individualists seek a more active approach with an external focus: They aim to perform tasks with high job impact in publicly visible roles, emphasizing personal contact with the target audience beyond the organization. In contrast, social idealists adopt a more passive approach with an internal focus: They 'vote with their feet' for employers with high ethical and social standards, prioritizing a positive atmosphere within the organization but without actively seeking outreach to society.

A conceptual implication of these findings is that motivational dispositions seem to contribute substantially, though not entirely, to labor market segmentation. In theoretical terms, material pragmatists are most clearly defined, as they respond predominantly to extrinsic incentives; this aligns with the concept of extrinsic motivation as described by self-determination theory (Ryan & Deci, 2000). The distinction between impact-driven individualists and social idealists, however, is less clear in motivational terms. Both groups exhibit prosocial orientations (Grant, 2007), yet these manifest differently in their job preferences, indicating that additional factors contribute to the segmentation of the candidate market. Accordingly, future research should explore potential moderators along the motivation–intention–behavior chain, considering the various ways in which prosociality translates into job preferences. For instance, personality could serve as a moderator, with impact-driven individualists tending to be more extroverted, and social idealists more introverted. However, this remains speculative until further theoretical and empirical research is conducted.

Practical Implications

For practitioners aiming to use resources efficiently, it follows that there is a necessity to first conduct a thorough analysis of the candidate market and then tailor recruitment messages accordingly. When developing these more nuanced strategies, it is important to incorporate job design into the considerations. For example, impact-driven individualists place importance on autonomy and flexibility—workplace characteristics that often do not correspond to the reputation of public bureaucracies. Recruitment strategies also need to align with broader diversity policies, given the considerable demographic differences among subgroups. While the impact-driven individualists segment comprises more men than women, the social idealists cluster is predominantly female. Depending on the positions to be filled, recruiting from these target groups bears the risk of inadvertently perpetuating existing gender imbalances.

Given the relatively low importance of the employment sector compared to other attributes, our findings do not support calls for emphasizing the employer's affiliation with the public sector during the recruitment process (e.g., Cordes & Vogel, 2023). Such an emphasis is only advisable when recruitment efforts specifically target the group we refer to as impact-driven individualists. Candidates in this segment are indeed an appealing and reachable target due to their preference for the public sector and their potential to excel in those roles (Christensen et al., 2017; Perry & Wise, 1990). In contrast, when targeting material pragmatists, employer branding could benefit from highlighting utilitarian attributes, such as salary and job stability—provided this group is considered suitable for public service. To attract social idealists, recruiters would be well-advised to emphasize a positive work and team environment, as well as social responsibility policies.

Limitations and Future Research

As with any research, this study has limitations that present opportunities for future exploration. *First*, while ACBC significantly enhances the analytical capacity to process multiple job attributes simultaneously, akin to real-world decision-making by job seekers, the number of attributes processed remains limited. While our selected attributes reflect the academic literature and expert opinions and were not altered in a pretest, future research could explore additional attributes not covered in our study, particularly those that are not specific to a particular job but relate to organizational characteristics of the employer (such as size and age). *Second*, like any method, ACBC has both advantages and disadvantages. For instance, adaptive conjoint designs, in which early responses influence whether attributes will be presented at later stages, are susceptible to endogeneity in part-worth estimates (Liu et al., 2007). Another concern arises from the forced-choice format, as it may lead to an overestimation of probabilities and biased utility scores (Determann et al., 2019). These statistical issues necessitate caution in the interpretation of the results and more methodological variety in future research. *Third*, as discussed earlier, the conjoint design does not reveal how potential interdependencies among attributes might have influenced job preferences. This shortcoming appears to contradict the method's foundational assumption that participants consider multiple attributes simultaneously in their decision-making. *Fourth*, the generalizability of our findings may be limited due to the exclusive sampling at a specific time and location. Consequently, future research should explore diverse populations across multiple countries and administrative cultures, as well as under varying economic and social conditions, to gain a deeper understanding of these differences. *Fifth*, our sampling was limited to a specific target group. Whether these findings apply to other groups, such as individuals with lower educational levels or more experience, remains speculative and could be investigated in future research.

Concluding Remarks

Sorting into employment sectors remains a topic of enduring interest for scholars and practitioners in PA and beyond. Despite significant efforts in previous research, it remains unclear whether sector signals serve as a distinct 'pull factor' in the recruitment process. This study shows that the employment sector is relatively unimportant in the multi-incentive, multi-stage job search of young and highly qualified candidates. These candidates are willing to compromise on the sector affiliation of their employer, provided that the job offers other, more important attributes. These results underscore the importance for public sector employers to analyze and segment recruitment targets carefully. Moving further away from traditional research designs and variable-centered approaches will assist PA scholars in supporting these efforts.

References

- Asseburg, J., Hattke, J., Hensel, D., Homberg, F., & Vogel, R. (2020). The tacit dimension of public sector attraction in multi-incentive settings. *Journal of Public Administration Research and Theory*, 30(1), 41–59.
- Ballart, X., & Rico, G. (2018). Public or nonprofit? Career preferences and dimensions of public service motivation. *Public Administration*, 96(2), 404–420.
- Beach, L. R. (1990). *Image theory: Decision making in personal and organizational contexts*. Chichester: Wiley.
- Beechler, S., & Woodward, I. C. (2009). The global "war for talent". *Journal of International Management*, 15(3), 273–285.
- Brand, B. M., & Baier, D. (2020). Adaptive CBC: Are the benefits justifying its additional efforts compared to CBC? *Archives of Data Science, Series A*, 6(1), P06.
- Bright, L., & Graham, C. B. (2015). Why does interest in government careers decline among public affairs graduate students? *Journal of Public Affairs Education*, 21(4), 575–594.
- Cantarelli, P., Belle, N., & Longo, F. (2020). Exploring the motivational bases of public mission-driven professions using a sequential-explanatory design. *Public Management Review*, 22(10), 1535–1559.
- Christensen, R. K., Paarlberg, L., & Perry, J. L. (2017). Public service motivation research: Lessons for practice. *Public Administration Review*, 77(4), 529–542.

- Christensen, R. K., & Wright, B. E. (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), 723–743.
- Cordes, J., & Vogel, R. (2023). Comparing employer attractiveness of public sector organizations to nonprofit and private sector organizations: An experimental study in Germany and the U.S. *Review of Public Personnel Administration*, 43(2), 260–287.
- Cunningham, C. E., Deal, K., & Chen, Y. (2010). Adaptive choice-based conjoint analysis: a new patient-centered approach to the assessment of health service preferences. *Patient*, 3(4), 257–273.
- DESTATIS. (2023). *Mikrozensus – Arbeitsmarkt 2021 (Endgültiges Ergebnis)*. Retrieved from: <https://www.destatis.de/>
- Determann, D., Gyrð-Hansen, D., de Wit, G. A., de Bekker-Grob, E. W., Steyerberg, E. W., Lambooij, M. S., & Bjørnskov Pedersen, L. (2019). Designing unforced choice experiments to inform health care decision making: Implications of using opt-out, neither, or status quo alternatives in discrete choice experiments. *Medical Decision Making*, 39(6), 681–692.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72(1), 218–232.
- Fowler, L., & Birdsall, C. (2020). Are the best and brightest joining the public service? *Review of Public Personnel Administration*, 40(3), 532–554.
- Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2), 393–417.
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48–58.
- Hansen, A.-K. L., Gøtzsche-Astrup, O., Pedersen, L. B., Jensen, U. T., & Jakobsen, C. B. (2023). Career path preferences and personality among junior doctors: Results of a discrete choice experiment. *Journal of Behavioral Public Administration*, 6(1), 1–21.
- Jakobsen, M., & Homberg, F. (2025). First impressions: An analysis of professional stereotypes and their impact on sector attraction. *Public Administration Review*, 85(4), 1134–1149.
- Jakobsen, M., Løkke, A.-K., & Keppeler, F. (2023). Facing the human capital crisis: A systematic review and research agenda on recruitment and selection in the public sector. *Public Administration Review*, 83(6), 1635–1648.
- Jervis, S. M., Ennis, J. M., & Drake, M. A. (2012). A comparison of adaptive choice-based conjoint and choice-based conjoint to determine key choice attributes of sour cream with limited sample size. *Journal of Sensory Studies*, 27(6), 451–462.
- Kaufman, L., & Rousseeuw, P. J. (2005). *Finding groups in data: An introduction to cluster analysis*: Wiley.
- Lee, G., & Choi, D. L. (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(2), 145–163.
- Lee, I. P., & Jilke, S. (2024). Sector attraction and the role of job information: Evidence from a conjoint experiment. *Public Administration Review*, 84(5), 982–996.
- LeRoux, K., & Feeney, M. K. (2013). Factors attracting individuals to nonprofit management over public and private sector management. *Nonprofit Management & Leadership*, 24(1), 43–62.
- Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government? *Public Administration Review*, 62(4), 395–404.
- Lievens, F., & Highhouse, S. (2003). The relation of instrumental and symbolic attributes to a company's attractiveness as an employer. *Personnel Psychology*, 56(1), 75–102.
- Linos, E. (2018). More than public service: A field experiment on job advertisements and diversity in the police. *Journal of Public Administration Research and Theory*, 28(1), 67–85.
- Liu, Q., Otter, T., & Allenby, G. M. (2007). Investigating endogeneity bias in marketing. *Marketing Science*, 26(5), 642–650.

- McFadden, D. (1974). Conditional logit analysis of qualitative choice behavior. In P. Zarembka (Ed.), *Frontiers in Econometrics* (pp. 105–142): Academic Press.
- Montgomery, D. B., & Ramus, C. A. (2011). Calibrating MBA job preferences for the 21st century. *Academy of Management Learning & Education*, 10(1), 9–26.
- Neo, S., Isa, B., Gabriela, S., Robin, B., Noortje, d. B., Stephan, G., . . . and Tummers, L. (2024). Working 9 to 5? A cross-national analysis of public sector worker stereotypes. *Public Management Review*, 26(7), 2064–2093.
- Ng, E. S. W., & Gossett, C. W. (2013). Career choice in Canadian public service: An exploration of fit with the millennial generation. *Public Personnel Management*, 42(3), 337–358.
- Ng, E. S. W., & McGinnis Johnson, J. (2020). Game of loans: The relationship between education debt, social responsibility concerns, and making a career choice in the public, private, and nonprofit sectors. *Nonprofit and Voluntary Sector Quarterly*, 49(2), 292–315.
- Pedersen, M. J. (2013). Public service motivation and attraction to public versus private sector employment: Academic field of study as moderator? *International Public Management Journal*, 16(3), 357–385.
- Pepermans, R., & Peiffer, M. (2024). Choosing jobs in the public, non-profit, and for-profit sectors: Personal career anchors moderating the impact of sector image and reputation. *Review of Public Personnel Administration*, 44(2), 295–324.
- Perry, J. L. (2014). The motivational bases of public service: Foundations for a third wave of research. *Asia Pacific Journal of Public Administration*, 36(1), 34–47.
- Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, 50(3), 367–373.
- Piatak, J. S. (2017). Sector switching in good times and in bad: Are public sector employees less likely to change sectors? *Public Personnel Management*, 46(4), 327–341.
- Ripoll, G., Ballart, X., Hernández, E., & Vandenabeele, W. (2025). 'It's a match!': A discrete choice experiment on job attractiveness for public service jobs. *Public Management Review*, 27(1), 183–217.
- Ritz, A., Weißmüller, K. S., & Meynhardt, T. (2022). Public value at cross points: A comparative study on employer attractiveness of public, private, and nonprofit organizations. *Review of Public Personnel Administration*, 43(3), 528–556.
- Ronda, L., Abril, C., & Valor, C. (2021). Job choice decisions: Understanding the role of nonnegotiable attributes and trade-offs in effective segmentation. *Management Decision*, 59(6), 1546–1561.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Santinha, G., Carvalho, T., Forte, T., Fernandes, A., & Tavares, J. (2021). Profiling public sector choice: Perceptions and motivational determinants at the pre-entry level. *Sustainability*, 13(3), 1272–.
- Sawtooth Software. (2014). The adaptive choice-based conjoint (ACBC) technical paper. *Technical Paper Series*. Orem, UT: Sawtooth Software, Inc.
- Sawtooth Software. (2017). The CBC system for choice-based conjoint analysis *Technical Paper Series*. Orem, UT: Sawtooth Software, Inc.
- Sawtooth Software. (2020). Lighthouse Studio, 9.9.2. Provo, UT.
- Schwab, A., & Starbuck, W. H. (2025). How Muriel's tea stained management research through statistical significance tests. *Journal of Management Inquiry*, 34(2), 226–230.
- Toubia, O., Hauser, J. R., & Simester, D. I. (2004). Polyhedral methods for adaptive choice-based conjoint analysis. *Journal of Marketing Research*, 41(1), 116–131.
- Van de Walle, S., Steijn, B., & Jilke, S. (2015). Extrinsic motivation, PSM and labour market characteristics: A multilevel model of public sector employment preference in 26 countries. *International Review of Administrative Sciences*, 81(4), 833–855.
- Vogel, R., & Satzger, M. (2023). What drives the attractiveness of public and private employers? Comparative evidence from an online employer review platform. *American Review of Public Administration*, 54(2), 180–197.

- Weske, U., Ritz, A., Schott, C., & Neumann, O. (2020). Attracting future civil servants with public values? An experimental study on employer branding. *International Public Management Journal*, 23(5), 677–695.
- Wiernik, B. M., & Kostal, J. W. (2019). Protean and boundaryless career orientations: A critical review and meta-analysis. *Journal of Counseling Psychology*, 66(3), 280–307.

Appendix

Appendix A. Sample and Population Characteristics

	Sample		Population aged 25-40 (2021) ^a	
	n	%	n	%
Total	300	100	15,737	100.0
Gender				
<i>Female</i>	150	50.0	7,659	48.7
<i>Male</i>	149	49.7	8,076	51.3
<i>Other</i>	1	0.3	n/a	n/a
Employment status				
<i>Employees</i>	258	86.0	12,983	82.5
<i>Students</i>	35	11.7	2,754	17.5
<i>Unemployed</i>	7	2.3		
Study program				
<i>Agricultural Sciences</i>	5	1.7	n/a	n/a
<i>Business Administration, Economics</i>	68	22.7	n/a	n/a
<i>Engineering</i>	53	17.7	n/a	n/a
<i>Law</i>	13	4.3	n/a	n/a
<i>Linguistics, Cultural Science, Humanities</i>	50	16.7	n/a	n/a
<i>Medicine</i>	19	6.3	n/a	n/a
<i>Psychology</i>	8	2.7	n/a	n/a
<i>Science, Information Technology</i>	37	12.3	n/a	n/a
<i>Social Sciences, Political Science</i>	30	10.0	n/a	n/a
<i>Others</i>	17	5.7	n/a	n/a
Age (M= 32.7, SD = 4.1)				
25-29	76	25.3	4,744	30.1
30-34	112	37.3	5,747	36.5
35-39	112	37.3	5,246	33.3

Note: ^a Source: DESTATIS (2023).

Appendix B. Must-Haves/Unacceptables and Part-Worth Utilities

Attributes and Levels	Must-have (%)	Unacceptable (%)	Part-worth utilities			
			M	SD	Min	Max
Autonomy	2.7	2.7	n/a	n/a	n/a	n/a
60-80% of the decisions are made autonomously	2.7	0.0	11.93	24.82	-89.78	85.66
20-40% of the decisions are made autonomously	0.0	2.7	-11.93	24.82	-85.66	89.78
Contract type	19.0	57.3	n/a	n/a	n/a	n/a
Unlimited contract	19.0	0.7	109.62	70.71	-193.44	328.38
Limited to two years	0.0	22.7	-28.55	44.22	-176.48	83.42
Limited to one year	0.0	34.0	-81.06	56.59	-224.44	139.39
Ethics and social responsibility	13.3	13.3	n/a	n/a	n/a	n/a
Accepted ethics and social responsibility policy	13.3	0.0	51.41	57.65	-106.26	203.45
Disputed ethics and no social responsibility policy	0.0	13.3	-51.41	57.65	-203.45	106.26
Job impact	0.7	0.7	n/a	n/a	n/a	n/a
High impact on target group	0.0	0.7	16.78	18.42	-78.50	81.25
Low impact on target group	0.7	0.0	-16.78	18.42	-81.25	78.50
Personal contact	2.3	2.3	n/a	n/a	n/a	n/a
Many contacts with target group and physical proximity	2.3	0.0	13.31	27.97	-74.02	127.45
Few contacts with target group and physical distances	0.0	2.3	-13.31	27.97	-127.45	74.02
Task complexity	9.3	9.3	n/a	n/a	n/a	n/a
Known problems and less complex tasks	0.0	0.0	0.35	34.34	-109.04	126.01
Need for creative and innovative approaches and complex tasks	9.3	0.0	28.09	27.06	-76.42	127.42
Quick decisions and crisis management and chaotic/challenging tasks	0.0	9.3	-28.44	36.03	-134.88	69.21
Team and work atmosphere	11.0	11.0	n/a	n/a	n/a	n/a
Mutual support, flexible people, and trusted relationships	11.0	0.0	46.27	32.18	-36.49	142.79
Lone wolves, competitive people, and formal relationships	0.0	11.0	-46.27	32.18	-142.79	36.49
Salary	30.3	43.0	n/a	n/a	n/a	n/a
Expected salary +20%	0.7	0.0	91.92	58.15	-91.60	242.30
Expected salary +10%	0.7	0.7	52.78	41.81	-86.98	153.97
Expected salary	9.3	1.3	24.77	34.44	-70.67	147.12
Expected salary -10%	19.7	10.7	-46.55	45.68	-160.27	81.88
Expected salary -20%	0.0	30.3	-122.92	83.39	-325.48	143.12
Sector affiliation	2.0	13.3	n/a	n/a	n/a	n/a
Private sector	0.7	4.3	5.91	34.86	-125.76	126.22
Nonprofit sector	0.3	6.7	-20.26	38.51	-136.43	188.76
Public sector	1.0	2.3	14.35	33.38	-96.11	121.40
Visibility	1.0	1.0	n/a	n/a	n/a	n/a
Many opportunities for public visibility	1.0	0.0	1.40	20.18	-90.54	75.17
Few opportunities for public visibility	0.0	1.0	-1.40	20.18	-75.17	90.54
Workplace flexibility	17.7	26.0	n/a	n/a	n/a	n/a
>10 days/ month workplace flexibility	0.7	0.0	25.13	49.83	-139.97	219.62
6-10 days/ month workplace flexibility	1.0	0.7	11.56	39.28	-135.51	134.34
3-5 days/ month workplace flexibility	4.3	1.7	13.38	27.98	-53.18	140.85
1-3 days/ month workplace flexibility	11.7	6.0	-13.79	37.48	-134.98	147.64
0 day/ month workplace flexibility	0.0	17.7	-36.27	65.84	-230.91	202.73

Appendix C. Results of Beta Regression (DV: Relative Importance of Employment Sector)

	Coef.	z	p
Age	−0.01 (0.01)	−1.08	.281
Gender (d; 1 = female)	−0.09 (0.07)	−1.33	.183
Employment status (d; 1 = employee)	−0.03 (0.10)	−0.31	.753
Study program (ref = others)			
<i>Agricultural Sciences</i>	0.11 (0.30)	0.36	.719
<i>Business Administration, Economics</i>	−0.10 (0.16)	−0.60	.551
<i>Engineering</i>	0.04 (0.17)	0.24	.811
<i>Law</i>	0.02 (0.22)	0.09	.931
<i>Linguistics, Cultural Science, Humanities</i>	−0.12 (0.17)	−0.68	.494
<i>Medicine</i>	−0.05 (0.20)	−0.25	.801
<i>Psychology</i>	−0.09 (0.26)	−0.36	.717
<i>Social Sciences, Political Science</i>	−0.18 (0.18)	−0.95	.343
<i>Science, Information Technology</i>	0.21 (0.17)	1.24	.215
Intercept	−2.18*** (0.33)	−6.70	.000
n		300	
X ²		14.49	
p > X ²		.270	
Log-likelihood		567.20	

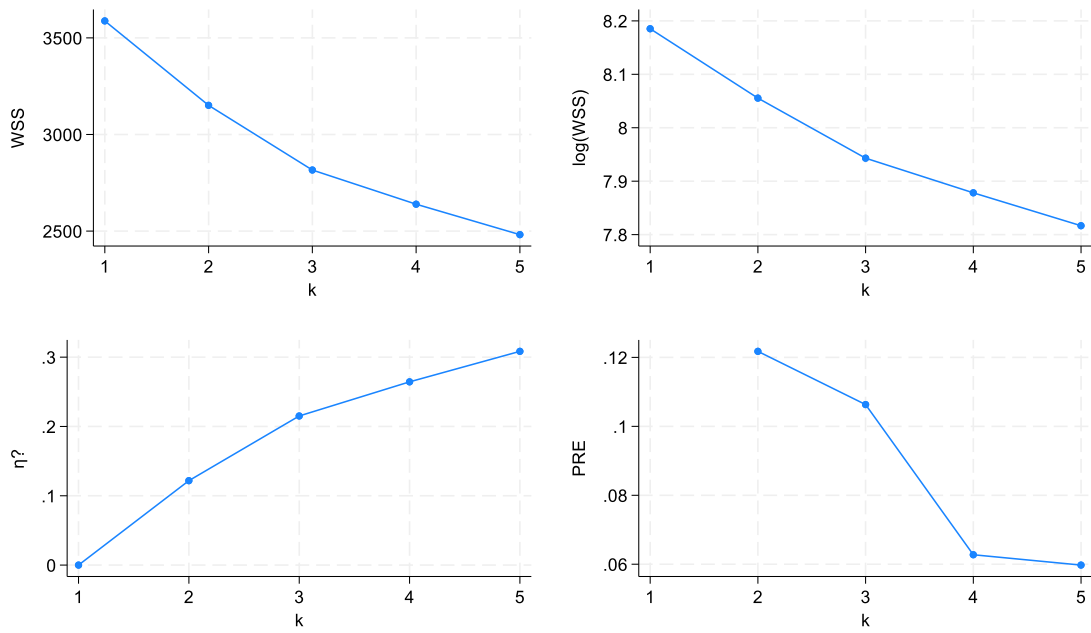
Notes: *** $p < .001$. d = dummy; ref = reference group. Standard errors appear in the parentheses below the coefficients.

Appendix D. Results of OLS Regression (DV: Part-Worth Utilities of Employment Sectors)

	<i>Public Sector</i>			<i>Private Sector</i>			<i>Nonprofit Sector</i>		
	Coef.	t	p	Coef.	t	p	Coef.	t	p
Age	0.03 (0.51)	0.05	.960	0.26 (0.54)	0.49	.627	-0.29 (0.61)	-0.47	.636
Gender (d; 1 = female)	1.24 (3.95)	0.31	.754	-10.80** (3.96)	-2.73	.007	9.57* (4.39)	2.18	.030
Employment status (d; 1 = employee)	5.07 (6.26)	0.81	.418	1.64 (6.68)	0.25	.806	-6.72 (8.17)	-0.82	.412
Study program (ref = others)									
<i>Agricultural Sciences</i>	-9.77 (20.83)	-0.47	.639	37.82** (13.60)	2.78	.006	-28.05 (14.63)	-1.92	.056
<i>Business Administration, Economics</i>	-22.55** (8.16)	-2.76	.006	35.76*** (6.74)	5.30	.000	-13.22* (6.13)	-2.16	.032
<i>Engineering</i>	-18.88* (8.63)	-2.19	.029	41.97*** (8.18)	5.13	.000	-23.09** (7.02)	-3.29	.001
<i>Law</i>	8.64 (12.21)	0.71	.480	15.11* (7.37)	2.05	.041	-23.75* (11.24)	-2.11	.035
<i>Linguistics, Cultural Science, Humanities</i>	-11.89 (8.33)	-1.43	.155	15.00* (6.80)	2.21	.028	-3.11 (6.99)	-0.45	.657
<i>Medicine</i>	-20.12 (11.71)	-1.72	.087	15.14 (10.16)	1.49	.137	4.98 (10.36)	0.48	.631
<i>Psychology</i>	-19.18 (14.61)	-1.31	.190	-4.64 (13.02)	-0.36	.722	23.82 (22.75)	1.05	.296
<i>Science, Information Technology</i>	-18.41 (9.76)	-1.89	.060	34.33** (9.75)	3.52	.001	-15.92 (10.40)	-1.53	.127
<i>Social Sciences, Political Science</i>	-7.51 (8.77)	-0.86	.392	21.21** (7.17)	2.96	.003	-13.71 (7.18)	-1.91	.057
Intercept	23.55 (17.92)	1.31	.190	-25.22 (17.09)	-1.48	.141	1.66 (20.55)	0.08	.936
n	300			300			300		
F	1.63			7.23***			2.73**		
p > F	.084			.000			.002		
R ²	.06			.19			.11		

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$. d = dummy, ref = reference group. Robust standard errors appear in the parentheses below the coefficients.

Appendix E. Results of K-Means Cluster Analysis



Appendix F. Demographic Characteristics of Clusters with Part-Worth Utilities

	Cluster 1	Cluster 2	Cluster 3	ANOVA / X ² -test	
	<i>Impact-driven Individualists</i> (n = 88)	<i>Extrinsic Instrumentalists</i> (n = 113)	<i>Social Idealists</i> (n = 99)	F/X ²	p
Demographic characteristics					
Age (M (SD))	32.8	33.1	32.3	F = 1.21	.300
Gender (% female)	39.8	43.4	66.7	X ² = 16.67***	< .001
Employment status (% employees)	84.1	92.9	79.8	X ² = 7.92*	.019
Study program (%)					
<i>Agricultural Sciences</i>	2.3	0.9	2.0	X ² = 0.69	.707
<i>Business Administration, Economics</i>	18.2	30.1	18.2	X ² = 5.70	.058
<i>Engineering</i>	20.5	21.2	11.1	X ² = 4.39	.112
<i>Law</i>	4.5	7.1	1.0	X ² = 4.70	.095
<i>Linguistics, Cultural Science, Humanities</i>	15.9	12.4	22.2	X ² = 3.72	.155
<i>Medicine</i>	5.7	2.7	11.1	X ² = 6.45*	.040
<i>Psychology</i>	2.3	2.7	3.0	X ² = 0.10	.950
<i>Science, Information Technology</i>	18.2	10.6	9.1	X ² = 4.05	.132
<i>Social Sciences, Political Science</i>	5.7	8.8	15.2	X ² = 4.91	.086
<i>Others</i>	6.8	3.5	7.1	X ² = 1.54	.463
Part-worth utilities					
Autonomy					
<i>60-80% of the decisions are made autonomously</i>	17.14	13.14	5.91	F = 5.13**	.007
<i>20-40% of the decisions are made autonomously</i>	-17.14	-13.14	-5.91	F = 5.13**	.007
Contract type					
<i>Unlimited contract</i>	93.65	149.48	78.30	F = 37.13***	< .001
<i>Limited to two years</i>	-28.67	-36.39	-19.50	F = 3.92*	.021
<i>Limited to one year</i>	-64.98	-113.09	-58.80	F = 36.23***	< .001
Ethics and social responsibility					
<i>Accepted ethics and social responsibility policy</i>	16.33	29.10	108.05	F = 140.00***	< .001
<i>Disputed ethics and no social responsibility policy</i>	-16.33	-29.10	-108.05	F = 140.00***	< .001
Job impact					
<i>High impact on target group</i>	21.55	10.34	19.90	F = 12.12***	< .001
<i>Low impact on target group</i>	-21.55	-10.34	-19.90	F = 12.12***	< .001
Personal contact					
<i>Many contacts with target group and physical proximity</i>	16.92	7.31	16.93	F = 4.25*	.015
<i>Few contacts with target group and physical distances</i>	-16.92	-7.31	-16.93	F = 4.25*	.015

	Cluster 1 <i>Impact-driven Individualists</i> (n = 88)	Cluster 2 <i>Extrinsic In- strumentalists</i> (n = 113)	Cluster 3 <i>Social Idealists</i> (n = 99)	ANOVA / X ² -test	
				F/X ²	p
Task complexity					
<i>Known problems and less complex tasks</i>	15.58	0.74	-13.62	F = 21.54***	< .001
<i>Need for create and innovative approaches and complex tasks</i>	32.18	23.01	30.24	F = 3.36*	.036
<i>Quick decisions and crisis management and chaotic/challenging tasks</i>	-47.76	-23.75	-16.62	F = 18.87***	< .001
Team and work atmosphere					
<i>Mutual support, flexible people, and trusted relationships</i>	38.42	31.42	70.19	F = 58.03***	< .001
<i>Lone wolves, competitive people, and formal relationships</i>	-38.42	-31.42	-70.19	F = 58.03***	< .001
Salary					
<i>Expected salary +20%</i>	47.28	137.00	80.13	F = 105.01***	< .001
<i>Expected salary + 10%</i>	23.69	78.95	48.79	F = 61.71***	< .001
<i>Expected salary</i>	6.71	48.11	14.17	F = 59.45***	< .001
<i>Expected salary -10%</i>	-23.33	-81.96	-26.77	F = 85.43***	< .001
<i>Expected salary -20%</i>	-54.36	-182.11	-116.32	F = 95.49***	< .001
Sector affiliation					
<i>Private sector</i>	9.60	8.30	-0.12	F = 2.26	.106
<i>Nonprofit sector</i>	-29.20	-27.31	-4.26	F = 13.92***	< .001
<i>Public sector</i>	19.60	19.01	4.37	F = 6.87**	.001
Visibility					
<i>Many opportunities for public visibility</i>	9.64	-2.57	-1.40	F = 11.19***	< .001
<i>Few opportunities for public visibility</i>	-9.64	2.57	1.40	F = 11.19***	< .001
Workplace flexibility					
<i>>10 days/ month workplace flexibility</i>	39.80	21.81	15.88	F = 5.96**	.003
<i>6-10 days/ month workplace flexibility</i>	19.67	4.22	12.72	F = 3.97*	.020
<i>3-5 days/ month workplace flexibility</i>	21.33	9.19	11.09	F = 5.30**	.006
<i>1-3 days/ month workplace flexibility</i>	-22.31	-11.03	-9.38	F = 3.31*	.038
<i>0 day/ month workplace flexibility</i>	-58.49	-24.20	-30.30	F = 7.64**	.001

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$.