Article

# Public Service Motivation as a Predictor of Corruption, Dishonesty, and Altruism

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#### Abstract

Understanding how Public Service Motivation (PSM) is tied to ethical or unethical conduct is critically important, given that civil servants and other public-sector employees throughout the world have been shown to exhibit high PSM levels. However, empirical evidence about the relationship between PSM and ethical or unethical behavior remains limited, due in part to the challenges of observing unethical conduct and overcoming social desirability bias in self-reported measures. We address these challenges by employing incentivized experimental games to study the relationships between PSM and two types of unethical behavior—corruption and dishonesty—as well as one type of ethical behavior: altruism. Based on data from approximately 1,870 university students at three research sites in Russia and Ukraine, we find evidence of a robust negative association between PSM and willingness to engage in corruption and a positive association between PSM and altruistic behavior. Results concerning dishonesty are more mixed. Our findings indicate that corruption and dishonesty are related yet fundamentally distinct concepts, particularly with respect to their compatibility with PSM. The findings additionally demonstrate that hypotheses about PSM and behavioral ethics generated in the Western context generalize well to the starkly different institutional context of the former Soviet Union.

#### Abstract (Russian)

Понимание взаимосвязи между мотивацией людей работать на благо общества (PSM) и неэтичным поведением исключительно важно, учитывая большое количество исследований, показывающих, что, например, уровень PSM у государственных служащих во всем мире существенно выше, чем у занятых в частном секторе. Вместе с тем, количество эмпирических исследований, изучающих эту взаимосвязь остается небольшим, в первую очередь из-за сложностей как с прямым наблюдением неэтичного поведения людей, так и с получением несмещенных ответов на вопросы о нем в опросах. В этой статье мы проводим серию экспериментальных игр, которые позволяют нам оценить степень склонности людей к альтруистическому, нечестному и коррупционному поведению, и изучаем взаимосвязь этих типов поведения с мотивацией людей работать на благо общества. Используя данные 1,870 студентов трех университетов России и Украины, мы обнаруживаем сильные отрицательную корреляцию между PSM и склонностью к коррупции и положительную корреляцию между PSM и альтруизмом, в то время как связь между PSM и склонностью к нечестному поведению в целом менее однозначная. Эти результаты говорят о том, что коррупция и нечестное поведение — фундаментально различные, хотя и связанные явления,

особенно в контексте их взаимосвязи с PSM. Кроме того, наши результаты свидетельствуют о том, что взаимосвязь между PSM и этичностью поведения людей на постсоветском пространстве схожа с такой взаимосвязью в западных странах.

Are individuals with high levels of Public Service Motivation (PSM) more likely to act ethically? Since Perry and Wise's (1990) seminal formulation of the concept of PSM, scholars of Public Administration have recognized that some individuals are motivated less by self-interest and more by a desire to contribute to the public good, help others, or improve society. Given that a number of the values underlying PSM compassion, social justice, self-sacrifice—also are the bedrock for ethical behavior (Maesschalck, van der Wal, and Huberts 2008), it follows that high levels of PSM are likely to be associated with ethical conduct. Conversely, it would seem reasonable to expect low levels of PSM to be associated with unethical conduct.

Whether PSM levels predict individuals' propensity for ethical or unethical behavior has important policy implications, for extensive evidence suggests that civil servants and other public-sector employees have higher levels of PSM than their private sector counterparts (see, e.g., Crewson 1997; Houston 2000; Lewis and Frank 2002) and that university students with high PSM levels are more likely to aspire to public-sector careers (see, e.g., Carpenter, Doverspike, and Miguel 2012; Clerkin and Coggburn 2012; Liu et al. 2011; Vandenabeele 2008). Yet due to a dearth of Public Administration research on ethical and unethical conduct, empirical analysis evaluating propositions about PSM's relationship to ethical behavior is only beginning to emerge.<sup>1</sup> Early evidence of a link between PSM and ethical conduct was indirect, such as Brewer and Selden's (1998) study showing that federal employees' motivations for reporting rule violations (i.e., whistle blowing) are more consistent with a theory of PSM than with competing theories. Later studies that examined the correlation between direct measures of PSM and ethical behavior relied on selfreported activities such as volunteering, charitable contributions, or donating blood (e.g., Coursey et al. 2011; Houston 2005; Wright, Hassan, and Park 2016), leaving open the possibility that these measures suffer from respondents' inclination to exaggerate their engagement in activities perceived as socially desirable. Meanwhile, because of the challenge of observing or collecting accurate self-reported data on illicit behavior, the small handful of studies that have investigated the relationships between PSM and unethical or corrupt practices have relied on hypothetical vignettes

(e.g., Kwon 2012; Lim Choi 2004). Consequently, despite these studies' important contributions, nearly all existing PSM-related research on ethical or unethical conduct falls short of offering evidence regarding the relationships between PSM and *observable behavior*.<sup>2</sup>

In this article, which draws on three studies conducted with approximately 1,870 university students in Russia and Ukraine, we address the challenges of social desirability bias and the difficulties inherent in measuring unethical behavior by employing incentivized experimental games to examine the relationships between PSM and two types of unethical conductcorruption and dishonesty-and one type of ethical behavior: altruism.<sup>3</sup> These games offer subjects cash payments, the value of which is conditional on choices made during the study, to elicit observable behavior indicative of revealed preferences. First, to measure subjects' propensity to engage in corruption, we introduce laboratory corruption games into the study of PSM. Utilizing a modified version of a bribery game developed by Barr and Serra (2010), our corruption indicator captures the multidimensional nature of a bribe transaction, such as the need to find a willing bribe partner, the harm incurred to other members of society, and the moral element of engaging in an act explicitly labeled as a "bribe." Second, we employ a dice-task game developed by Barfort et al. (2019) and Olsen et al. (2019) to measure *dishonesty*.<sup>4</sup> This game requires subjects to repeatedly guess the outcome of a dice roll. The subject earns three times as much for correct guesses as for incorrect guesses, and the game's setup presents participants with the opportunity to earn more money by dishonestly reporting the number of correct guesses. Comparing the observed distribution of an individual's correct guesses over 40 repeated dice rolls to the expected distribution of an honest individual allows for estimation of each subject's cheat rate. Finally, following studies such as Banuri and Keefer (2016), Hanna and Wang (2017), and Barfort et al. (2019), we measure altruistic behavior using a

<sup>1</sup> See Bellé and Cantarelli (2017) for a recent review of the Public Administration literature on unethical conduct.

<sup>2</sup> Two recent and important exceptions, Esteve et al. (2016) and Olsen et al. (2019), are discussed below.

<sup>3</sup> We focus on these three behaviors because they are classic examples of ethical and unethical conduct in the behavioral ethics literature and because they exhibit similarities with the behaviors studied using selfreported measures in earlier works on PSM and ethical conduct.

<sup>4</sup> Barfort et al. (2019) and Olsen et al. (2019) were conducted by the same research team with overlapping samples of Danish university students. The two studies, however, focus on different questions and accordingly we cite each study separately at points throughout this article.

modified dictator game in which subjects are given an initial endowment and then must choose how much to keep for themselves and how much to donate to charities. The game therefore presents subjects with a direct tradeoff between personal financial gain and the opportunity to help others at one's own expense. As we discuss below, the external validity of all three games has been demonstrated in various settings, indicating that subjects' choices in these experimental games correspond to choices made in real-world situations.

Using the 16-item PSM scale developed by Kim et al. (2013), we find strong evidence of a negative correlation between PSM and propensity to engage in corruption and a positive correlation between PSM and altruistic behavior. These findings are robust to controlling for potentially confounding factors such as gender, risk aversion, ability, class year, academic field of study, family income, parental occupation, religiosity, and size of participants' childhood city of residence. Moreover, our use of data from three distinct research sites-and the notable consistency of our results across three subject pools-attests to the robustness of our findings. By contrast, while we find that PSM is negatively correlated with dishonesty, the correlations are substantively small and statistically significant at only one of three research sites.

Our unique subject sample is particularly relevant to the study of Public Administration. At all research sites, a substantial proportion of participants were enrolled in Public Administration or Public Law programs, and these universities' alumni feature prominently in Russia's and Ukraine's public sectors. Given the challenge of conducting incentivized experimental games with public officials currently in office, particularly in the authoritarian context of contemporary Russia, understanding the relationships between PSM and ethical or unethical behavior among *future* officials is especially valuable.<sup>5</sup>

Our empirical analyses facilitate two key theoretical contributions. First, our use of multiple experimental games allows us not only to examine the relationships between PSM and ethical and unethical conduct, but also to disentangle two related yet conceptually distinct types of unethical behavior—corruption and dishonesty—and analyze PSM's relationships with each. As we discuss below, corruption is a specific type of unethical behavior that is particularly at odds with PSM's focus on advancing the public interest, while dishonesty can under certain circumstances be compatible with PSM. That corruption is less compatible with PSM than dishonesty is borne out in our empirical findings introduced above, which show far more robust correlations between PSM and corruption than between PSM and dishonesty. Among other implications, these findings call into question earlier studies' tendency to employ indicators of dishonesty as proxies for willingness to engage in corruption.

Our second theoretical contribution pertains to the stark contrast of our research setting-post-Soviet Russia and Ukraine-with that of earlier studies of PSM, which have focused predominantly on North America and Western Europe. The post-Soviet region differs from the West in numerous ways that are inhospitable for PSM: bureaucratic traditions in which civil servants serve rulers and the state, not the public; concepts of the "public interest" or the "public good" that are in flux; and high levels of corruption. Yet despite these differences, our results show that theories about PSM and ethical or unethical conduct generated in the context of Western countries generalize surprisingly well to the post-Soviet region. We account for this finding by considering the ways that different types of theories presume PSM to operate at distinct levels-individual-level psychological factors versus national-level institutional factors-and propose that the former are more likely to generalize than the latter. Because explanatory mechanisms critical to theories about relationships between PSM and ethical or unethical behavior, such as self-identity and shared values, operate at an individual psychological level, not at a national institutional level, we expect correlations between individuals' PSM levels and corrupt, dishonest, or altruistic behaviors to be similar across sharply different institutional contexts. We also expect to find similar relationships between PSM and ethical behavior across distinct groups within a given society even if they face divergent institutional incentives, a point we demonstrate by showing how the correlations between PSM and ethical behavior among Russian and Ukrainian students aspiring to become public officials and among students aspiring to private sector careers are nearly identical.

Our study is most closely related to Esteve et al. (2016) and Olsen et al. (2019). The former shows a positive correlation between PSM and prosocial behavior measured by contribution levels in a public goods game conducted with university students in the Netherlands; the latter finds a negative correlation between PSM and dishonesty as measured by a dice-task game conducted with university students in Denmark. However, our research advances the literature in several important ways. First, this article is the first to introduce laboratory corruption games—as distinct from experimental games designed to measure dishonesty—into the study of PSM. More broadly, it is one of only a handful of studies to explicitly investigate

<sup>5</sup> In addition to the challenge of gaining access to current public officials, offering monetary incentives to public-sector employees raises difficult ethical and, in some contexts, legal questions.

the relationship between PSM and corruption, and, of these, the first study to employ a direct, comprehensive, and validated measure of PSM.6 Second, as noted above, our reliance on multiple experimental games, rather than a single experimental task, allows us to develop insights about PSM's relationships to corruption and dishonesty as distinct yet related concepts and to draw attention to the ways in which corruption is a type of unethical behavior particularly incompatible with PSM. Third, in contrast to existing studies, we demonstrate our findings hold not only in our sample as a whole but also when focusing separately on students pursuing a public-sector career and students pursuing private sector career paths.7 Finally, as one of the first studies to integrate Russia and Ukraine into debates over PSM, we generate novel empirical data for the study of PSM and analyze the generalizability of theories about PSM from a fresh perspective, including consideration, as introduced above, of the ways that different theories operate at different levels of analysis.

The following section examines the existing literature on PSM and its relationships to corruption, dishonesty, and altruistic behavior in greater detail. We then turn to discussion of our research design before presenting results.

#### Theory

PSM frequently is defined as individuals' predispositions for responding to motives related to the well-being of others, the public interest, and the improvement of society as a whole (Perry and Wise 1990). In accordance with Perry and Wise's (1990) initial formulation, scholars usually conceive of PSM as a multidimensional concept, combining a foundational dimension of Self-Sacrifice with rational, norm-based, and affective elements—which Kim et al. (2013) refer to as Attraction to Public Service, Commitment to Public Values, and Compassion, respectively.<sup>8</sup>

Following Schott et al. (2019, 1201), we emphasize that PSM is distinct from related concepts such as prosocial motivation. Whereas PSM-motivated individuals seek to benefit society at large and serve abstract ideals such as the "public interest," prosocially motivated individuals more narrowly seek to benefit people with whom they come in contact and/or the organizations of which they are a part. As we elaborate below, this distinction is important for delineating the relationships between PSM and corruption from PSM and dishonesty, and for distinguishing our choice of experimental games from those employed in earlier work (e.g., Esteve et al. 2016).

We follow Treviño, Weaver, and Reynolds (2006, 952) in defining ethical behavior as "behavior that is subject to or judged according to generally accepted moral norms of behavior." As Treviño, Nieuwenboer, and Kish-Gephart (2014, 636-7) further clarify, scholars of behavioral ethics frequently focus on three related types of behavior: "unethical behavior that is contrary to accepted moral norms in society (e.g., lying, cheating, stealing); routine ethical behavior that meets the minimum moral standards of society (e.g., honesty, treating people with respect); and extraordinary ethical behavior that goes beyond society's moral minima (e.g., charitable giving, whistleblowing)." Our study's focus on corruption and dishonesty falls squarely in the first category; its focus on contributions to charities as a form altruistic behavior, squarely in the third category.

We place particular emphasis on the relationships between PSM and corruption because the deleterious effects of corruption are well established and because PSM seems particularly antithetical to corruption, even more so than to other unethical behaviors. Corruption is frequently defined as the abuse of public office or resources for private gain (Fisman and Golden 2017, 23–5), which places it directly at odds with the Commitment to Public Values component of PSM. Corruption also causes harm to other citizens, making it incompatible with the Compassion component of PSM.<sup>9</sup> And corruption requires placing self-interest over the public good, in direct contradiction to the Self-Sacrifice component of PSM.

We simultaneously incorporate dishonesty into our study because it has been the focus of one of the few other studies on PSM to utilize incentivized experimental games (Olsen et al. 2019) and because other scholars who have employed dice-task games to measure dishonesty frequently imply that measures of dishonesty serve as proxies for corruption (e.g., Barfort et al. 2019; Hanna and Wang 2017). Yet dishonesty, while clearly an example of unethical conduct, may or may not cause harm to others and does not inherently undermine the public interest. Indeed, high-PSM individuals could potentially be more prone to engage in some forms of dishonesty, such as circumventing a rule perceived to be at odds with the public good or lying to compassionately protect a fellow citizen (Schott and

<sup>6</sup> Kwon (2012), for example, analyzes the relationship between PSM and corruption but uses an indicator of a related yet distinct concept intrinsic motivation—as a measure of PSM.

<sup>7</sup> Olsen et al.'s (2019, 577–8) sample, for example, is limited to students planning to pursue public-sector careers.

<sup>8</sup> We use the terminology of Kim et al. (2013) rather than the original Perry (1996) index given that we employ Kim et al.'s index in our empirical analyses below.

<sup>9</sup> Corruption's harms to others range from public safety hazards resulting from firms bribing inspectors to avoid enforcement of regulations to the loss of revenues for public goods resulting from corrupt officials' embezzlement.

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Ritz 2018, 37). It is therefore essential to analyze *separately* the relationships between PSM and corruption and PSM and dishonesty.

Finally, our study seeks to analyze not only the relationships between PSM and unethical conduct but also the relationships between PSM and ethical conduct. We focus on altruistic behavior as a critically important form of what Treviño, Nieuwenboer, and Kish-Gephart (2014, 637) refer to as "extraordinary" ethical conduct-conduct that exceeds society's moral standards-given that self-sacrifice plays a foundational role in the conceptualization of PSM. Indeed, altruism is so closely linked to PSM that some scholars conflate the two. Recent work by Piatak and Holt (2020) has taken important steps toward untangling PSM and altruism, proposing that altruism is a subset of the motivations encompassed by PSM. But given our study's focus on PSM's relationships to observable behaviors, we follow Schott et al. (2019, 1202-3) in conceptualizing altruism as a class of behaviors defined by an action that provides a benefit to a recipient at a cost to the donor, rather than as a type of motivation. Conceptualizing altruism as a behavior facilitates empirical analysis of whether the values expressed by individuals with high PSM are, in fact, associated with specific types of actions of interest to Public Administration scholars and other social scientists, such as willingness to sacrifice personal financial gain in order to support charitable causes.

#### PSM and Ethical or Unethical Behavior

There are a number of reasons why individuals with higher PSM levels might be more likely to engage in ethical conduct and less likely to engage in unethical conduct. First, PSM and ethical behavior exhibit a number of shared underlying values, including a focus on fairness, social justice, and self-sacrifice (see, e.g., Maesschalck, van der Wal, and Huberts 2008). Second, defining traits of PSM, such as a strong desire to help others and to sacrifice personal interest for the sake of the greater good, are also cornerstones of ethical conduct (Wright, Hassan, and Park 2016, 648-9). Third, individuals with high PSM may be more prone to moral reasoning based on internal virtues rather than external incentives, which may also foster ethical behavior (Lim Choi 2004; see also Stazyk and Davis 2015). Finally, for all reasons previously mentioned, PSM shares many features with moral identity, a social identity in which individuals' understanding of themselves requires adherence to norms and values. This self-concept, in turn, facilitates self-regulation of behavior (Ripoll 2018, 24-7). Critical to our discussion below pertaining to the generalizability of theories about PSM and ethical conduct across differing contexts, all of these factors operate at an individual

psychological level, rather than at the level of national institutions.

Unfortunately, empirical research on the relationships between PSM and unethical conduct is limited. As a recent review of the literature by Bellé and Cantarelli (2017) makes clear, Public Administration research in general, and research on PSM in particular, rarely has examined the roots of unethical conduct. Public Administration research on corruption is even more scant (see review by Bozeman, Molina, and Kaufmann 2018), and research devoted specifically to PSM and corruption is nearly nonexistent. Kwon's (2012) study of civil servants in South Korea finds that a concept closely related to PSM--intrinsic motivation--is associated with a lower propensity for corruption, as measured using a hypothetical vignette. Cowley and Smith (2014) show that while intrinsic motivation is higher among public employees relative to private sector workers throughout much of the world, this association is weaker in countries with high levels of corruption. Our study, however, is the first to examine the link between PSM and corruption while utilizing a direct measure of PSM and an indicator of corruption based on observable behavior. In line with broader expectations about PSM and unethical conduct, we test the following hypothesis:

## *Hypothesis 1:* Higher PSM levels will be associated with a lower propensity to engage in corruption.

In one of the few other studies of PSM to use incentivized experimental games, Olsen et al. (2019) find that PSM is negatively associated with dishonesty among university students in Denmark, as measured by a repeated dice-task game. However, per our earlier discussion, we believe that arguments suggesting a negative relationship between PSM and dishonesty are weaker than the case for a negative relationship between PSM and corruption. Indeed, in another recent study, Christensen and Wright (2018) found in laboratory experiments with US university students that priming subjects with exercises known to activate a sense of PSM did not decrease willingness to cheat in an incentivized dice-task game similar to that used by Olsen et al.<sup>10</sup> In order to disentangle the relationships between PSM, corruption, and dishonesty, we employ the same approach as Olsen et al. (2019). Our

<sup>10</sup> Note that Christensen and Wright (2018) differs from Olsen et al. (2019) in that the former experimentally stimulated PSM and then compared the behavior of those who had or had not been primed. Olsen et al., by contrast, focus on whether individuals with higher PSM are more likely to act dishonestly. Moreover, as Christensen and Wright (2018, 6) recognize, it may be the case that their intervention was ineffective at stimulating PSM or that their null finding resulted from unusually low cheat rates in their experiments.

replication of their study further allows us to examine whether their findings in the low-corruption context of Denmark generalize to the high-corruption contexts of Russia and Ukraine.

## *Hypothesis* 2: Higher PSM levels will be associated with lower dishonesty.

Compared to research on PSM and unethical conduct, there are relatively more empirical studies of PSM and ethical behavior. Until recently, however, studies of PSM and ethical conduct relied on indirect evidence of the link between PSM and prosocial behaviors. Brewer and Selden (1998) demonstrated that whistleblowers in the federal government are more motivated by regard for the public interest, and less motivated by personal reward or job security, than colleagues who are unwilling to whistle blow. Houston (2005), meanwhile, found that public employees-who in earlier studies had been shown to exhibit higher levels of PSM-are more likely than their private sector counterparts to volunteer for charities or donate blood. More recent work has considered the relationship between various forms of ethical conduct and direct measures of PSM. Lim Choi (2004) demonstrated that US civil servants with higher levels of PSM are more likely to select the moral choice when presented with hypothetical vignettes about ethical dilemmas, while other scholars showed a positive association between PSM and prosocial behavior such as willingness to volunteer and engage in charitable activity (Clerkin, Paynter, and Taylor 2009; Coursey et al. 2011; Lee and Jeong 2015; Piatak and Holt 2020) or to report unethical behavior in one's organization (Wright, Hassan, and Park 2016). Meyer-Sahling, Mikkelsen, and Schuster (2019) push this line of research further, demonstrating that experimentally priming PSM increases willingness to report ethical problems to management among Chilean government employees.

Despite these studies' important contributions, their reliance on self-reported measures of ethical behavior is subject to bias resulting from survey respondents' efforts to portray themselves in a positive light. Only one study, Esteve et al. (2016), has linked PSM to what they describe as observable "prosocial behavior," showing that participants with higher PSM contribute more in an incentivized public goods game. But public goods games measure a number of traits. Some of these traits, such as willingness to contribute to one's community, clearly are related to PSM, but others—such as trust and propensity to collaborate—are less directly relevant.<sup>11</sup> The modified dictator game we employ presents participants with a tradeoff between increased personal financial gain and donations to a charity, thereby offering a measure of altruistic behavior that is both more directly tied to key components of PSM such as Compassion and Self-Sacrifice and also more in line with earlier studies that employed non-experimental measures of charitable giving or propensity to volunteer. Following Esteve et al. (2016) and earlier studies using self-reported behavior, we hypothesize that PSM will be positively correlated with charitable donations. We again emphasize, however, that whereas these earlier works focused on developed countries, the evidence we present from the distinctively different context of Russia and Ukraine offers a chance to assess the generalizability of theories about PSM and ethical conduct.

*Hypothesis 3:* Higher PSM levels will be associated with higher levels of altruistic behavior.

## The Generalizability of PSM's Relationships to Ethical and Unethical Conduct

An additional contribution of this article is to analyze the relationship between PSM and ethical or unethical conduct in a novel context: the post-Soviet region. Extending the study of PSM beyond Western Europe and North America offers insights into the extent to which findings based on developed countries generalize to developing or transition countries, and vice versa. Such analysis invites attention to the ways that different theories presume PSM to operate. Drawing on influential works about the theoretical underpinnings of PSM, such as Perry (2000), Vandenabeele (2007), and Perry and Vandenabeele (2008), we propose that theories based on individual-level psychological factors are more likely to generalize than theories based on national-level institutional factors.

The majority of discussions about the generalizability of PSM have focused on the extent to which PSM is a universal concept or whether PSM is expressed in unique ways depending on the national context (see, e.g., Kim 2009; Liu, Tang, and Zhu 2008; Mikkelsen, Schuster, and Meyer-Sahling 2020; Vandenabeele, Scheepers, and Hondeghem 2006). For this line of inquiry, the post-Soviet region would seem to pose a particularly tough test of generalizability, given that public officials in this region, and to a significant extent citizens themselves, traditionally have been expected to serve the interests of the state rather than the public interest, complicating the notion of "public service" (Hill and Gaddy 2015, ch. 3; Houston 2014). Moreover, the collapse of the Soviet Union in the early 1990s and the resulting chaos created flux in prevailing moral frameworks, undermining consensus about the meaning of ideas such as the "public good" (Nezhina and Barabashev

<sup>11</sup> In a public goods game, participants choose whether to keep their initial endowment or contribute some of their private funds to a public pool. The publicly "invested" funds are increased by a fixed multiplier and then distributed equally among all participants, including those who did not contribute.

2019, 111–3).<sup>12</sup> Meanwhile, other analyses regarding the generalizability of PSM theories have considered the applicability to non-Western settings of findings showing that higher PSM levels are associated with better performance among public-sector employees, and that public-sector employees on average have higher PSM levels than their private sector counterparts (see discussion in Van der Wal 2015, 83). In this respect, the post-Soviet region would again seem to present a tough test of generalizability, as multiple factors may make the region's public sector both unattractive to high-PSM individuals and unlikely to foster PSM in public-sector employees. For example, Houston (2014, 847) has suggested that communism left the Eastern Bloc with a bureaucratic culture that is "devoid of a public service ethos," while the post-Soviet region exhibits some of the highest levels of public-sector corruption in the world.<sup>13</sup> Corruption, as discussed above, is in many ways is antithetical to PSM.

As shown in the upper half of Figure 1, PSM operates in these aforementioned theories via institutional factors and often at a national level. Distinct national cultures and path-dependent bureaucratic traditions influence understandings of concepts such as the "public good" or "public interest" (Ripoll 2018, 27; Schott and Ritz 2018, 31; Vandenabeele, Scheepers, and Hondeghem 2006, 20–1), shaping the ways in which PSM is conceptualized in a given national context and the applicability of the original four-factor configuration of Perry's (1996) PSM scale. Similarly, national institutional factors such as bureaucratic traditions and levels of corruption are likely to affect whether high-PSM individuals are attracted to and selected for public organizations, and whether they perform better once in the public sector. But should national-level institutional factors also affect the generalizability of the relationships between PSM and ethical or unethical conduct?

To the contrary, the mechanisms emphasized in existing theories about why PSM should be associated with ethical conduct operate primarily at the individual psychological level. To the extent that nationallevel institutions enter into these theories, they play an antecedent role: Via mechanisms such as socialization and social learning, institutions ranging from the family to religious organizations to professional associations shape individuals' PSM levels by influencing the extent to which public service becomes essential to one's values and identity (Moynihan and Pandey 2007; Perry and Vandenabeele 2008, 57–62; see also Perry 1997, 2000; Vandenabeele 2007), a pathway demarcated by the dotted-line arrow linking the upper and lower halves of Figure 1. But once institutions inculcate values and identities, it is at the individual level that these values and identities shape a person's capacity for self-regulation, determining the behavioral choices one makes in a given context or situation (Perry and Vandenabeele 2008, 66–70). And as Ripoll (2018) emphasizes, PSM can usefully be understood as a type of moral identity, a social identity that fosters self-regulation of behavior in line with norms and values that encourage ethical conduct so as to maintain an individual's self-concept of herself.

Important implications follow from these distinctions between theories in which PSM operates at a national institutional level and theories in which PSM operates at an individual psychological level. There are sound reasons, noted above, to question whether theories based on national institutional factors should generalize to the post-Soviet region. It may also be the case that levels of PSM in the former Soviet Union are lower than in other regions due to these institutional factors.<sup>14</sup> But to the extent that psychological theories about the effects of individual values and identities generalize across different settings, we would expect the relationships between PSM and ethical behavior to remain relatively stable across a variety of institutional contexts. In other words, even across countries whose institutions produce different average *levels* of PSM—or across subgroups influenced by distinct institutional contexts within a given country-individuals with higher PSM relative to their peers should be more likely to act ethically, leading to similar correlations between PSM and ethical conduct.<sup>15</sup>

We examine these issues in two contexts. First, we evaluate the issue of cross-national generalizability in the concluding section of the article by analyzing the extent to which our data from Russia and Ukraine collectively support Hypotheses 1–3, which draw on theories initially formulated in Western contexts.<sup>16</sup>

- 14 See Vandenabeele and Van de Walle (2008, 229–32) for evidence of lower PSM levels in Eastern Europe relative to other regions. We note, however, that cross-national comparisons of PSM levels should be conducted with caution due to a lack of scalar invariance in PSM measures, as shown by Mikkelsen, Schuster, and Meyer-Sahling (2020).
- 15 We would expect the signs of correlations to be similar, though variation of magnitudes would seem likely across institutional contexts. Institutions affect behavior not only via intrinsic motivations as in the theories of PSM and ethical behavior discussed above, but also via extrinsic motivations (e.g., rewards and punishment). Accordingly, in a society whose institutions incentivize both low- and high-PSM individuals primarily to act ethically or unethically, the magnitude of the correlations between PSM and ethical behavior would presumably be compressed.
- 16 We do not formalize a hypothesis about cross-national generalizability, as our research design does not facilitate a statistical test of such a hypothesis.

<sup>12</sup> It should be noted, however, that as we discuss in the Research Design section, measures of PSM developed by Kim et al. (2013) appear to generalize relatively well to the post-Soviet context.

<sup>13</sup> Russia and Ukraine consistently ranking in the bottom third of prominent cross-national corruption ratings. See, for example, Transparency International's Corruption Perceptions Index at transparency.org/ research/cpi/overview.



Figure 1. Levels of Analysis and the Generalizability of PSM Theories.

Second, we consider the relationships between PSM and ethical behavior across two distinct subgroups in our sample that face different institutional incentives and have noticeably different average PSM levels: students who aspire to public-sector employment versus students who aspire to private sector employment:<sup>17</sup>

Hypothesis 4: Among subjects expressing preferences for public sector and among subjects expressing preferences for private sector employment, higher PSM levels will be associated with lower propensity for corruption, lower dishonesty, and higher levels of altruistic behavior.

#### **Research Design**

#### Sampling and Implementation

We conducted our studies with undergraduate and masters students at three different sites: A top-five Russian university located in Moscow, a major regional Russian university, and a Ukrainian legal academy located in a major regional city.<sup>18</sup> At the two Russian sites, we recruited students using flyers, emails, and classroom announcements by research assistants and also allowed students to invite other students to participate via a module at the end of the survey. The survey and experimental games were conducted online using Qualtrics. To mitigate concerns about participants' attentiveness in an online study, we employed screener questions (Berinsky, Margolis, and Sances 2014). The level of attentiveness was high and results for both studies are robust to the exclusion of inattentive participants. The Moscow study, which was conducted between May 27 and June 15 of 2016, included 804 participants; the regional study, which was conducted between December 8, 2017 and January 22, 2018, included 376.<sup>19</sup>

For the Ukrainian research site, we recruited a random sample stratified by class year and department using enrollment data provided by the university administration. Research assistants visited classrooms and requested the participation of students from the sample. When students were not present, their names were replaced with the next person on the list until quotas for each department and class year were filled.<sup>20</sup> Those

<sup>17</sup> We note that this hypothesis was added in response to questions raised by reviewers. Our evaluations of this hypothesis should therefore be considered exploratory rather than confirmatory.

<sup>18</sup> For other research projects for which we intended to use these data, we were interested in students' sectoral career preferences and therefore sought to ensure that our samples included a sufficient number of students with an interest in public-sector careers. At the Russian research sites, we therefore focused on social science departments, with a particular emphasis on Public Administration students. In Ukraine, where Public Administration programs are less developed, we chose a law academy as a site where we could reasonably expect

a concentration of students with public-sector ambitions. See Section D of supplementary appendix for demographic information about the samples and discussion of the samples' representativeness of the larger student body.

<sup>19</sup> A pilot study with approximately 175 students was also conducted at a US university located in the Midwest in spring 2015. Notably, the pilot study also produced similar results to those presented below (see Section G of supplementary appendix). However, given that we modified the experimental games prior to launching the study in the post-Soviet region, our findings are not strictly speaking comparable.

<sup>20</sup> Response rates varied by department from 14 to 41%, with an average response rate for the sample of 27%. Students rarely refused to

that agreed to participate were then directed to the university's computer labs and presented with instructions on the computer screens. The survey and experimental games were again conducted using Qualtrics. The study was carried out between October 25 and November 3, 2017 and included 695 participants.

On average, Moscow study participants received the approximate equivalent of 14 USD, participants in the regional study received the approximate equivalent of 9 USD, and participants in the Ukraine study received the approximate equivalent of 4 USD.<sup>21</sup> It was made clear to participants that the payoffs for each of the experimental games were independent and that their total payoffs would be the sum of their earnings from across the games. All experimental games were conducted at the outset of the study to ensure that responses to survey questions would not influence participants' choices.<sup>22</sup> The language of the research instruments in all three studies was Russian.<sup>23</sup>

#### Measurement-Experimental Games

A significant challenge for studies of unethical conduct such as dishonesty or corruption is that respondents may be unlikely to offer sincere responses to interview or survey questions. Respondents also may be prone to exaggerate self-reported behavior related to ethical conduct. To mitigate these challenges, we employed experimental games that utilize incentive payments to elicit observable behavior, allowing researchers to make inferences about participants' preferences from the choices they make when confronted with decisions that lead to real-world financial loss or gain. Three games were employed to measure propensity for corruption, dishonesty, and altruistic behavior. Full scripts for these games can be found in Section C of supplementary appendix.

#### **Bribery Game**

The bribery game used in the study builds on Barr and Serra (2010). Participants were randomly assigned to the role of citizen or bureaucrat and subjects in both roles received an initial endowment of equal value. The citizen then was presented with a scenario in which she could more than double her initial endowment by obtaining a permit. When she seeks to obtain the permit, however, she is denied and informed that to avoid a long reapplication process, she may offer a bribe to the bureaucrat. Bribing entails a risk of punishment, so for offering a bribe the citizen loses approximately onethird of the initial endowment, regardless of whether the bureaucrat accepts the offer.<sup>24</sup> The bureaucrat next decides whether to accept the bribe, incurring a fine of approximately two-fifths of the initial endowment for engagement in corruption, a cost larger than that imposed on the citizen to reflect the greater harm done to society when officials act corruptly. If the bureaucrat accepts the bribe, the citizen receives the permit and the correspondingly higher payoff.<sup>25</sup> When the citizen offers and the bureaucrat accepts a bribe, then two additional participants (chosen at random) each incur a small loss (approximately one-seventh of the initial endowment), representing the harm that corruption inflicts on society at large.

We constructed payoffs so that participants could, with the aid of a payoff matrix, easily identify the range of bribes that increases the overall payoffs for both the bureaucrat and citizen and therefore should be accepted by participants guided solely by self-interest. However, if the bureaucrat incorporates considerations other than financial payoffs into her decision and rejects the citizen's offer, the citizen is strictly worse off, receiving a payoff of about two-thirds the initial endowment with which she began the game. The primary indicator of interest for the purpose of our study was whether an individual offers (in the role of citizen) or accepts (in the role of bureaucrat) a bribe.

#### Dice-Task Game

To measure dishonesty, the study utilized the dice-task game developed by Barfort et al. (2019) and Olsen et al. (2019). Respondents were asked to imagine a dice roll, guess a number between 1 and 6, and then click to the next screen. On this screen, a picture of a dice was shown with a randomly generated outcome.

participate, but on any given day for any given classroom, a number of students were either absent or in a different location than indicated by the university administration.

<sup>21</sup> The average payment size for the Moscow study was set to be roughly equal to payments for similar studies in other major cities (Barfort et al. 2019's study in Copenhagen, for example, paid an average of 13 USD to participants). For the regional and Ukraine studies, we then adjusted payments in accordance with cost of living and purchasing power in each city vis-à-vis Moscow. We emphasize that the *relative* stakes within each game (e.g., payoffs for guessing correctly vs. incorrectly in the dice-task game) are held constant across sites.

<sup>22</sup> All participants first engaged in a modified dictator game, then in 20 rounds of the dice-task game, then in the bribery game, then in a lottery game measuring risk aversion, and then in another 20 rounds of the dice-task game. Survey questions, including items for the PSM scale, then followed.

<sup>23</sup> The university at which the Ukraine study was conducted is located in a region where Russian is the predominant language and one of the official regional languages.

<sup>24</sup> To avoid the conflation of risk aversion and aversion to corruption, we chose, following Barr and Serra (2010), not to make punishment probablistic.

<sup>25</sup> We use strategy elicitation for the bureaucrat role, in which the participant indicates whether she would accept or reject each possible bribe amount. After the study concluded, payoffs were determined by randomly sorting participants into pairs of citizens and bureaucrats. This process was made explicit to participants.

Participants were then asked to record the number they had imagined and then click to the next screen. For correct guesses, participants earned three times more than for incorrect guesses. Since there was no way to observe participants' guesses, an incentive existed to dishonestly report guesses that matched the randomly generated outcome in order to increase one's payoff. Participants engaged in 20 rounds of this exercise at two points in the study, for a total of 40 rounds. An honest participant on average would guess between 6 and 7 rolls correctly. Comparison of a participant's number of successful guesses reported to the expected distribution of successful guesses under the assumption of honest reporting allows for estimation of the participant's cheat rate.

#### **Prosocial Preferences Game**

To measure altruistic behavior, we employed a modified dictator game (see, e.g., Banuri and Keefer 2016; Barfort et al. 2019; Hanna and Wang 2017). We allotted participants a sum of money and then allowed participants to keep this money or donate to charity. Actual donations were made in accordance with the participants' preferences. The game therefore places participants in a scenario that encompasses a direct tradeoff between personal financial gain and efforts to promote broader societal goals.

#### **External Validity**

These experimental games facilitate measurement based on observed behavior, but an important question concerns the extent to which behavior in the experimental setting correlates with real-world behavior. Fortunately, abundant evidence indicates that concerns about the artificiality of these experimental measures should not be overstated. Barr and Serra (2010) demonstrate a remarkable connection between realworld conditions and outcomes in their bribery games: Oxford University students from foreign countries that rank poorly on global corruption indicators were significantly more likely to engage in corruption in the laboratory than students from low-corruption countries. Dice-task games have been similarly validated, with several studies showing that dishonesty in these games is correlated with cheating, fraud, and rule breaking in schools, the workplace, and prisons (Cohn, Maréchal, and Noll 2015; Cohn and Maréchal 2018; Hanna and Wang 2017). Finally, with respect to our measure of altruistic behavior, a number of studies show that donations in laboratory games are strong predictors of real-world prosocial behavior such as charitable giving (e.g., Benz and Meier, 2008; Franzen and Pointner 2013). In short, when real-world behavior is difficult to observe, the existing evidence suggests that indicators derived from experimental games offer a valuable alternative.

#### Measurement-PSM and Control Variables

To measure PSM, we used a 16-item scale developed by Kim et al. (2013). This version of the scale builds on Perry's (1996) original scale but was designed to account for cross-cultural distinctions. The scale consists of an unweighted average of a series of attitudinal questions, shown in Section A of supplementary appendix, measuring four dimensions of PSM: (1) Attraction to Public Service (APS), (2) Commitment to Public Values (CPV), (3) Compassion (COM), and (4) Self-Sacrifice (SS). Section A of supplementary appendix presents the results of confirmatory factor analysis (CFA) showing that the four-factor model is a reasonable fit to the data for all three research sites. Moreover, at all sites reliability coefficients (Cronbach's  $\alpha$ ) for the full PSM scale were above 0.85 and at or above the 0.70 threshold for acceptable internal consistency for each of the four dimensions with the exception of CPV in the Moscow study.

We additionally collected data on demographic and attitudinal indicators that could potentially be correlated with both PSM and propensity to engage in corruption, dishonesty, or altruistic behavior. Perry (1997) and Maesschalck, van der Wal, and Huberts (2008) suggest that various processes of socialization affect an individual's level of PSM, including parental socialization, religious socialization, and professional identification. Our analyses therefore include control variables for religiosity, parental occupation, family income, and the size of the city or town in which respondents resided during childhood. Professional identification may be less relevant for our student-based sample, but we measure respondent's class year and academic specialization in order to account for the different socialization processes across departments (e.g., Economics versus Public Administration). Finally, we collect data on gender, ability (measured with selfreported GPA), and risk aversion. To measure risk aversion, we used a series of paired lottery choices in which participants selected between a series of fixed payoffs and lotteries with a 50% chance of receiving no payment and a 50% chance of receiving a higher payment (see Holt and Laury 2002). The indicator of interest is the number of certain payoffs an individual chooses before switching to a riskier-though potentially higher paying—lottery.

#### Results

#### **Descriptive Statistics**

We first present a brief overview of the outcomes from the experimental games and summary statistics for the PSM scale. As can be seen in Table 1, 61% of participants in the Moscow study engaged in a bribe transaction, compared to 47% and 29% in the Russian regional study and Ukraine study, respectively. Two factors should be considered when interpreting the lower rate in the Ukraine study. First, this study was conducted on university territory in a computer laboratory, which may have created an environment in which students felt more compelled to avoid behavior labeled as "corrupt." Second, the sample composition of the two Russian studies, in which participants were primarily from the social sciences, differed markedly from the Ukraine study in which 83% of participants were studying to be lawyers, judges, and prosecutors.

With respect to measures of dishonesty from the dice-task game, Table 1 shows that the average number of reported correct guesses was approximately 15 in the Moscow study, 21 in the Russian regional study, and 19 in the Ukraine study-far higher than the approximately 6.7 correct guesses that would be expected on average from a fully honest individual reporting correct guesses for 40 dice rolls. Following Barfort et al. (2019) and Olsen et al. (2019), we estimate the proportion of the 40 rolls on which an individual likely reported dishonestly.<sup>26</sup> Average cheat rates range from 0.26 in Moscow (meaning that on average participants reported dishonestly on just over every fourth dice roll) to 0.42 in the Russian regional study and 0.38 in the Ukraine study. To provide further intuition for the dice-task game results, Figure 2 compares the distribution of observed correct guesses over 40 dice rolls to the expected distribution for an honest participant. Only 3% of the sample at the Moscow research site, 6% at the regional Russia site, and 2% at the Ukraine site purely maximized payoffs by reporting 40 correct guesses. In Moscow, 16% reported seven or fewer correct guesses-the amount of or lower than the number of correct guesses an honest individual would be expected to make by chance. In the regional Russia study, the comparable figure was 12%; in the Ukraine study, 10%. Meanwhile, approximately 63% of respondents in the Moscow study, 79% of respondents in the regional Russia study, and 77% of respondents in the Ukraine study reported 10 or more correct guesses, despite the fact that the probability of honestly guessing right 10 or more times is around 12%.

In the modified dictator game participants in the Moscow study on average donated approximately 50% of their initial endowment to charity, compared to 53% in the regional Russia study and 60%

$$CheatRate = \frac{6}{5} \left( \frac{Y_i}{40} - \frac{1}{6} \right)$$

in the Ukraine study. It again should be noted that the Ukrainian students participated in a university laboratory, whereas the participants at both Russian sites participated online at a time and location of their choosing, meaning that results across the Russian and Ukrainian studies are not strictly comparable.

In all studies, altruistic behavior is negatively correlated with dishonesty and propensity to engage in corruption, while dishonesty and propensity to engage in corruption are positively correlated. In the Moscow study, those who gave or accepted bribes in the bribery game donated around 13 percentage points less of the initial endowment than those who did not. In the regional study and Ukraine study, the corresponding figures were 12 and 19 percentage points. Meanwhile, in all three studies those who engaged in a bribe transaction in the bribery game had a cheat rate of about 10 percentage points higher in the dice game. In all cases, these differences are significant at p < .001. That said, while the measures of propensity for corruption and dishonesty clearly are related, they capture distinct information about unethical behavior, as discussed in more detail below.

Finally, Table 1 provides descriptive statistics for PSM scores. The 5-point scales on which these were initially measured have been rescaled to range from 0 to 1.<sup>27</sup> Overall PSM scores were similar across the Moscow and regional study—0.57 and 0.61, respectively—and moderately higher in the Ukraine study at 0.70.<sup>28</sup> At all three research sites, average scores for the Commitment to Public Values (CPV) dimension of PSM were highest, followed by Compassion (COM), Attraction to Public Service (APS), and then Self-Sacrifice (SS).

## PSM as a Predictor of Corruption, Dishonesty, and Altruistic Behavior

This section turns to our primary analyses. Table 2 presents results evaluating willingness to engage in a behavior framed explicitly as a corrupt activity, as measured by whether or not participants offered (in the role of citizen) or accepted (in the role of bureaucrat) a bribe in the bribery game. Because the outcome variable is dichotomous, we employ linear probability models. Results are robust to the use of logit regressions

<sup>26</sup> Each participant's reported number of correct guesses  $Y_i$  is a function of the number of dice rolls K = 40, the probability of a correct guess p = 1/6, and individual *i*'s unobservable *CheatRate*, such that  $Y_i = K(p + (1 - p)CheatRate_i)$ . Rearranging produces the estimated cheat rate:

Note that for sufficiently small  $Y_i$  (i.e., for individuals who are both honest and unlucky), the estimated cheat rate can be negative.

<sup>27</sup> We use this rescaling to make our results regarding PSM and cheating in the dice-task game comparable to Olsen et al. (2019), although we emphasize that without assessment of measurement invariance such cross-national comparisons warrant caution.

<sup>28</sup> As discussed in Section B of supplementary appendix, multigroup confirmatory factor analysis does not produce evidence of metric invariance across the research sites, indicating that comparisons of mean values—as well as the magnitude of the relationships between PSM and ethical or unethical behavior analyzed below—across research sites should be conducted with care.

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			Russia					Russia					Ukraine		
			Jniversity in M	loscow			F	Regional Unive	ersity				Legal Acader	ny	
	Mean	SD	Minimum	Maximum	Ν	Mean	SD	Minimum	Maximum	Ν	Mean	SD	Minimum	Maximum	N
Experimental games															
Bribe	0.61	0.49	0	1	803	0.47	0.50	0	1	375	0.29	0.45	0	1	693
Correct Guesses	15.36	8.92	0	40	804	20.61	10.99	ŝ	40	376	19.25	9.87	2	40	695
Cheat Rate	0.26	0.27	-0.20	1	804	0.42	0.33	-0.11	1	376	0.38	0.30	-0.14	1	695
Donations	0.50	0.32	0	1	804	0.53	0.32	0	1	376	0.60	0.33	0	1	695
Public Service Motiva	tion														
PSM Index	0.57	0.17	0	1	803	0.61	0.18	0	1	375	0.70	0.16	0	1	693
APS	0.67	0.19	0	1	804	0.69	0.21	0	1	375	0.73	0.20	0	1	694
CPV	0.76	0.16	0	1	804	0.77	0.18	0	1	376	0.80	0.18	0	1	694
COM	0.73	0.17	0	1	804	0.74	0.19	0	1	376	0.79	0.18	0	1	694
SS	0.44	0.20	0	1	803	0.47	0.22	0	1	376	0.54	0.21	0	1	693
Demographic and atti	tudinal v.	ariables													
Male	0.40	0.49	0	1	804	0.31	0.46	0	1	376	0.36	0.48	0	1	695
<b>Risk Aversion</b>	0.52	0.18	0	1	803	0.53	0.21	0	1	375	0.51	0.24	0	1	691
GPA	0.60	0.18	0	1	803	0.77	0.19	0	1	376	0.84	0.17	0	1	694
Family Income	0.40	0.23	0	1	793	0.33	0.20	0	1	370	0.20	0.17	0	1	674
Religious	0.49	0.50	0	1	804	0.43	0.50	0	1	376	0.67	0.47	0	1	695
Home City Size	0.57	0.37	0	1	804	0.35	0.33	0	1	374	0.38	0.30	0	1	692
Parent employed in															
Public Sector	0.52	0.50	0	1	804	0.46	0.50	0	1	376	0.38	0.49	0	1	695
<b>Private Sector</b>	0.80	0.40	0	1	804	0.76	0.43	0	1	376	0.52	0.50	0	1	695
Nonprofit	0.07	0.26	0	1	804	0.06	0.24	0	1	376	0.06	0.23	0	1	695
Sector															
Military	0.11	0.31	0	1	804	0.05	0.22	0	1	376	0.10	0.30	0	1	695
Legal	0.06	0.24	0	1	804	0.06	0.23	0	1	376	0.13	0.34	0	1	695
Profession															
		, ,	c		100			c	·						
Public Admin. Public Law	c7.0	0.45	0	-	804	0.34	0.47	0	-	3/0	0 56	050	0	-	694
Dublic Car Duaf	0.73	0.47	C	-	804	0.30	0.46	0	-	376	0.30	0.40			604
Fublic Sec. Frei.	67.0	0.42	O	-	804	0.30	0.40	D	Т	3/0	0.38	0.49	D	1	694
Note: Bribe is a dich to the number of corre- reflects fewer correct o	otomous et guesses	indicato reported	r of whether a <u>I</u> l in the dice-tasl	participant offer k game; Cheat F of correct guess	red (in th Sate refer	e role of ( 's to the c for a ful	citizen) or orrespone	r accepted (in t ding estimate fo - individual rol	he role of a bu or the proporti ling a dice 40 t	reaucrat) on of roli imes (see	a bribe ii ls on whic Footnote	the corr th an indi 26 for 6	ruption game. ( ividual cheated. liscussion of ch	Jo <i>rrect Guesses</i> r A negative cheat eat rate calculati	efers t rate
Donations refers to the	proporti	on of the	initial endown	nent donated to	charity ii	in the moc	lified dict	ator game. <i>PSI</i>	M refers to the ]	Public Se	rvice Mot	ivation i	ndex, APS to th	e Attraction to P	ublic



Figure 2. Number of Correct Guesses for 40 Dice Rolls. *Note*: The histograms show the expected distribution with full honesty vs. observed distribution. The x-axes represent number of correct guesses; y-axes represent proportion of participants.

and average marginal effects from logit models are similar in magnitude to the coefficients in Table 2.

The PSM index has been rescaled to range from 0 to 1, such that regression coefficients can be interpreted

as the average percentage point difference in the likeliness of individuals at the high end of the PSM spectrum to engage in a bribe transaction compared to individuals at the low end of the spectrum. Odd numbered

				m manua la a			amon l'anna					
		Rus	iia			Russ	ia			Ukraine		
		University in	n Moscow			Regional U	niversity			Legal Acader	ny	
	(1)		(2)		(3)		(4)		(5)		(9)	
PSM	-0.759***		-0.657***		-0.530***	200	-0.500***		-0.620***		-0.580***	
Male	(0.086)	[0.000]	(0.092) $0.10^{**}$	[0.000]	(0.139)	[0.000]	(0.150) -0.031	[0.001]	(0.104)	[0.000]	(0.122) $0.098^{**}$	[0.000]
Dick According			(0.035)	[0.002]			(0.059)	[0.601]			(0.036)	[0.007]
KISK AVETSION			0.090) (0.090)	[0.373]			-0.126) (0.126)	[0.291]			cc0.0- (0.067)	[0.606]
GPA			0.040 (0.092)	[0.663]			-0.098 (0.145)	[0.499]			-0.099 (0.121)	[0.413]
Family Income			0.077				0.009	[200]			0.028	
Home City Size			0.022	[0.52/]			(0.136) -0.022	[0.946]			(0.133) $0.105^{\dagger}$	[0.832]
			(0.048)	[0.644]			(0.081)	[0.782]			(0.061)	[0.087]
Religious			-0.008 (0.034)	[0.807]			-0.057 (0.055)	[0.302]			0.042 ( $0.042$ )	[0.321]
Parent Employed in:				,							*EC	
Public Profession			0.019	[0 589]			0.060	[0 274]			0.071*	[0.035]
Private Profession			0.019	[~00.0]			-0.026	[±/7.0]			0.055	[]
			(0.045)	[0.672]			(0.065)	[0.695]			(0.038)	[0.154]
Nonprofit Sector			-0.033				-0.020				0.017	
Military			(0.063) 0.102†	[966.0]			(0.106) 0.085	[168.0]			(8c0.0)	[0.768]
1 11111111			(0.057)	[0.071]			(0.123)	[0.489]			(0.046)	[0.053]
Legal Profession			0.053				0.064				0.024	
			(0.070)	[0.454]			(0.113)	[0.570]			(0.052)	[0.654]
Field of Study: Public Administration			-0.059 (0.041)	[0.154]			-0.015 (0.058)	[0.793]				
Public Law			~				~				-0.038	[0, 0, 0]
Constant	$1.041^{***}$		0.937***		0.795***		0.977***		0.716***		0.698***	[C+C.U]
	(0.050)	[0.000]	(0.118)	[0.000]	(0.089)	[0.000]	(0.186)	[0.000]	(0.078)	[0.000]	(0.144)	[0.000]
Class Year Dummies	No		Yes		No		Yes		No		Yes	
Ν	802		789		374		366		691		665	
$R^2$	0.070		0.112		0.037		0.066		0.049		0.093	
<i>Note:</i> Linear probability Service Motivation index. 7 compares students at the Ul	models with robu The Public Admini trainian legal acad	st standard erro <i>istration</i> variable lemv studying ir	rs in parentheses e compares stude 1 departments spe	and <i>p</i> -values in outs at the Russi scializing in the	brackets. For the an universities str preparation of in	Ukraine study udying Public A dres. prosecuto	(Columns 5 and 6 Administration to rs and investigate	<ol> <li>standard erre students studyi ors with student</li> </ol>	ors are clustered a ing in other acade s studving in den	tt the session lev	el. <i>PSM</i> refers to s; the <i>Public</i> Lo	the Public <i>w</i> variable ommercial

Table 2. PSM as a Predictor of Propensity to Engage in Corruption

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\*\*\*p < .001, \*\* p < .01, \* p < .05, †p < .10.

columns show bivariate regressions; even numbered columns show specifications controlling for gender, risk aversion, ability, class year, field of study, religiosity, family income, parental occupations, and size of the subject's childhood city of residence.

Consistent with Hypothesis 1, individuals with higher levels of PSM are substantially less likely to engage in a corrupt act. In the Moscow study, participants exhibiting the highest levels of PSM are on average approximately 76 percentage points less likely than participants exhibiting the lowest levels of PSM to engage in a bribe transaction; in the Russian regional and Ukraine studies, the corresponding figures are 53 and 62 percentage points, respectively. Results are robust to the inclusion of a full set of control variables, and for all specifications at all three research sites the findings are significant at p < .001. Additionally, as shown in Section E of supplementary appendix, there is a large and nearly always significant negative relationship between each of the four dimensions of PSM and propensity for corruption at each of the research sites.

Our findings concerning dishonesty stand in contrast to our robust results concerning PSM and corruption. Table 3 presents results from OLS regressions analyzing the association between PSM and cheat rates in the dice-task game. Regression coefficients can be interpreted as the percentage point difference in cheat rates between a high and low-PSM individual. In contrast to Olsen et al. (2019) who, using the same dice task we employed, identify a robust negative correlation between PSM and cheating among Danish students, we find mixed results. For the Moscow study, moving from the lowest to highest PSM levels is associated with approximately a 13 percentage points decline in the cheat rate, and the bivariate results are significant at p < .05. However, the magnitude of this correlation is strikingly lower than the approximately 70 percentage point decline found in Olsen et al.'s (2019) Danish sample. And while Olsen et al. (2019) found a robust negative correlation between each dimension of PSM and cheating, ranging in magnitude from 19 to 44 percentage points, the dimensions in our study are associated with a decline in the cheat rate of around 7-11 percentage points at the Moscow site, as shown in Section E of supplementary appendix. Beyond the Moscow study, results diverge further. For both the overall PSM scale and its dimensions, there are few statistically significant relationships in the regional and Ukraine studies. In short, we find only mixed support for Hypothesis 2 that higher PSM will be associated with lower levels of dishonesty. In the concluding section, we consider possible interpretations and implications of the divergent findings between our study and Olsen et al. (2019).

Finally, Table 4 presents OLS regressions analyzing the association between PSM and altruistic behavior, as measured by the proportion of the initial endowment donated to charity in the dictator game. In line with Hypothesis 3, the results show a robust positive relationship between PSM and altruistic behavior. In bivariate regressions, an individual with high PSM levels on average donates 54 percentage points more of the initial endowment than the low-PSM individual in the Moscow study, 37 percentage points more in the regional Russian study, and 50 percentage points more in the Ukraine study. In all cases, results are significant at p < .01 or p < .001, even in specifications including a full set of control variables. Moreover, all four dimensions of PSM are positively and mostly significantly associated with altruistic donations, as shown in Section E of supplementary appendix.

Beyond our primary analyses about PSM, surprisingly few covariates in the set of control variables are associated with propensity to engage in corruption, dishonesty, or altruistic behavior at a statistically significant level. Males at the Moscow and Ukrainian research sites are more likely to engage in a bribe transaction, and males at all sites donate less money in the dictator game. Subjects studying Public Administration at the Moscow site or Public Law at the Ukrainian site on average offer larger charitable donations in the dictator game, but there are no statistically significant differences by field of study with respect to the corruption or dice roll games.<sup>29</sup> Somewhat surprisingly, risk aversion is largely uncorrelated with behavior in any of the games, at least in specifications including other control variables. There is some evidence at the Russian sites that students with parents in the public sector are more likely to cheat and students with parents in the private sector are more likely to donate. But overall, systematic relationships between parental occupation and ethical conduct are not readily apparent.

The analyses so far have relied on our full samples. We now consider the extent to which our findings generalize across subgroups within the samples and examine a distinction with significance for scholars of Public Administration by comparing students expressing a preference for public versus private sector career paths. The percentage of students preferring a public-sector career ranges from 23% at the Moscow site to 30% at the regional Russian site to 38% at the Ukrainian legal academy (see Table 1).<sup>30</sup> A follow-up

<sup>29</sup> The regressions in tables 2–4 compare students enrolled in Public Administration (at the Russian research sites) or Public Law (at the Ukrainian site) with students specializing in other fields of study. However, our findings are robust regardless of how we control for academic specializations.

<sup>30</sup> Our samples contain a significant number of Public Administration or Public Law students, and preferences for public-sector careers are notably higher among these students than in the overall sample (see Table F2 in supplementary appendix). However, even in these departments, a sizable proportion of students—in some cases a majority—aspire to a private sector career; similarly, a number

		R	ussia			Kı	lssia			Ukr	aine	
		Universit	y in Moscow			Regional	University			Legal A	cademy	
	(1)		(2)		(3)		(4)		(5)		(9)	
MSP	-0.126*		-0.118 <sup>+</sup>	[0.075]	0.092	[0 360]	0.092	[0 381]	-0.041	[0 510]	-0.033	[0.638]
Male		[CE0:0]	(0000) 0.009 (0000)	[C (0.0]	(101.0)	[000:0]	-0.001			[orc·o]	-0.044	[0C0.0]
Risk Aversion			0.044 0.044 0.050)	[0.0/4]			0.011 0.011 0.010	[110 0]			(0.090 <sup>†</sup> (0.053)	[0.000]
GPA			(0.096 <sup>+</sup>				(-0.110)				(cc0.0)	[260.0]
Family Income			(0.033 0.033 (120.0)	[070.0]			0.005 (100.01)	[0.62]			(0.092 (0.092	[7/C.U]
Home City Size			0.043	[010.0]			-0.050	[0000]			(0.010)	[ 407.0]
Religious			(0.027) 0.022	[0.105]			(0.053) - 0.028	[0.351]			(0.043) 0.013	[0.822]
			(0.019)	[0.251]			(0.035)	[0.424]			(0.027)	[0.629]
Parent Employed in: Public Profession			0.033				0.094**				-0.008	
Drivate Drofession			(0.020) 	[0.102]			(0.035)	[0.008]			(0.023)	[0.741]
1 11/4/0 1 1 01/201011			(0.025)	[0.284]			(0.046)	[0.015]			(0.021)	[0.275]
Nonprofit Sector			-0.082** (0.030)	[0.006]			0.004 (0.070)	[0.951]			-0.020 (0.045)	[0.660]
Military			-0.024 (0.030)	[0 424]			-0.127 (0.083)	[0 126]			-0.028 (0.039)	[0 476]
Legal Profession			0.018 (0.039)	[0.643]			0.091 (0.087)	[0.296]			(0.037) (0.037)	[0.238]
Field of Study: Public Administration			-0.025 (0.023)	[0.289]			0.005 (0.039)	[0.888]				-
Public Law			~								0.001 (0.033)	[0.965]
Constant	0.333*** (0.038)	[0 000]	0.212** (0.069)	[000]	0.361*** (0.065)		0.554***		0.406*** (0.048)		0.455***	
Class Year Dummies N	No 803	[000:0]	Yes 790	[700:0]	No 375	[000:0]	Yes 367	[000:0]	No 693	[000:0]	Yes Yes	[000:0]
$R^2$	0.007		0.036		.003		0.071		0.001		0.062	

Table 3. PSM as a Predictor of Dishonesty

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$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$				Zussia			a a	Inssia			¥Π	raine	
			Universi	ty in Moscow			Regiona	al University			Legal /	Academy	
		(1)		(2)		(3)		(4)		(5)		(9)	
	PSM	0.544***		0.474***		0.366***		0.315***		0.504***		0.427***	
mat         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0.0.0         0	Mala	(0.065)	[0.000]	(0.068) 0.128***	[0000]	(0.097)	[000.0]	(0.098)	[0.001]	(0.068)	[000.0]	(0.079) ^^^^^	[0.000]
Risk Arreston         -0.104	INIAIC			-0.120 (0.023)	[0.000]			(0.038)	[0.002]			(0.026)	[0.005]
RH         0064)         0102         01064)         0102         01064)         0105         01064)         0105         01064)         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006         0006	Risk Aversion			-0.104				0.109				$-0.120^{\dagger}$	
mily income $(000)$ $(067)$ $(067)$ $(000)$ $(067)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$ $(000)$	GDA			(0.064)	[0.102]			(0.078) 0.060	[0.165]			(0.066) 0.052	[0.071]
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				(0.061)	[0.673]			(0.098)	[0.542]			(0.072)	[0.475]
Home City Size         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)         (000)	Family Income			0.002	ע מבק			0.048	[0 613]			0.096	
Religious         (0.03)         (0.23)         (0.34)         (0.04)         (0.04)           Religious         (0.02)         (0.12)         (0.12)         (0.03)         (0.03)         (0.04)         (0.04)           Public Profession         (0.02)         (0.12)         (0.02)         (0.12)         (0.03)         (0.03)         (0.03)           Private Profession         (0.02)         (0.01)         (0.03)         (0.04)         (0.03)         (0.03)           Private Profession         (0.02)         (0.01)         (0.03)         (0.01)         (0.03)         (0.03)         (0.03)           Norporht Sector         (0.03)         (0.01)         (0.01)         (0.03)         (0.01)         (0.03)         (0.03)           Norporht Sector         (0.03)         (0.13)         (0.01)         (0.04)         (0.02)         (0.02)           Norporht Sector         (0.03)         (0.13)         (0.04)         (0.04)         (0.02)         (0.02)           Norport Sector         (0.03)         (0.13)         (0.04)         (0.04)         (0.02)         (0.02)           Norport Sector         (0.03)         (0.13)         (0.13)         (0.04)         (0.02)         (0.02)           <	Home City Size			0.036	[/06.0]			-0.045	[01010]			0.014	[01-2-10]
Religious         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03	~			(0.030)	[0.230]			(0.052)	[0.384]			(0.043)	[0.748]
Parett Employed in: Public Profession         (0.023)         (0.150)         (0.034)         (0.034)         (0.034)         (0.034)           Public Profession         0.011         0.004         0.014         0.004         0.0034         0.0034           Private Profession         0.012         0.066'         0.064'         0.0134         0.0034         0.023           Norprofit Sector         0.013         0.013         0.013         0.013         0.0134         0.023           Norprofit Sector         0.013         0.013         0.013         0.013         0.033         0.0137         0.0137         0.023           Milhary         0.033         0.0133         0.0133         0.0137         0.0137         0.0337         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.037         0.044         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.047         0.04	Religious			0.032				0.003				0.041	
Parett Employed in: Public Profession         0011         0.004         0.004         0.002           Public Profession         0.012         [0.616]         [0.022]         [0.616]         [0.034]         [0.901]         [0.022]           Private Profession         0.008*         0.012         [0.617]         [0.013]         [0.023]         [0.023]           Nonprofit Sector         0.003         [0.011]         0.003         [0.012]         [0.013]         [0.023]         [0.013]           Miltary         0.003         [0.617]         [0.013]         [0.013]         [0.013]         [0.023]         [0.013]         [0.023]         [0.013]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]         [0.023]				(0.022)	[0.150]			(0.034)	[0.920]			(0.028)	[0.145]
Trivate Profession         (002)         (056)         (0034)         (091)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         (0024)         <	Parent Employed in: Dublic Drofession			0.011				0.004				-0.020	
Private Profession $0.06^{\circ}$ $0.07^{\circ}$ $0.07^{\circ}$ $0.07^{\circ}$ $0.02^{\circ}$ <t< td=""><td></td><td></td><td></td><td>(0.022)</td><td>[0.616]</td><td></td><td></td><td>(0.034)</td><td>[0.901]</td><td></td><td></td><td>(0.024)</td><td>[0.417]</td></t<>				(0.022)	[0.616]			(0.034)	[0.901]			(0.024)	[0.417]
	<b>Private Profession</b>			0.069*				$0.075^{\dagger}$				0.028	
				(0.027)	[0.011]			(0.043)	[0.081]			(0.027)	[0.295]
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Nonprofit Sector			0.019	[0 2 1 2 ]			0.009				0.052	
Legal Profession $(0.037)$ $[0.138]$ $(0.077)$ $[0.043]$ $(0.047)$ $(0.047)$ Legal Profession $0.052$ $0.052$ $0.052$ $0.064$ $0.049$ $0.037$ Field of Study: $0.064$ $0.0664$ $0.0664$ $0.0664$ $0.0664$ $0.037$ $0.037$ Public Administration $0.0664$ $0.0664$ $0.0664$ $0.000$ $0.0164$ $0.037$ $0.037$ $0.0364$ $0.037$ Public Law $0.0664$ $0.027$ $0.0163$ $0.0337$ $0.039$ $0.039$ $0.000$ $0.037$ $0.037$ $0.032$ Constant $0.187^{***}$ $0.189^{***}$ $0.189^{***}$ $0.183^{***}$ $0.221^{*}$ $0.023^{*}$ $0.031^{*}$ No       No $0.039$ $0.000$ $0.0181$ $0.0300$ $0.0181$ $0.023^{*}$ $0.032^{*}$ $0.031^{*}$ No       No       No $0.039$ $0.000$ $0.017^{*}$ $0.023^{*}$ $0.000^{*}$ $0.024^{*}$ No       No $0.000$ $0.000$ $0.017^{*}$ $0.023^{*}$ $0.000$	Military			(0.055	[/10.0]			(0.000) 0.157*	[c60.0]			(0.04/)	[7/7.0]
	~			(0.037)	[0.138]			(0.077)	[0.043]			(0.047)	[0.622]
Field of Study:       (0.073) $[0.274)$ $[0.270]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.027]$ $[0.026]$ $[0.020]$ $[0.026]$ $[0.020]$ $[0.027]$ $[0.027]$ $[0.020]$ $[0.020]$ $[0.020]$ $[0.020]$ $[0.020]$ $[0.020]$ $[0.020]$ $[0.020]$ $[0.020]$ <	Legal Profession			0.052				-0.006	ט סזע]			0.049	[0 104]
Public Administration $0.066^*$ $-0.000$ Public Law $(0.027)$ $[0.016]$ $(0.037)$ $[0.999]$ $0.071^*$ Public Law $(0.039)$ $(0.020)$ $[0.016]$ $(0.037)$ $[0.999]$ $0.071^*$ Constant $0.187^{***}$ $0.189^*$ $0.303^{***}$ $0.321^*$ $0.032)$ Constant $0.187^{***}$ $0.189^*$ $0.303^{***}$ $0.221^*$ $0.253^{***}$ $0.032)$ Class Year Dunnies         No         Yes         No         Yes $0.223^*$ $0.200$ $0.106)$ $0.166)$ N $0.303 \cdot 790$ $0.730$ $0.000$ $0.018$ $0.000$ $0.117$ $0.052$ $0.000$ $0.106$ N $803$ $790$ $703$ $0.127$ $0.050$ $0.060$ $0.107$	Field of Study:			(0100)	[0+7.0]			(100:0)	[0000]			( ( ( ( ( ) ( ) ) ) ) ) ) ) ) ) ) ) ) )	[±/1.0]
Public Law         0.071*         0.071*           Constant $0.187^{***}$ $0.189^{**}$ $0.33^{***}$ $0.021^{\circ}$ Constant $0.187^{***}$ $0.189^{**}$ $0.30^{***}$ $0.021^{\circ}$ $0.032^{\circ}$ Constant $0.039^{\circ}$ $0.000^{\circ}$ $0.000^{\circ}$ $0.000^{\circ}$ $0.223^{***}$ $0.272^{**}$ Class Year Dummies         No         Yes         No         Yes $0.000^{\circ}$ $0.000^{\circ}$ $0.000^{\circ}$ $0.000^{\circ}$ $0.000^{\circ}$ $0.000^{\circ}$ $0.000^{\circ}$ $0.010^{\circ}$ $0.000^{\circ}$ $0.010^{\circ}$ $0.000^{\circ}$ $0.010^{\circ}$ $0.000^{\circ}$ $0.010^{\circ}$ $0.000^{\circ}$ $0.010^{\circ}$ $0.000^{\circ}$ $0.010^{\circ}$ $0.000^{\circ}$	Public Administration			0.066*	[0.016]			-0.000	[0 999]				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Public Law			(170.0)	[010.0]			(100.0)	[ הר היט]			0.071*	
Constant $0.10^{\circ}$ $0.10^{\circ}$ $0.10^{\circ}$ $0.10^{\circ}$ $0.10^{\circ}$ $0.21^{\circ}$ $0.21^{\circ}$ $0.21^{\circ}$ $0.21^{\circ}$ $0.21^{\circ}$ $0.21^{\circ}$ $0.21^{\circ}$ $0.21^{\circ}$ $0.00^{\circ}$	Constant	0 1 0 1 × * *		100*		0 303***		*****		***OUCC		(0.032) 0.77*	[0.027]
Class Year Dummies     No     Yes     No     Yes       N     803     790     375     367     693     667       N     0.03     0.140     0.043     0.120     0.130	COLORATIC	(0.039)	[0.000]	(0.080)	[0.018]	(090.0)	[0.000]	(0.117)	[0.059]	(0.052)	[0.000]	(0.106)	[0.012]
N 803 790 375 367 693 667	Class Year Dummies	No		Yes		No		Yes		No		Yes	
νι 0.002 0.140 0.013 0.112 0.060 0.132	Ν	803		790		375		367		693		667	
K <sup>2</sup> V.1.00 U.100 D.1140 U.0140 D.104 D.10	$R^2$	0.083		0.148		0.043		0.112		0.060		0.132	

survey conducted at the Moscow research site three years after the initial study validated our career preference measure and confirmed that students' reported career preferences are highly predictive of actual career paths.<sup>31</sup> Meanwhile, as shown in Section F of supplementary appendix, PSM is higher among students indicating a preference for public-sector employment at all three research sites. The difference is statistically significant at all sites and ranges from one-fifth of a standard deviation on the normalized PSM scale at the Ukraine site to approximately one-third of a standard deviation at Russian sites.

Yet in line with Hypothesis 4, our regressions in Table 5, which interact the PSM index with a dummy variable for sectoral career preference, show that the correlations for both PSM and corruption and PSM and altruistic behavior are substantively large and statistically significant within each subgroup at all research sites.<sup>32</sup> Indeed, the magnitude of the correlations are remarkably similar, as shown by the lack of statistical significance for the interaction variable *PSM* x *Private Sector*, which represents the difference in correlations across the subgroups. By contrast, the inconsistency in the relationship between PSM and dishonesty apparent in analyses based on the overall samples also emerges clearly in the sub-sample analyses.

In summary, we find that PSM is robustly negatively associated with propensity to engage in corruption and positively associated with altruistic behavior. Our findings regarding PSM and dishonesty are more mixed. PSM is negatively correlated with dishonesty, but the magnitude of these correlations is relatively small and results are statistically significant only at one of three research sites. Our finding that the correlations between PSM and ethical or unethical behavior are remarkably stable even when the sample is disaggregated by sectoral career preferences suggests that not only are high-PSM individuals across society as a whole more likely to behave ethically, but also that among subsets of individuals within a given country who face distinctly different institutional incentives, individuals with high PSM levels relative to their peers are more likely to act ethically than low-PSM individuals in their peer group. In the concluding section, we discuss the implications of our findings for the generalizability of theories about PSM within and across countries.

#### Discussion

Given that civil servants and other public-sector employees throughout the world have been shown to exhibit high PSM levels, understanding how PSM is tied to ethical or unethical behavior has important implications. With rare exceptions, earlier research on this topic has been limited by reliance on self-reported measures of ethical conduct that are subject to social desirability bias or hypothetical vignettes about unethical behaviors. This study advances the literature by employing incentivized experimental games to study the relationships between PSM and observable behavior indicative of propensity to engage in corruption, dishonesty, and altruistic behavior. Most notably, our study represents the first research on PSM to utilize an experimental behavioral measure of corruption. Our simultaneous use of three experimental games facilitates nuanced interpretation of the findings in ways that studies employing a single game cannot. In particular, our finding that PSM is robustly negatively correlated to propensity to engage in corruption but only weakly associated with dishonesty indicates that unethical behavior that specifically undermines the public interest may be especially at odds with PSM. Our findings also suggest that caution is warranted when utilizing behavioral measures of dishonesty as a proxy for willingness to engage in corruption.

Finally, by integrating Russia and Ukraine into the study of PSM and ethical conduct, which to date has focused overwhelmingly on North America and Western Europe, our analyses facilitate evaluation of whether hypotheses generated in the Western context travel to notably different institutional contexts. In accordance with the distinctions we develop above between theories that presume PSM to operate at a national institutional level and theories that presume PSM to operate at an individual psychological level, we find that the correlations between PSM and ethical conduct or unethical conduct are strikingly similar in the post-Soviet region to those previously identified in Western settings, despite the region exhibiting bureaucratic traditions at odds with PSM, unsettled norms regarding concepts such as the "public good," and high levels of corruption.

of students studying in other departments aspire to public-sector employment. We therefore consider sectoral career preferences a more salient measure of public-sector orientation than field of study. In Section F of supplementary appendix we show that analyses comparing students specializing in Public Administration or Public Law to students in other fields of study produce results similar to those shown here.

<sup>31</sup> Students indicating a preference for public-sector employment were 24 percentage points more likely to be employed in the public sector following graduation, a difference that is highly significant (p < .001). We estimate that 596 of the original 804 participants had graduated by 2019. Of these, we received a response to the follow-up surveys regarding current occupations from 387 students (65%).

<sup>32</sup> In Table 5,  $\beta_1$  represents the correlation between PSM and the outcome variables for subjects preferring a public-sector career and  $\beta_3$  represents the difference in the correlations for subjects with a private versus public-sector orientation. Correspondingly, the sum of  $\beta_1$  and  $\beta_3$  represents the correlation between PSM and the outcome variables for subjects preferring a private sector career.

			$\beta_1 = co$ $\beta_1 + \beta_2 = c$	rrelation betw	veen PSM and	outcome varia d outcome va	able for subjec riable for subj	ts with public lects with priv	c-sector orienta	tion ntation		
			$\beta_3 = di$	ifference in the	e correlations f	for subjects w	ith public-sec	tor vs. private	-sector orientat	ion		
			Russia			H	tussia			Ukra	une	
		Universi	ity in Moscow			Regiona	ll University			Legal Ac	cademy	
	(1)		(2)		(3)		(4)		(5)		(9)	
anel A: Bribery in	Corruption ( -0.593**	Game	-0.480*		-0.543*		-0.467*		-0.751***		-0.725***	
	(0.216)	[900.0]	(0.220)	[0.030]	(0.211)	[0.010]	(0.230)	[0.043]	(0.178)	[0.000]	(0.193)	[0.000]
2: Private Sector	0.178		0.144		0.030		0.095		-0.125		-0.146	
	(0.148)	[0.230]	(0.150)	[0.338]	(0.187)	[0.874]	(0.195)	[0.625]	(0.167)	[0.457]	(0.178)	[0.416]
$_{3}$ : PSM ×	-0.174		-0.221		0.057		-0.015		0.216		0.228	
<b>Private Sector</b>	(0.236)	[0.461]	(0.238)	[0.352]	(0.282)	[0.839]	(0.290)	[0.958]	(0.216)	[0.322]	(0.231)	[0.327]
Controls	No		Yes		No		Yes		No		Yes	
I	802		789		374		366		069		664	
2	0.075		0.113		0.041		0.071		0.051		0.095	
$_1 + \beta_3$	-0.767***		$-0.701^{***}$		$-0.486^{**}$		$-0.482^{*}$		$-0.536^{***}$		$-0.497^{***}$	
	(0.095)	[0.000]	(660.0)	[0.000]	(0.186)	[0.010]	(0.192)	[0.012]	(0.140)	[0.000]	(0.149)	[0.001]
anel B: Dishonesty	r in Dice-Tasi	k Game										
I: PSM	$-0.207^{+}$		-0.158		$0.265^{\dagger}$		$0.325^{*}$		0.160		0.156	
	(0.121)	[0.087]	(0.127)	[0.216]	(0.148)	[0.074]	(0.155)	[0.037]	(0.117)	[0.174]	(0.120)	[0.196]
2: Private Sector	-0.050		-0.015		0.135		0.213		$0.226^{\dagger}$		$0.213^{\circ}$	
	(0.093)	[0.591]	(0.096)	[0.877]	(0.132)	[0.306]	(0.134)	[0.113]	(0.120)	[0.064]	(0.121)	[0.083]
$_{3}$ : PSM ×	0.110		0.057		-0.325		-0.409*		$-0.298^{\dagger}$		-0.284	
<b>Private Sector</b>	(0.142)	[0.440]	(0.145)	[0.693]	(0.199)	[0.104]	(0.203)	[0.044]	(0.171)	[0.085]	(0.172)	[0.104]
Controls	No		Yes		No		Yes		No		Yes	
7	803		290		375		367		692		666	
۲2	0.008		0.037		0.019		0.086		0.007		0.066	
$\beta_1 + \beta_3$	-0.097		-0.100		-0.060		-0.084		-0.138		-0.128	
	(0.075)	[0.194]	(0.076)	[0.190]	(0.134)	[0.654]	(0.135)	[0.533]	(0.093)	[0.138]	(0.096)	[0.184]

Table 5. Heterogeneous Effects By Sectoral Career Preference

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Continued
Table 5.

			$\beta_1 + \beta_3 = \alpha$	correlation be	tween PSM an	d outcome va	riable for subj	ects with priv	ate-sector orie	itation		
			$\beta_3 = di$	fference in the	e correlations f	or subjects wi	th public-sect	or vs. private	-sector orientat	ion		
		1	Russia			R	ussia			Ukra	ine	
		Universi	ity in Moscow			Regiona	l University			Legal Ac	ademy	
	(1)		(2)		(3)		(4)		(5)		(9)	
Panel C: Donation	s in Dictator (	Jame										
$\beta_1$ : PSM	0.478**		0.426**		$0.346^{*}$		$0.259^{+}$		0.582***		$0.480^{**}$	
	(0.145)	[0.001]	(0.143)	[0.003]	(0.153)	[0.024]	(0.154)	[0.093]	(0.139)	[0.000]	(0.142)	[0.001]
$\beta_2$ : Private Sector	-0.068		-0.044		-0.037		-0.074		0.090		0.064	
	(0.104)	[0.512]	(0.102)	[0.666]	(0.126)	[0.772]	(0.125)	[0.554]	(0.137)	[0.514]	(0.127)	[0.616]
$\beta_3$ : PSM ×	0.072		0.058		0.020		0.082		-0.121		-0.083	
Private Sector	(0.163)	[0.659]	(0.160)	[0.718]	(0.199)	[0.922]	(0.194)	[0.672]	(0.190)	[0.527]	(0.178)	[0.643]
Controls	No		Yes		No		Yes		No		Yes	
Ν	803		790		375		367		692		666	
$R^2$	0.084		0.148		0.045		0.114		0.060		0.132	
$\beta_1 + \beta_3$	0.550***		0.484***		0.366**		$0.341^{**}$		$0.461^{***}$		0.397***	
	(0.075)	[0.000]	(0.077)	[0.000]	(0.127)	[0.004]	(0.125)	[0.007]	(0.102)	[0.000]	(0.106)	[0.000]
Moto: Danol A m	acante vaculte f	rom linear pro	hability models.	Danels B and	C from OI S re	C B Suciose R C	bust standard	ui erc srorre	Tranthecec h-w	advert in seule	te Eor the Ulbri	ine study

standard errors are clustered at the session level. Private Sector takes a value of 1 if a respondent indicated a preference for private sector employment following university graduation and 0 if a respondent indicated a preference for public-sector employment.  $\beta_2$  represents the difference in the mean value of the outcome variables for subjects who prefer private sector employment versus subjects who prefer public-sector employment when PSM is at its lowest value. Statistical significance of  $\beta_1 + \beta_3$  is based on a joint significance test of the null hypothesis  $H_0$ :  $\beta_1 + \beta_3 = 0$ . See notes 5 in is 7 6 Ξ žo IIIC to Tables 1 and 2 for details about control variables. 5 T ALLEL A PL Note:

 $^{***}p < .001, \, ^{**}p < .01, \, ^{*}p < .05, \, ^{\dagger}p < .10.$ 

One issue our study leaves unresolved, however, is the relationship between PSM and dishonesty, for our finding of a weak association between PSM and dishonesty in Russia and Ukraine contrasts with Olsen et al.'s (2019) findings in the Danish setting. While a fruitful topic for future research would be to systematically rule out the possibility that the different national contexts of these studies accounts for divergent findings, we have presented sound theoretical reasons throughout this study to expect the relationship between PSM and dishonesty to be weaker than the relationship between PSM and corruption. Moreover, not only are our findings in line with those of Christensen and Wright (2018), as noted in the Theory section, but also with those of our pilot study conducted in the United States (see Section G of supplementary appendix). Together, these results suggest that Olsen et al.'s (2019) findings may be the outlier.

Another potential limitation to our study concerns the extent to which our results generalize beyond our research subjects. While we were able to draw a random sample at the Ukrainian site, probability samples were infeasible at the two Russian sites. Strictly speaking, we cannot rule out the possibility that students in our study differ systematically from their peers who did not participate. Note, however, that our results do not depend on levels of bribing, cheating, or altruistic behavior, but on the correlation between these behavioral traits and PSM.33 It is therefore unlikely that our findings are an artifact of sampling. We also emphasize the degree to which our samples themselves are relevant to the concerns of scholars and practitioners of Public Administration. Our research subjects included a significant number of students from Public Administration and Public Law programs, many of whom embark on public-sector careers following graduation. Alumni from the Moscow research site are well represented in influential government posts, including—as of July 2018 when we were concluding our study-two ministers and three deputy ministers. Similarly, the Ukrainian legal academy where we conducted research is a prominent training ground for judges, prosecutors, and investigators. Alumni constitute approximately 10% of judges in the district courts of Ukraine's capital city, Kyiy, and the city in which the university is based, and the university has formalized internship programs with the Office of the Prosecutor General of Ukraine and with the National Police.<sup>34</sup>

Future research nevertheless undoubtedly would benefit from finding ways to analyze the relationships between PSM and unethical behaviors in a non-laboratory context and in non-student samples. Hanna and Wang (2017), for example, validate the dice-task game by comparing public employees' cheating in the laboratory with administrative data on the same employees' fraudulent absenteeism, the claiming of a paycheck for time not worked. Building on this approach, future studies could collect measures of PSM for samples of subjects for whom similar administrative data exists, facilitating analysis of PSM's associations with real-world unethical behavior.

Our study also makes no claims regarding PSM's causal impact, only that individuals with high PSM levels are also more likely to engage in ethical behavior and avoid unethical conduct. Moreover, while the robustness of our findings to the inclusion of an extensive set of control variables should mitigate concerns about some forms of endogeneity, our research design cannot account for potentially confounding factors as rigorously as designs that experimentally manipulate explanatory variables. Future experimental work that primes individuals using exercises known to increase PSM levels, in line with Meyer-Sahling, Mikkelsen, and Schuster (2019) and Christensen and Wright (2018), may be able to offer insights into whether managers can purposefully activate PSM in socially beneficially ways.

For now, what is clear is that individuals with high PSM are less willing to engage in unethical behavior, particularly behavior such as corruption that undermines the public interest, and more likely to engage in ethical behavior such altruistic charitable donations. These associations hold true not only in Western contexts but also in the starkly different context of the post-Soviet region.

#### **Supplementary Material**

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

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<sup>33</sup> See Section D of supplementary appendix for further discussion of the representativeness of our samples.

<sup>34</sup> Authors' calculations based on court websites and publicly available government archives.

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#### **Data Availability**

The data underlying this article are available in Harvard Dataverse at https://doi.org/10.7910/DVN/HUCIQ4.

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