### Public Service Motivation in Germany. An Empirical Assessment of the Adaptability of PSM to Germany

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#### Abstract:

The concept of Public Service Motivation (PSM) is commonly used in international research to address the question of why individuals seek employment in the public sector. The strong focus on the US American public service, however, leads to limited transferability of results between countries. At the same time research on German PSM is scarce. This study investigates the adaptability of the concept to Germany by measuring PSM for a German general population sample and three student samples. Results suggest that PSM in Germany is characterized by a strong political motivation, high levels of compassion, high willingness to provide help to others, and lower levels of self-sacrifice. The comparison of people working in the public sector to people working in the private sector indicates that PSM in Germany is more about job-fit rather than sector-fit and therefore an ineffective predictor for public sector employment.

#### Keywords:

Public Service Motivation, Public Administration, Public Service, Person-Environment-Fit

## Public Service Motivation in Deutschland

## Eine empirische Untersuchung des PSM Konzeptes für Deutschland

#### Zusammenfassung:

Die internationale Forschung greift regelmäßig auf das Konzept der Public Service Motivation (PSM) zurück um zu erklären, warum Menschen eine Beschäftigung im öffentlichen Dienst anstreben. Durch den starken US-amerikanischen Fokus des Konzeptes lassen sich Ergebnisse jedoch nur bedingt auf andere nationale Verwaltungen transferieren. Für Deutschland existiert diesbezüglich überraschend wenig Forschung. Diese Studie untersucht daher die Übertragbarkeit des Konzepts auf Deutschland und misst dafür PSM-Ausprägungen in der Gesamtbevölkerung sowie für drei Studierendengruppen. Die Ergebnisse deuten auf eine hohe politische Motivation, ein ausgeprägtes Maß an Mitgefühl und Hilfsbereitschaft, jedoch ein geringes Maß an Aufopferungsbereitschaft (*selfsacrifice*) hin. Nahezu identische PSM-Werte von Mitarbeitenden des öffentlichen Dienstes und Mitarbeitenden der Privatwirtschaft legen nahe, dass das PSM-Konzept in Deutschland ein unwirksamer Prädiktor für die Beschäftigung im öffentlichen Sektor ist. Die Analyse der Studierendengruppen deutet darauf hin, dass sich PSM eher zur Erklärung Wahl des Berufes (Job-Fit) als des Sektors (Sector-Fit) eignet.

#### Schlagworte

Public Service Motivation, öffentliche Verwaltung, öffentlicher Dienst, Person-Environment-Fit

#### 1 Introduction

The concept of public service motivation (PSM) has attracted fast-growing interest in the field of public administration research since its seminal introduction by Perry & Wise in 1990. In a nutshell, PSM addresses "altruistic intentions that motivate individuals to service to the public interest" (Bright 2008, 151). The topic is becoming increasingly relevant in Germany. The progressing demographic change and the challenges of recruiting young prospects inevitably require research on public administration in Germany to address the question of what motivates people to take on jobs in public institutions and organizations and how their job satisfaction can be positively affected. This is especially the case since common financial incentive systems are practically non-existent in the German public sector. However, the strong focus on the US-American public service of the original concept and region-specific differences in national administrations lead to limited transferability of results between countries (Vandenabeele & van de Walle 2008, 226). While there is empirical research on PSM for many European countries such as Austria, Belgium, France, Netherlands, Italy, the UK, and Switzerland (Ritz et al. 2016), surprisingly little research is available for Germany. Aside from basic investigations on PSM in Germany, there is a particular lack of data that contributes to the ongoing debate on whether PSM is genuinely a concept that roots deeply in the public sector. Does PSM really help us to understand why people enter and stay within the public sector in Germany or is PSM actually more about the nature of a job regardless of where the occupation is located?

Based on this assertion, this study first looks descriptively at the PSM of respondents from two kinds of samples: students and a sample of German citizens. Second, to examine the relationship between PSM and the public sector, the study asks if people working in the German public sector differ in their PSM from those working in the private sector. Referring to the person-environment (PE) fit theory, the comparison of five student groups from three different universities provides deeper insight into whether PSM is more about person-organization (PO) or person-job (PJ) fit. The analysis of correlations between PSM and extrinsic, intrinsic, as well as altruistic work motivation, additionally, offers new insights on the "crowding out effect" (Frey & Jegen 2001, 590) and the question of how to motivate intrinsically driven employees. The article uses the measurement instrument developed for the international context by Kim et al. (2013) to address issues with the original PSM instrument by Perry (1996).

Through the collection and analysis of the unique data set, this paper sheds light on the erstwhile neglected research field. Consequently, it substantially adds to an understanding of PSM in the German context but also reveals valuable insights on how to use, apply and adjust the PSM concept in the international context. The empirical results yield three main findings: (1) All samples show comparatively high levels of PSM. The data indicates a strong political motivation, high levels of compassion, and a strong willingness to provide help to others. Self-sacrifice, in contrast, is not a

prominent feature of German PSM. (2) The differences between the comparison groups are nonexistent in the general population and just minor for the student samples. Students who already contracted for the public sector show the lowest levels of PSM. Therefore, PSM is not a suitable concept for reconstructing why people in Germany seek jobs in the public sector. (3) PSM correlates with intrinsic and especially altruistic work motivation. Surprisingly, the study also finds a weak positive correlation with extrinsic motivation.

The article proceeds as follows: The next section describes the PSM concept and its development, followed by a short review of previous studies on PSM in Germany and the presentation of the hypotheses. The third section introduces the research design including data description and measurement instrument. In section four, the article presents the results of the empirical analysis. Finally, findings are summarized and discussed.

#### 2 The Concept of Public Service Motivation

Originally, Perry & Wise (1990, 368) defined public service motivation as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" and identified *rational, norm-based,* and *affective* motives as sources of PSM. In the course of developing a measuring instrument for PSM, Perry (1996) later derived a set of four dimensions originating from the three motives: *attraction to policy-making* (APM), *commitment to the public interest* (CPI), *compassion* (COM), and *self-sacrifice* (SS). APM measures the degree of interest in policy-making and the willingness to be part of it, CPI refers to government loyalty and the consciousness of duty towards the state and the community. COM measures the perceived will to improve the living conditions of all community members, SS the willingness to stand up for this goal unconditionally.

The concept has attracted a lot of interest since its introduction, extending far beyond the borders of the U.S. In the last 15 years, in particular, the number of publications has risen rapidly, making the topic "more international, multidisciplinary, and multisectored" (Ritz et al. 2016, 414). However, the transfer of the concept to other regions and contexts did not always go without difficulties.

#### **2.1 International Developments**

When Perry & Wise (1990) developed the concept of PSM, they most likely had the intention to create a universal approach to measuring and analyzing the work motivation of public service employees. Nevertheless, their research clearly focused on and derived from the public sector in the United States. The dominant focus on American administration culture within the concept, however, did not stop numerous scholars from transferring it to other socio-cultural and regional settings in various countries (Ritz et al. 2016). Adaptations of the concept led to the development of numerous new definitions of PSM as well as to altered measurement instruments (see Bozeman & Su (2015) for an overview). The inconsistency of measurement results in a difficult interpretation and

comparability of research (Wright 2008) and at the same time illustrates an ongoing problem of PSM research. Even though Vandenabeele & van de Walle (2008, 236) demonstrated that PSM has a transregional "robust common core", the peculiarities regionally differ "due to a different or partial implementation of similar ideas". PSM links closely to the region-specific public institutions and the public service values that originate from them (Perry & Vandenabeele 2008). Even if administrative structures have a common history, as is especially visible in Europe, there are still great differences that influence public values and consequently PSM. This means that PSM concepts "are not easily transferred or used across borders" (Vandenabeele & van de Walle 2008, 226).

Consequently, PSM has been subject to empirical studies in many countries to gain a better understanding of the concept itself as well as to nuance the regional differences (e.g. Camilleri 2006, Taylor 2007, Castaing 2006, Liu et al. 2008, Cerase & Farinella 2009, Leisink & Steijn 2009, Kim 2009). Worth highlighting at this point is the project of Kim & Vandenabeele (2010) and Kim et al. (2013). In order to establish a universal comparable PSM concept, the authors provided a revised PSM approach together with a new measurement instrument. Their approach centers on selfsacrifice as the "foundation of realizing public service motives" (Kim & Vandenabeele 2010, 703), and introduces three new motives of PSM (instrumental, value-based, and identification) as well as readjustments to some of the original dimensions. Kim & Vandenabeele (2010) redefine APM to attraction to public service (APS), and CPI to commitment to public values (CPV), while giving compassion (COM) a stronger focus on the connection and identification of an individual with the members of their community. Self-sacrifice (SS) as the foundation and precondition of PSM remains unchanged (Kim & Vandenabeele 2010, Kim et al. 2013). Although the new scale did not qualify in a cross-national comparative study as a "truly universal measure of PSM" (Kim et al. 2013, 96), the work of Kim et al. (2013) undoubtedly advances the concept and the measurement in the right direction. Perry & Vandenabeele (2015, 694) even expressed their surprise "that the limitations [of the scale] have not spawned more serious attention to resolving them" and conclude that the scale by Perry et al. (2013) "improves on Perry (1996) in several ways [making the scale] shorter, the compassion subscale [...] more reliable, and the scale's overall statistical properties [...] robust". Kim et al. (2013) especially recommend the use of the scale for single-country investigations on PSM.

While the approach continues to evolve and research is being done internationally including in many European countries (e.g. Camilleri 2006, Castaing 2006, Steijn 2008, Cerase & Farinella 2009, Leisink & Steijn 2009, Kim et al. 2013), we know relatively little about PSM in Germany. At present, only three studies systematically look at PSM in the German context.

#### 2.2 PSM in Germany

Hammerschmid et al. (2009) were the first to investigate PSM in the German-speaking world.<sup>1</sup> In their survey of Vienna public administration employees, they measured accentuated but not particularly high levels of PSM among the civil servants and found differences in the levels of the

dimensions: CPI showed the highest values, the dimension of APM the lowest values. Next, Schaa et al. (2014) examined PSM in a survey of first-year students from four different German universities with administration backgrounds (public administration, police, and law). They measured pronounced, compared to Hammerschmid et al. (2009) slightly higher levels of PSM among the students. In line with the Vienna study, values for APM were comparatively lower than in the other dimensions and only showed weak correlations with the three non-political attributes. The levels of COM, SS, and CPI differed only by a small margin. The latest work on PSM in Germany by Keune et al. (2018) surveyed students of the German university of federal employment agency and measured verifiable levels of PSM. As in the studies before, APM showed low expressions while CPI scored highest. All studies on PSM in the German context<sup>2</sup> thus show similar findings, characterized in particular by a low level of APM and high levels of CPI. Hammerschmid et al. (2009, 80) therefore concluded that in the German-speaking administration context values such as objectivity and political ambitions among people working in the public sector would thus constitute a distinctive feature of a German PSM.

However, besides the difficult accessibility of the studies for the international audience, there are at least two major problems with PSM research in Germany. First, all three studies identified problems with the measurement instrument by Perry (1996). Cronbach's alpha values, especially for APM and CPI, did not show sufficient levels of reliability in all three studies and point to a limited transferability of the used scales to the German context. Keune et al. (2018), for example, recommended a new operationalization for APM in particular. Second, all studies only cover people working in the public sector or students of administrative or related courses. Without suitable benchmark groups, it is not possible to evaluate PSM in the public sector and consequently the usefulness of the concept as such. Hammerschmid et al. (2009) therefore already called for an investigation of PSM in the private sector. Schaa et al. (2014) pointed out that the PSM of public-administration-related study programs can only be evaluated when data on other study programs are available.

The small number of studies on German PSM, their problems with measurement as well as the limited accessibility of the research, but most importantly their sole focus on public-sector-related samples, call for a basic investigation of PSM in Germany. Therefore, in the following, this study derives a set of hypotheses addressing essential assumptions on PSM and examines them in the German context.

#### 2.3 Investigating German PSM

#### 2.3.1 The relevance of the sector

The concept of PSM centrally refers to the idea "that unique motives are found among public servants that are different from those of their private sector counterparts" (Perry et al. 2010, 681). This closely relates the discussion on PSM to the discussion on PE fit theory. In short, PE fit theory assumes that

a person's work-related behavior, such as career choice, performance, or satisfaction, is the result of a concurrence of their personal characteristics and the characteristics of their work environment. Individuals with high levels of PSM would therefore seek employment in the public sector since this is where they find the greatest fit between their own values and goals and those of the organization they work for (PO fit). The sector here can be understood as a proxy for organizational values. Following this argument, PSM levels would differ between employees of the public sector from those of employees of the private sector. Findings in the literature support this assumption (see Perry et al. (2010) for an overview). Steijn (2008), for example, measures higher PSM levels in the Dutch public sector compared to the private sector and shows that private sector employees with high PSM are more likely to look for jobs in governmental organizations. Hence, the first hypothesis of this paper states:

### $H_{1a}$ : Employees working in the public sector show higher levels of PSM than employees working in the private sector.

However, recent research has questioned the PO fit theory and provides evidence that the relationship between PSM and the public sector is overestimated or even misunderstood (e.g. Kjeldsen & Jacobsen 2013, Bright 2016). Christensen & Wright (2011, 2), for example, assume that Public *Service* Motivation is often confounded or equated with Public *Sector* Motivation and advocate the idea of PJ fit as a more suitable approach. Thus, PSM is not (or not only) about the sector of employment, but rather about the nature of the job. High levels of PSM therefore would cause people to take on jobs where they can provide service to others regardless of where the job is located. A fact that is unsurprising considering the strong altruistic orientation of PSM. According to Bright (2021, 4-5), effects of PJ fit were found mainly in student or pre-employment samples, as respondents are not yet socialized through employment in the sector. Therefore, to investigate whether PSM in Germany is more associated with sector resp. PO fit or PJ fit, the following hypotheses look at different student groups:

 $H_{1b}$ : Students with clear career intentions for the public sector show higher PSM levels compared to students of unrelated subjects.

 $H_{1c}$ : Students of subjects with a strong service orientation show higher PSM levels compared to students of unrelated subjects.

#### 2.3.2 Work Motivation

Following Hammerschmid et al. (2009), this study investigates the relationship between PSM and extrinsic, intrinsic as well as altruistic work motivation. Employees with high extrinsic motivation are primarily motivated by factors like high income, reputation, or prestige. Intrinsic work motivation, on the other hand, covers factors like passion, purpose, or self-fulfillment. It is defined "as the doing of an activity for its inherent satisfactions rather than some separable consequence" (Ryan & Deci

2000, 56). The question of which types of motivations are prevalent in the public sector is highly relevant for decisions in the context of work environment, hiring policy, and human resource management and can be considered as the starting point of PSM. Commonly used rational choice concepts struggled to explain the selfless behavior of public servants or their restriction of personal utility to help others (Perry 2000). PSM, therefore, assumes that the work motivation of public sector employees differs from that of private sector employees and that intrinsic work motivation takes on a more important role. Forest (2008, 336), for example, refers to PSM to be "by [its] very nature, essentially intrinsic". Altruistic motivation as a sub-dimension of intrinsic motivation describes the experience of satisfaction by helping others and represents a key feature of PSM. Vandenabeele & van de Walle (2008, 704) characterize altruism as the "foundation" of PSM.

Research shows that operating with extrinsic stimuli on individuals who are more intrinsically motivated can pose sustainable problems (Frey & Jegen 2001, Forest 2008). According to the "crowding out effect" (Frey & Jegen 2001, 590) intrinsic and extrinsic motivation do not accumulate. On the contrary, the extrinsic stimuli rather seem to drain of intrinsic motivation. Employees with high intrinsic motivation can perceive extrinsic incentive systems, e.g. performance-related pay, as control mechanisms diminishing their self-determination and self-esteem. Forest (2008, 332) shows that extrinsic incentives in the public sector "are likely to damage intrinsic motivation". The introduction of more extrinsic incentive concepts in the German public sector as suggested by new public management approaches would therefore not increase the performance of the high-level PSM employees, but rather undermine their intrinsic motivation and possibly lead to a decrease in their motivation and performance. The three studies on PSM in the German context measured positive correlations between PSM and intrinsic as well as altruistic work motivation (Hammerschmid et al. 2009, Schaa et al. 2014, Keune et al. 2018). For extrinsic motivation, however, the studies showed no significant or negative correlation with PSM. Hence, the second hypothesis of this paper states:

H2a: PSM correlates positively with intrinsic and altruistic work motivation.

H<sub>2b</sub>: PSM correlates negatively with extrinsic work motivation.

#### **3 Data and Measurement**

#### 3.1 Data

To gain insight into German PSM and find answers to the hypotheses formulated above, this study draws on a total number of 3,278 respondents from two different types of samples: students and a general population sample of German citizens. The general population sample consists of respondents resident in Germany. Field access was provided by *DALIA Research*<sup>3</sup>. DALIA distributed the survey link to potential respondents based on a river sampling method, which selectively targets people on websites and apps based on demographic quota characteristics. This study used quotas for gender, age, education level, and parental status from the German Microcensus. Respondents

received a monetary incentive for their participation. In total, DALIA directed 3,354 respondents to the general population survey. After data cleaning and speeder control<sup>4</sup>, 1,937 cases were available for further analysis. Based on self-reported sector affiliation, 1,336 participants currently work or have worked in the private sector, whereas 352 work in the public sector. 249 respondents cannot be assigned to a sector because either they have no sector affiliation (e.g. students, pupils, or homemakers) or did not provide that information (see Table 1 for descriptive statistics).

	Ge	neral Populat	ion Sample		
Sample	Fieldwork	N	Age	Gender (female)	Education (High School)
Public Sector	05/2019	352	43.1	55%	50%
Private Sector	05/2019	1,336	44.6	46%	39%
No sector identified	05/2019	249	35.7	65%	56%
Total		1,937	42.9	50%	43%
		Student Sa	ample		
Social Work	05/2019	127	31.2	74%	100
Social Science/Humanities	05-06/2019	276	26.4	75%	100
STEM	05-06/2019	154	25.1	56%	100
Economics/Law	05-06/2019	274	24.8	56%	100
Public Administration	05/2019	510	23.8	59%	100
Total		1,341	25.4	63%	100

#### Table 1 Summary of samples

The second sample consists of students from three different universities differing in their closeness to the public sector and the nature of their study program. The first sample *Public Administration* includes students who have already contracted for the public sector. The sample includes voluntarily recruited undergraduate and graduate public administration students from the University for Applied Local Public Administration of Lower Saxony (*Kommunale Hochschule für Verwaltung Niedersachsen – HSVN*). The HSVN administration distributed the survey to all students enrolled in the study programs *General Public Administration* (Bachelor), *Public Management* (Bachelor), and *Local Public Management* (Master). Universities of public administration science are funded by state-level administration and form the main share of the German public administrative workforce. In total, 578 out of 1,258 students contacted by the university administration participated in the survey. This corresponds to a response rate of approximately 46%. After data cleaning and speeder control, 510 students were available for further analysis.

Students from the sample *Social Work* were recruited at the German University for Social Work and Welfare (*Rauhes Haus – Evangelische Hochschule für Soziale Arbeit und Diakonie*). This group of graduates serves as a proxy for students with clear career intentions in service jobs and a

comparatively high altruistic orientation. The Rauhes Haus follows protestant principles and offers further ecclesiastical qualifications. After graduating, the majority work either as social workers or social pedagogues in governmental and non-governmental institutions. The university distributed the invitation link directly to all of their 523 enrolled students. In total, 147 respondents took part in the survey. This corresponds to a response rate of approximately 28%. 20 students were excluded after data cleaning and speeder control leaving a total of 127 cases.

Finally, three additional student groups originate from a survey at the *Universität Hamburg*. The laboratory for social research and experiments, run directly by the university, distributed the survey invitation to 2,031 members of its opt-in respondent pool of enrolled students. 815 pool members replied to the invitation and received the link to the survey. In total, 772 participants took part in the survey. In the questionnaire, students were asked about their study program by self-report. The information was coded and then classified by subjects. After data cleaning and speeder control, 274 students were assigned to *Economics/Law*, 276 to *Social Science/Humanities*, and 154 to *Science, Technology, Engineering, and Mathematics* (STEM). 12 students could not be assigned to any group due to very specific courses of study.

Students from all three surveys had the option to take part in a lottery with a chance to win Amazon gift cards worth between 25 and 250 euros. In three separate lotteries, a total of 7,000 euros were paid to the participants.

#### 3.2 Measurement

This study uses the instrument by Kim et al. (2013) to measure the four PSM dimensions APS, CPV, COM, and SS, distinguishing itself from the abovementioned studies on PSM in Germany that worked with the scale by Perry (1996) or variations of it. Although the usage of this instrument limits the comparability with the previous studies, it addresses the issues with the measurements based on Perry (1996) mentioned above. This study accepts the increased complexity of the comparison to further develop the field of research. Consequently, this article measures public service motivation with a German translation of the 16-item instrument by Kim et al. (2013). The scale includes four items for each of the four PSM dimensions. All items are rated on a five-point Likert scale ranging from 1 "*strongly disagree*" to 5 "*strongly agree*" (see online appendix for original scale and German translation).

In addition, the survey measures extrinsic, intrinsic, and altruistic work motivation with two items for each type of motivation. Respondents rate how important they consider specific job characteristics on a five-point Likert scale ranging from 1 "*unimportant*" to 5 "*very important*". Extrinsic motivation is operationalized by "*high income*" and "good promotion opportunities", intrinsic motivation by "*interesting occupation*" and "*activity in which you can work independently*" and altruistic motivation by "*profession where you can help others*" and "*profession that is useful to society*". The scale is a

shortened version of the item battery regularly used in the German Social Survey (*ALLBUS - Allgemeine Bevölkerungsumfrage der Sozialwissenschaften*) developed by ZA & ZUMA (1997) and run today by GESIS to measure the importance of different occupational characteristics.

#### 4 Results

Table 2 and Table 3 show the mean values and standard deviations for the PSM total score and its dimensions for the general population sample and the student samples. Items measure PSM using a five-point Likert scale. Therefore, the mean value for the indices is at 3. Values greater than 3 indicate a higher presence of PSM or its dimensions, values smaller than 3 indicate a lower or no presence.

Sample	Ν		PSM	APS	CPV	COM	SS
Public	352	Mean	3.91	4.19	4.32	4.11	3.02
Sector		SD	(0.56)	(0.64)	(0.65)	(0.77)	(0.91)
Private	1,336	Mean	3.91	4.16	4.36	4.19	2.94
Sector		SD	(0.57)	(0.67)	(0.63)	(0.72)	(0.90)
$\Delta$ (Public-Private)			0.00	0.03	-0.04	-0.08	0.08
P (Public-Private > 0)			0.49	0.19	0.85	0.95	0.06

Table 2 PSM statistics and differences for the general population sample

Note: P-values show probability for one-sided t-tests.

The PSM total score and three of its four dimensions are at an overall high level in all seven samples. For employees of the public sector as well as of the private sector, the total PSM score equals 3.91 (Table 2). CPV as the dimension with the highest score in both groups is at about 4.3, APS and COM are at only slightly lower levels. Self-sacrifice, on the other hand, is barely measured in the general population. Similar dimension patterns occur in all of the five student samples (Table 3). The highest values can be observed for CPV, followed by APS and COM. Comparatively lower scores are measured for SS with values ranging from approximately 3.1 to 3.4. These results indicate that PSM in Germany is characterized by (1) a high dedication to essential public values, (2) empathy and commitment towards the members of the society, (3) a willingness to actively exert a positive influence on the community and (4) a lower willingness to accept own disadvantages in return.<sup>5</sup> These findings thus differ from previous studies on German PSM, which measured comparatively high values of CPI resp. CPV, mixed results for SS, and barely measurable APM (Hammerschmid et al. 2009, Schaa et al. 2014, Keune et al. 2018). In terms of the measurement instrument, the scale by Kim et al. (2013) shows persuasive usability. In six out of seven samples, all four dimensions show a significant positive correlation with each other making the aggregation of the dimensions to a PSM total score reasonable.<sup>6</sup> Cronbach's alpha shows a high internal scale consistency for the PSM total score and acceptable to good levels of consistency for all four subdimensions in the general population. For the student samples, however, alpha is questionable CPV, but sufficient for the rest of the dimensions.

Sample	Ν		PSM	APS	CPV	COM	SS
Social Work	127	Mean	4.25	4.55	4.57	4.44	3.43
		SD	(0.36)	(0.42)	(0.49)	(0.53)	(0.65)
Social	276	Mean	4.18	4.43	4.59	4.36	3.34
Science/		SD	(0.44)	(0.56)	(0.49)	(0.66)	(0.73)
Humanities							
STEM	154	Mean	4.08	4.29	4.57	4.18	3.29
		SD	(0.53)	(0.66)	(0.49)	(0.75)	(0.79)
Economics/	274	Mean	3.97	4.25	4.47	4.09	3.09
Law		SD	(0.47)	(0.56)	(0.49)	(0.66)	(0.73)
Public	510	Mean	3.87	4.23	4.42	3.83	3.01
Administration		SD	(0.43)	(0.54)	(0.45)	(0.62)	(0.74)

Table 3 PSM statistics for student samples

#### 4.1 PO fit or PJ fit

Previously this article raised the question of whether PSM is genuinely a concept that is tied closely to public sector employment (PO fit) or if it is more about the nature of the job rather than the sector (PJ fit). Following the intentional assumption of the concept by Perry & Wise (1990), the first hypothesis H<sub>1a</sub> assumes that PSM is related to sector employment and public sector employees, therefore, show higher levels of PSM than their private sector counterparts. Besides mean values and standard deviation, Table 2 shows the differences in the PSM values between the two sector groups. Contrary to expectations, data provide no evidence for a strong relationship between PSM and the public sector in Germany. People working in the public sector do not show significantly higher PSM levels than people in the private sector. PSM is similarly high in both groups driven mainly by the dimensions of CPV, APS, and COM (Figure 1). The evaluation of the second hypothesis H<sub>1b</sub> also does not support the argument of sector fit theory (Table 3). Here, the effect is even opposite to the expectations (Figure 2). Despite the overall high level of PSM in all student samples, students of public administration actually show the lowest PSM scores compared to the other four student groups (see online appendix for ANOVA and t-tests).

Figure 1 PSM values for the general population sample



This is surprising since students of universities funded by state-level administrative units are almost guaranteed to work in the public sector upon completion of their studies. In fact, this student group was assumed to have particularly accentuated levels of PSM, which led to them being the focus of recent German PSM research (Schaa et al. 2014, Keune et al. 2018). Students of social work, on the other hand, whose subject is characterized by strong service orientation making them the center of hypotheses H<sub>1c</sub>, show the highest PSM scores. The group is followed by students of social science and humanities, which further strengthens the JF theory. Individuals with high levels of PSM are more likely to look for and accept jobs where they can interact and apply service to others, regardless of whether it is in the public, private or non-profit sector. PSM in Germany is thus more related to the type of occupation rather than the sector where a job is located. This observation corresponds to Brewer & Selden (1998), who argued that PSM is more evident in people's behavior than in their sector choice.

#### Figure 2 PSM values for student samples



#### 4.2 Work Motivation

Table 4 shows the mean values, standard deviation, and Cronbach's alpha statistics for the extrinsic, intrinsic, and altruistic work motivation for the seven samples. The right side of the table presents the correlation between work motivation and the PSM total score as well as its dimensions. Respondents from both general population groups show similar expressions for the three types of work motivation with just minor differences. For both sectors, mean values for the intrinsic work motivation rank highest followed by extrinsic and altruistic motives. Values for intrinsic motivation score only slightly higher among employees from the private sector. The PSM total score in both subsamples shows the highest correlation with altruistic work motivation, followed by intrinsic motivation. Extrinsic motivation, however, only correlates weakly but still significantly positive with PSM, except for SS in both groups. As previously in chapter 4.1, the data show no substantial sector differences.

Motivation	Mean	SD	Cronbachs	PSM	APV	CPV	СОМ	SS
			alpha					
			General Pop	oulation S	ample			
			Public See	ctor (N = 3	53)			
Extrinsic	3.58	0.79	0.57	0.13*	0.20**	0.10	0.11*	0.04
Intrinsic	3.90	0.84	0.57	0.32**	0.32**	0.26**	0.26**	0.16**
Altruistic	3.67	1.01	0.81	0.45**	0.47**	0.21**	0.37**	0.31**
			Private Sec	tor ( N = 1	,336)	1	1	1
Extrinsic	3.67	0.76	0.59	0.12**	0.15**	0.17**	0.14**	-0.01
Intrinsic	4.09	0.76	0.65	0.26**	0.30**	0.24**	0.23**	0.11**
Altruistic	3.61	0.96	0.82	0.46**	0.51**	0.29**	0.37**	0.30**
			Studen	t Samples	S	1	1	I
			Social Wo	ork (N = 12	27)			
Extrinsic	3.19	0.75	0.65	-0.00	0.08	0.05	-0.33	-0.05
Intrinsic	4.30	0.75	0.76	0.18*	0.32**	0.17*	0.03	0.10
Altruistic	4.11	0.70	0.45	0.31**	0.24**	0.11	0.15	0.31**
		So	cial Science / I	Humanities	s (N = 276)	)	1	I
Extrinsic	3.43	0.70	0.52	-0.06	-0.02	-0.01	0.00	-0.14*
Intrinsic	4.16	0.69	0.57	0.20**	0.23**	0.10	0.18**	0.15*
Altruistic	3.88	0.93	0.82	0.47**	0.51**	0.26**	0.26**	0.40**
			STEM	(N = 154)	L	1	1	1
Extrinsic	3.51	0.89	0.70	-0.20*	-0.10	-0.13	-0.13	-0.25**
Intrinsic	4.12	0.76	0.59	0.28**	0.25**	0.26**	0.29**	0.15
Altruistic	3.58	1.01	0.81	0.49**	0.46**	0.18*	0.40**	0.38**
			Economics	/ Law (N =	274)	1	1	1
Extrinsic	3.85	0.69	0.66	-0.03	0.03	0.09	0.04	-0.23**
Intrinsic	4.16	0.63	0.49	0.18**	0.18**	0.15*	0.15*	0.10
Altruistic	3.47	0.92	0.80	0.48**	0.47**	0.27**	0.41**	0.36**
I			Public Admini	istration (N	l =510)			
Extrinsic	3.72	0.56	0.40	-0.06	-0.06	-0.05	0.01	-0.10*
Intrinsic	4.05	0.64	0.46	0.23**	0.15**	0.24**	0.11*	0.17**
Altruistic	3.43	0.85	0.77	0.57**	0.49**	0.24**	0.33**	0.50**

Table 4 Correlation between PSM and extrinsic, intrinsic and altruistic work motivation

Note: Spearmans rho: \*p < .05, \*\*p < 0.01

Intrinsic motivation is also the most accentuated type of motivation among all student groups. Students of social work and students of social science or humanities show comparatively high values for altruistic motivation. Extrinsic motivation, in contrast, is more relevant for PA students and students of economics or law. Following the expectations, the PSM total score correlates highest with altruistic motivation followed by the intrinsic motivation in all seven student samples. Extrinsic motivation, on the other hand, has no positive link to PSM in the student samples. In four out of five samples, data show a significant negative correlation with the dimension of SS and in the case of STEM students also a negative correlation with the PSM total score. Regarding the dimensions, altruistic motivation correlates high with APS, COM, and SS. Intrinsic motivation shows a more differentiated pattern across the samples. For students of public administration, for example, it correlates highest with CPV. In the case of social work students, data show the highest correlation with APS instead. It is notable that in the group of the social work students the correlation coefficients between the PSM values and altruistic and intrinsic motivation are comparatively low and in some cases do not meet the 95% confidence level. This could be due to the overall very high level of PSM and intrinsic and extrinsic motivation and the resulting low variance in this specific group.

In summary, we observe evidence supporting hypothesis  $H_{2a}$  and mixed results for  $H_{2b}$ . PSM is related to intrinsic, but especially to altruistic work motivation. However, extrinsic incentives have a smaller, but still significantly positive effect on PSM in the general population. A crowding-out effect is therefore not present in these groups. In the case of all student groups, extrinsic factors have no or even negative effects on PSM. This is especially the case for self-sacrifice. When evaluating the results, it should be noted that the values for Cronbach's alpha vary between the samples and are partially not on a sufficient level.

#### **5 Discussion and Conclusion**

The concept of PSM originally initiated by Perry & Wise (1990) is used internationally by public administrative research to investigate why people are attracted to public sector employment. By identifying specific motives why people decide to work in the public sector instead of the private sector, policy-makers can implement and evaluate measures to increase the job satisfaction and performance of public sector employees. This paper demonstrated that there is a lack of a comprehensive empirical assessment of the US-centered PSM concept in the German context. To fill this gap, this study contributes to the ongoing discussion on PSM in the European context by measuring PSM in Germany with an extensive data set consisting of a general population sample and students from three different universities. In the following, the four main findings of the study are presented and discussed with reference to previous findings in the extant literature focusing on PSM in Germany.

First, the present study measured comparatively high levels of PSM in all of its seven sample groups. The aggregated PSM total score is mainly driven by the dimensions of CPV, APS, and COM. The values for CPV are at the highest level, followed by APS and COM. The difference between the three dimensions are overall small. However, the fourth PSM dimension SS was barely measured in the

general population sample and only slightly present in three out of five student samples. PSM in Germany is thus characterized by (1) a high dedication to essential public values, (2) empathy and commitment towards the members of the society, (3) a willingness to actively exert a positive influence on the community, and (4) a lower willingness to accept own disadvantages in return. This finding is surprising at first glance because Kim & Vandenabeele (2010) assumed self-sacrifice to be the basic requirement of PSM. However, it is in line with a previous assumption by Vandenabeele et al. (2006, 22) who attested self-sacrifice a negligible role in the German public sector, as it "received a politically incorrect connotation" in post-war Germany. This study's finding could indicate a stricter separation of work life and private life in public-administration-related occupations and therefore a peculiarity of German PSM. The findings of this study also differ from previous investigations in other regards. For example, previous studies measured comparatively high values of CPI resp. CPV, mixed results for SS, and barely measurable APM (Hammerschmid et al. 2009, Schaa et al. 2014, Keune et al. 2018). Although a comparison to the results of previous PSM studies on Germany is limited by different measurement instruments and samples, the differences in the political dimension of APS stand out. A possible explanation is the deviating operationalization of the dimension. For example, items for APS by Kim et al. (2013) focus more on individual beliefs and actions, whereas the measurement items of Perry (1996) adopt more general statements. The accentuated political dimension APS for Germany measured in this paper runs counter to assumptions by Hammerschmid et al. (2009) and Keune et al. (2018), but is not unlikely. Although the German administration leaves rather little space for policy-making for civil servants, they are in charge of the implementation of policy decisions and show great loyalty to their departmental ministers (Vandenabeele et al. 2006). It is surprising that previous studies explained the low political motivation in the German PSM concept by referring to high levels of neutrality and objectivity, as these attributes do not have to be mutually exclusive.

Second, the comparison of the present samples illustrated that PSM in Germany is more about PJ fit rather than PO fit and that there is no evidence of a strong relationship between PSM and the public sector in Germany. The lack of differences in PSM between public sector and private sector employees, comparatively low PSM levels in students who already contracted for the public service, and comparatively high PSM in students with a strong service orientation, indicate that sector "is not necessarily an accurate proxy for organizational value or activities" (Christensen & Wright 2011, 17). Accordingly, it is less relevant which sector/organization a person works for and more relevant whether the organization offers jobs in which PSM-related values are satisfied. Consequently, the public sector appears too multifaceted to be comprehensively covered by a single PSM concept. Rather bureaucratic-technical professions in the public sector also seem to be difficult to represent by the PSM concept as an effect of its strong altruistic orientation. The public administration in Germany should therefore selectively target young graduates depending on the profession within the administration and the level of altruistic job characteristics.

Third and in line with previous studies, PSM correlates strongly with altruistic and intrinsic types of work motivation. Extrinsic motives, on the other hand, did not correlate or even correlated negatively with some PSM dimensions in the student samples. In the general population sample, however, this study found weak but still accentuated correlations between PSM and extrinsic motives. This observation is inconsistent with previous investigations and provides no evidence for the existence of a crowding-out effect by extrinsic incentives. Instead, the results suggest that extrinsic incentives can have a positive impact on employees with high levels of PSM in the general population. The effect is comparatively smaller when compared to intrinsic and altruistic incentives. Employers therefore should still focus on intrinsic and altruistic incentives when recruiting or motivating workers in PSM-related jobs. Nonetheless, future research should not foreclose on studying the crowding-out effect but examine the extent to which it develops and changes over time and with occupational entry.

Fourth, the present study demonstrates a persuasive utility of the measurement instrument by Kim et al. (2013) for investigations on German PSM. Previous studies working with the scale by Perry (1996) showed problems with the composition of the total PSM score as well as with the internal consistency of some PSM dimensions (Hammerschmid et al. 2009, Schaa et al. 2014, Keune et al. 2018). Especially the measurement of APM and CPV showed better results. Therefore, the present study recommends using the measurement instrument by Kim et al. (2013) for future work on PSM in Germany.

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**Online Appendix** 

Public Service Motivation in Germany - An Empirical Assessment of the Adaptability of PSM to Germany

#### A. PSM items by Kim et al. (2013) and German translation

Dimension	Kim et al. 2013	German Translation
APS	I admire people who initiate or are	Ich schätze Personen sehr, die sich
(Attraction to public	involved in activities to aid my community.	für die Gemeinschaft engagieren.
service)	It is important to contribute to activities that tackle social problems.	Es ist wichtig, Tätigkeiten zu unterstützen, die soziale Probleme bekämpfen.
	Meaningful public service is very important to me.	Es ist mir wichtig, dass die öffentliche Verwaltung sinnvolle Aufgaben wahrnimmt.
	It is important to me to contribute to the common good.	Es ist mir wichtig, einen Beitrag zum Allgemeinwohl zu leisten.
CPV (Commitment	I think equal opportunities for citizens are very important.	Ich denke, dass Chancengleichheit für alle Bürger ein sehr hohes Gut ist.
to public values)	It is important that citizens can rely on the continuous provision of public service.	Es ist wichtig, dass sich die Bürger auf die Leistungen der öffentlichen Verwaltung verlassen können.
	It is fundamental that the interests of future generations are taken into account when developing public policies.	Es ist wichtig, dass die öffentliche Verwaltung in ihren Entscheidungen die Interessen zukünftiger Generationen berücksichtigt.
	To act ethically is essential for public servants.	Es ist wichtig, dass sich die Beschäftigten der öffentlichen Verwaltung ethisch richtig verhalten.
COM (Compassion)	I feel sympathetic to the plight of the underprivileged.	Ich empfinde Mitgefühl mit bedürftigen Personen.
	I empathize with other people who face difficulties.	Ich empfinde Mitgefühl mit Personen, die sich in schwierigen Lebenssituationen befinden.
	I get very upset when I see other people being treated unfairly.	Ich bin sehr aufgebracht, wenn ich sehe, dass andere Personen unfair behandelt werden.
	Considering the welfare of others is very important.	Es ist sehr wichtig, das Wohlergehen anderer Personen bei Entscheidungen zu berücksichtigen.
SS (Self-	I am prepared to make sacrifices for the good of society.	Ich bin bereit, für das Wohl der Gesellschaft auf Dinge zu verzichten.
Sacrifice)	I believe in putting civic duty before self.	Die Erfüllung staatsbürgerlicher Pflichten ist mir wichtiger als die eigenen Interessen.
	I am willing to risk personal loss to help society.	Ich bin bereit, zum Wohle der Gesellschaft Risiken auf mich zu nehmen.
	I would agree to a good plan to make a better life for the poor, even if it costs me money.	Einem guten Plan zur Unterstützung bedürftiger Menschen stimme ich auch dann zu, wenn er mich Geld kostet.

Table A1 PSM Items by Kim et al. (2013) and German translation

#### **B. Antecedents of PSM**

One strand of PSM literature addresses the antecedents of public service motivation and examines the relationship between PSM and specific sociodemographics (e.g. Perry 1997, Alonso & Lewis 2001, Kim 2004, Camilleri 2007, Perry et al. 2008, van Witteloostuijn et al. 2017, Piatak & Holt 2021). Although some studies showed inconclusive results, the majority measured higher PSM levels for women and positive correlations with age and education level (Ritz et al. 2016). The results for Germany are inconsistent. Hammerschmid et al. (2009), for example, measured significantly higher PSM values for male employees, Schaa et al. (2014) and Keune et al. (2018) on the other hand, a tendency for a higher PSM in female students. Age has a positive influence on PSM in the studies by Hammerschmid et al. (2009) and Keune et al. (2018) but is insignificant for Schaa et al. (2014).

Table A2 shows the correlation between PSM and gender for the seven samples. In the general population sample, data show no differences between genders for the PSM total score, but some differences in the dimensions. Female employees in the private sector as well as in the public sector show significantly higher levels of COM compared to their male counterparts. Female workers in the private sector, however, display lower levels of SS. The PSM value patterns among the student groups are less consistent. While there are no differences between male and female students in the social work sample, female students of Public Administration and STEM show significantly higher values for COM. Female students of economics or law and female students of social science or humanities differ significantly from male students in the PSM total score and three of its four dimensions (APS, CPV, COM). The data thus show higher values for women, though not for all dimensions. Especially COM takes on a prominent position in this context and seems to be more related to female respondents.

Sample	Ν	Gender (female)	PSM	APS	CPV	СОМ	SS			
General Population Sample										
Public Sector	351	55%	0.10	0.09	0.09	0.17**	-0.04			
Private Sector	1,333	46%	0.03	0.04	-0.01	0.17**	-0.07**			
Student Samples										
Social Work	127	74%	-0.00	-0.07	0.09	0.12	-0.07			
Social	276	75%	0.15**	0.14**	0.14**	0.21**	-0.03			
Science/										
Humanities										
STEM	153	56%	0.08	0.05	0.07	0.22**	-0.05			
Economics/	274	56%	0.16**	0.15**	0.14**	0.23**	-0.01			
Law										
Public	510	59%	0.05	0.06	0.02	0.14**	-0.04			
Administration										

#### Table A2 PSM and gender

Note: Spearman's rho: \*p < .05, \*\*p < 0.01.

Table A3 shows the correlation between PSM and age. In both general population samples, age correlates positively with the PSM total score as well as with the dimensions of APS, CPV, and COM.

Self-sacrifice is not affected by age. In the student samples, age has almost no influence. This observation might indicate that PSM is more likely to form in occupational life than in an academic setting. However, the lower variance in age of the students must be taken into account, when interpreting the results. Surprisingly, data show that the dimension of APS in case of the PA students decreases with age as well as the level of COM in social work students. Both dimensions can be considered as one of the driving factors for the choice of the study program. A decrease could indicate a resignation of students caused by the study program itself. However, the effect cannot be replicated with the number of semesters.

Sample	Ν	Age	PSM	APS	CPV	СОМ	SS			
		Gene	eral Populat	ion Sample	;					
Public Sector	352	43.1	0.16**	0.17**	0.21**	0.17**	-0.01			
Private Sector	1,336	44.6	0.11**	0.12**	0.14**	0.11**	0.02			
Student Samples										
Social Work	127	31.2	-0.04	-0.07	0.11	-0.25**	-0.02			
Social	276	26.4	0.04	-0.01	0.09	0.04	0.03			
Science/										
Humanities										
STEM	143	25.1	0.07	0.08	0.08	0.12	-0.01			
Economics/	274	24.8	0.06	0.09	0.11	0.06	0.02			
Law										
Public	510	23.8	-0.01	-0.10*	-0.02	-0.05	0.09			
Administration										

#### Table A3 PSM and age

Note: Spearman's rho: \*p < .05, \*\*p < 0.01.

#### Table A4 PSM and education level

Sample	N	Education (High School)	PSM	APS	CPV	СОМ	SS
Public Sector	333	50%	0.05	0.01	0.01	-0.04	0.11*
Private Sector	1,276	39%	0.06*	0.03	0.01	-0.02	0.14**

Note: Spearman's rho: \*p < .05, \*\*p < 0.01.

Table A4 illustrates the relationship between PSM and education. Since all students have the same German educational degree (High School or *Abitur*), the table only presents results for the general population sample. In both sample groups education correlates positively with self-sacrifice. The dimensions of APS, CPV, and COM are not affected. For the private sector, data show a positive correlation between education and the PSM total score, but only in the 95% confidence range.

To sum up, data show support for the existence of higher PSM levels for women and positive correlations with age and education level. However, this only applies to certain dimensions. Higher values for women can be measured primarily in the COM dimension, higher levels of education result in higher levels of SS only. Age, however, shows positive correlations with APS, CPV, and COM, but not for SS.

#### C. Dimension correlations and Cronbach's alpha values

Sample	Ν		PSM	APS	CPV	COM	SS
		Gene	ral Popula				
Public Sector	352	Mean	3.91	4.19	4.32	4.11	3.02
		SD	0.56	0.64	0.65	0.77	0.91
		APS		(0.78)	0.50**	0.49**	0.40**
		CPV		()	(0.72)	0.51**	0.25**
		COM				(0.85)	0.42**
		SS					(0.83)
Private Sector	1,336	Mean	3.91	4.16	4.26	4.19	2.94
	,	SD	0.57	0.67	0.63	0.72	0.90
		APS		(0.79)	0.55**	0.57**	0.44**
		CPV		, ,	(0.75)	0.53**	0.32**
		COM			, ,	(0.85)	0.41**
		SS					(0.83)
			Student Sa	amples			
Social Work	127	Mean	4.25	4.55	4.57	4.44	3.43
		SD	(0.36)	(0.42)	(0.49)	(0.53)	(0.65)
		APS		(0.62)	0.43**	0.33**	0.29**
		CPV			(0.59)	0.15	0.28**
		COM				(0.79)	0.41**
		SS					(0.64)
Social	276	Mean	4.18	4.43	4.59	4.36	3.34
Science/		SD	(0.44)	(0.56)	(0.49)	(0.66)	(0.73)
Humanities		APS		(0.76)	0.45**	0.52**	0.52**
		CPV			(0.60)	0.37**	0.35**
		COM				(0.78)	0.44**
		SS					(0.77)
STEM	154	Mean	4.08	4.29	4.57	4.18	3.29
		SD	(0.53)	(0.66)	(0.49)	(0.75)	(0.79)
		APS		(0.77)	0.47**	0.55**	0.62**
		CPV			(0.67)	0.36**	0.34**
		COM				(0.85)	0.45**
		SS					(0.76)
Economics/	274	Mean	3.97	4.25	4.47	4.09	3.09
Law		SD	(0.47)	(0.56)	(0.49)	(0.66)	(0.73)
		APS		(0.73)	0.50**	0.61**	0.47**
		CPV			(0.58)	0.46**	0.31**
		COM				(0.81)	0.44**
		SS					(0.76)
Public	510	Mean	3.87	4.23	4.42	3.83	3.01
Administration		SD	(0.43)	(0.54)	(0.45)	(0.62)	(0.74)
		APS		(0.70)	0.39**	0.43**	0.42**
		CPV			(0.53)	0.35**	0.25**
		COM				(0.71)	0.36**
		SS	anhach'a Alnh				(0.77)

Table A5 PSM statistics with correlation values and Cronbach's alpha for all samples

Note: Spearman's rho: \*p < .05, \*\*p < 0.01; Cronbach's Alpha in parentheses.

Table A6 Cronbach's Alpha for PSM total score for all samples

Sample	Public Sector	Private Sector	Social Work	Social Science Humanities	STEM	Economics Law	Public Administration
Cronbach's Alpha for PSM total score	0.88	0.89	0.83	0.77	0.87	0.85	0.88

#### D. ANOVA and t-tests for student samples

Dimension		Partial SS	df	MS	F	P(F)
	Model	25.69	4	6.42	31.78	0.00
PSM	Residual	269.95	1,336	0.20		
	Total	295.95	1,340	0.22		
	Model	6.95	4	1.74	7.95	0.00
CPV	Residual	292.09	1,336	0.22		
	Total	299.09	1,340	0.22		
	Model	15.81	4	3.95	13.08	0.00
APS	Residual	403.92	1,336	0.30		
	Total	419.92	1,340	0.31		
	•				·	
	Model	70.67	4	17.67	44.71	0.00
СОМ	Residual	527.90	1,336	0.40		
	Total	598.56	1,340	0.45		
	·				·	
	Model	33.05	4	8.26	15.13	0.00
SS	Residual	729.64	1,336	0.55		
	Total	762.69	1,340	0.57		

#### Table A7 ANOVA for student samples

Note: N = 1,341.

#### Table A8 Differences for student samples

Differences	PSM	APS	CPV	COM	SS
$\Delta$ (Social Work-SS/Hum)	0.06	0.12	-0.02	0.08	0.08
P (Social W-SS/Hum > 0)	0.07	0.02	0.62	0.10	0.15
$\Delta$ (Social Work-STEM)	0.16	0.26	0.00	0.26	0.14
P (Social Work-STEM > 0)	0.00	0.00	0.53	0.00	0.06
$\Delta$ (Social Work-Eco/Law)	0.27	0.30	0.10	0.35	0.33
P (Social Work-Eco/Law > 0)	0.00	0.00	0.03	0.00	0.00
$\Delta$ (Social Work-PA)	0.37	0.32	0.15	0.61	0.41
P (Social Work-PA > 0)	0.00	0.00	0.00	0.00	0.00
$\Delta$ (PA-Social Work)	-0.37	-0.32	-0.15	-0.61	-0.41
P (PA-Social Work > 0)	1.00	1.00	1.00	1.00	1.00
$\Delta$ (PA-SS/Hum)	-0.31	-0.20	-0.17	-0.53	-0.33
P (PA-SS/Hum > 0)	1.00	1.00	1.00	1.00	1.00
$\Delta$ (PA-Social W)	-0.21	-0.06	-0.15	-0.35	-0.27
P (PA-Social W > 0)	1.00	0.89	1.00	1.00	1.00
$\Delta$ (PA-Eco/Law)	-0.10	-0.02	-0.05	-0.26	-0.08
P(PA-Eco/Law > 0)	1.00	0.70	0.91	1.00	0.92

Note: P-values show probability for one-sided t-tests.

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<sup>3</sup> *DALIA Research* is a globally operating provider for online surveys (<u>https://daliaresearch.com/</u>). It provides its services in line with the ESOMAR Code on Market, Opinion and Social Research (<u>https://www.esomar.org/what-we-do/standards</u>).

<sup>4</sup> In line with the threshold used by DALIA Research, respondents are defined as speeders if processing time was below eight minutes. The median processing time was 10,1 minutes. Additionally, item batteries were checked for illogical and inconsistent patterns. These cases also drop out from analyses.

<sup>5</sup> The study additionally looked at the correlation between PSMs and some antecedents (gender, age, education). Results suggest that women have higher PSM than men and that PSM is positively correlated with age and education. Please refer to the online appendix for more additional information.

<sup>6</sup> Please refer to the online appendix for a detailed record of correlation values for all dimensions and samples as well as for Cronbach's alpha statistics for the PSM total score and all subdimenions.

<sup>&</sup>lt;sup>1</sup> The fact that the most cited article on PSM in the German context is based on data from Austria further illustrates the scarcity of PSM studies conducted on Germany.

<sup>&</sup>lt;sup>2</sup> Keune et al. (2018) refer to an additional investigation on PSM in Germany by Luft (2012). The study among administrative employees in Hesse is not accessible. According to Keune et al. (2018), the results are consistent with the three studies described above.

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