



The Grass is Greener, but Why? Evidence of Employees' Perceived Sector Mismatch from the US, New Zealand, and Taiwan

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Abstract

To answer the question “*Who wants to work for the government?*” scholars have relied on a few approaches including sector preference, sector-based comparison of work motives, and sector switching patterns of job mobility. The present study offers a related but distinct approach: perceived sector mismatch. The attractiveness of public sector jobs differs greatly across countries, thus in order to present a more comprehensive study, we examine data from the U.S., New Zealand, and Taiwan, where attitudes towards public sector jobs differ significantly as a result of different public service laws and traditions. Across all three samples, we find that among *private* sector employees, the preference for a public service job is related to socio-economic disadvantage. Among *public* sector workers, reasons for perceived sector mismatch vary, but often suggesting job dissatisfaction in current public sector jobs, rather than perceived advantages of the private sector (including compensation). These findings are followed by theoretical and practical implications from this comparative study.

Introduction: The Importance of Perceived Sector Mismatch

Over a decade ago, Lewis and Frank (2002) urged public administration scholars to more seriously explore “*Who wants to work for the government?*” in an era when governments often struggle to attract and retain qualified employees. Since then, scholars have attempted to answer this question by employing a few different research approaches. One approach is comparing public and private employees’ various extrinsic and intrinsic work needs or values such as pay aspirations, job security, advancement prospects, whether or not the work interests them, and being prosocial (Jurkiewicz, Massey, and Brown 1998, Houston 2011, Buelens and Van den Broeck 2007, Bullock, Stritch, and Rainey 2015, Lyons, Duxbury, and Higgins 2006). It is argued that employees’ different needs and the perception that their needs are fulfilled in a specific sector determine their sector choice. One of the major findings is that public employees are more prosocial or altruistic than private employees. The concept of public service motivation (PSM) is built on this premise. It is agreed that public servants exhibit a higher level of PSM compared to their private sector peers (Steijn 2008).

However, a different perspective to take is that instead of being a driving force for sector choice, employees’ work needs have resulted from their present work environment; work needs are not the *cause* but the *effects* of sector choice. For example, a public employee’s strong desire for autonomy can result from a lack of autonomy in his current job. Scholars then examine “sector preference” instead of “sector affiliation,” testing whether different extrinsic and intrinsic work needs predict public sector preference (Lewis and Frank 2002, Van de Walle, Steijn, and Jilke 2015, Ko and Jun 2015, Lee and Choi 2016, Winter and Thaler 2016).¹ In the literature on PSM, scholars find that individuals with high-PSM prefer a public sector (or public service) job to a private sector one (Vandenabeele 2008, Christensen and Wright 2011, Liu et al. 2011).

Aforementioned research has significantly improved our knowledge about how work needs determine public sector preference. However, work needs alone may not be sufficiently conclusive in predicting sector preference. This is because the selected work sector may not necessarily provide the ideal environment to fulfill the identified work needs. The literature of organizational commitment and turnover shows that fulfillment of needs in employees' current organization effectively predicts their intention to stay in a job or to quit a job (Lee and Whitford 2008, Ross and Zander 1957, Cook and Wall 1980). Does this imply the fulfillment of work needs also fosters public employees' willingness to stay in the public sector? Does non-fulfillment or low-fulfillment drive them to leave the public sector? Similarly, does low-fulfillment in the private sector determine the employees' intention to change to the public sector? More precisely, does need fulfillment, in addition to work needs, also have an impact on public sector preference? In fact, evidence shows that individuals who fail to perceive need fulfillment in their current work sector may think of the other sector as being superior (see Feeney, 2008 as an example).² Does this lead to their desire to work in a different sector? To answer these questions, we introduce the concept of "perceived sector mismatch," *the phenomenon of individuals working in one sector while preferring to work in a different one*. We will test how various work needs along with fulfillment of these needs influence public and private employees' sector preference.

The research of perceived sector mismatch advances sector switching studies (Su and Bozeman 2009, Wright and Christensen 2010, Hansen 2014, Van der Wal, De Graaf, and Lasthuizen 2008, Tschirhart et al. 2008). While mismatch is a perception, switching is an action. Some employees who perceive sector mismatch may at some point choose to switch sector, while others may choose to stay in the same sector due to job entrenchment, sunk cost effect, or a

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3 lack of opportunity to switch sectors (Carson and Carson 1997, Crossley et al. 2007). The
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5 research of perceived sector mismatch, as compared to research on discrete instances of sector
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7 switching behavior, helps managers to identify and manage individuals who are compelled to
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9 stay and who may be less motivated due to their dissatisfaction with their sector. In addition,
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11 sector-switching research so far has largely focused on how work needs and values influence
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13 switching, neglecting the impact of need fulfillment in employees' original work sectors.
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15 Perceived sector mismatch addresses this issue.
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19 20 **An Approach of International Comparison** 21

22 The public sector context greatly differs across the borders, and the difference affects
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24 generalizability of findings obtained in a specific region/nation. For example, although evidence
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26 in general shows a positive relationship between PSM and public sector preference among
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28 college students, a recent empirical study based in South Korea fails to find such correlation (Lee
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30 and Choi 2016). According to the authors of this article, the unusual lack of positive correlation
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32 may be attributed to a highly competitive/rigorous system of public servant selection. Ko and
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34 Jun (2015), similarly, also fail to find positive correlation between college students' prosocial
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36 motive and public sector preference in Mainland China.
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41 Scholars have employed a few methods to deal with the problem of generalizability, one
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43 of which is the examination of combined data collected in multiple countries. Some recent
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45 studies of public-private comparison or sector preference, especially those using data from the
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47 International Social Survey Programme (ISSP), include samples from multiple (sometimes over
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49 30) countries (Bullock, Stritch, and Rainey 2015, Van de Walle, Steijn, and Jilke 2015, Houston
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51 2011). The desirability of this approach is its huge sample size and accordingly a reliable,
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53 generalizable result. However, the drawbacks of this approach are (i) failing to provide clear
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reasons that explain differences found across the nations, and (ii) failing to apply findings to extreme cases. For example, a need for job security may not predict public sector preference in New Zealand, where life-long protection has been abolished.

Another method that also addresses the issue of generalizability is international comparison. Scholars compare results in two or three countries (too many countries can complicate comparison) with different cultures or public sector contexts, and in some cases, they combine datasets for aggregate results (Van der Wal and Yang 2015, Ko and Jun 2015, Klijn et al. 2016). Compared to the first method, this method permits a lower level of generalizability due to a relatively smaller sample size and the study of fewer countries. The advantage of this approach, however, is that it allows researchers to look more clearly into each individual country and explore possible reasons leading to disparate findings in different countries. While no solution is perfect, given our research interest in comparison, we have adopted the second method in the present study.

Regarding the selection of countries, in addition to the United States (US), which boasts a wealth and history of public administration research, we choose Taiwan as the first comparison target. This choice is primarily due to the relative (to the US) attractiveness of public sector jobs in Taiwan. Public service jobs are viewed as indicative of prestige, power, and a pride to the family due to the perspective that government/public service care of the citizens is modeled after Confucian parental responsibility towards children (Lu, Kao, and Chen 2006). A high social status, job security, and benefits result in an especially high entry bar. In general, the pass rate of the public service exam is generally lower than 5% and can sometimes go as low as 1-2%.³ The same situation can be found in other countries in East Asia such as Mainland China and South

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2
3 Korea (Kim 2009) which share a similar culture. It is likely that this unique culture causes high
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5 public sector preference and possibly a higher incidence of sector mismatch.
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8 We choose New Zealand as the second case study for comparison. New Zealand is
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10 known for its New Public Management Reforms in the 1980s and 90s. Major changes included
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12 the elimination of public service tenure provisions and the reduction of the public sector
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14 workforce through privatization. Since then, civil servants have been employed directly by their
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16 agencies and are accorded the same protection as private sector employees. Workforce reduction
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18 was drastic, with a focus on increasing efficiency and greater accountability to Ministers
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20 (NZSSC 1998). As a result of increased responsibilities, public employees are more likely to
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22 report significantly greater job stress than private-sector employees (Le Fevre, Boxall, and
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24 Macky 2015). Some state workers are pressured with too much work, and many do a
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26 considerable amount of unpaid work for their employers (Plimmer et al. 2013). However, in
27
28 spite of these drawbacks, government workers also feel that they have power, information, and
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30 knowledge to make decisions, and they are motivated and committed to make a difference to the
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32 society (Plimmer et al. 2013). Also, public managers' salaries are competitive: average salaries
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34 in the public sector are substantially higher than those in the private sector.⁴
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41 In sum, all three countries have developed, professional, and well-respected public
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43 sectors that provide attractive or at least competitive wages/benefits. However, unique features
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45 exist in each country: a relatively huge market in the US that provide people with the option of
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47 changing jobs and switching sectors easily; the high social status accorded to public servants
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49 along with a high entry barrier in Taiwan; comparable job security in the public and private
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51 sectors in New Zealand. These unique features may lead to different levels of perceived sector
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53 mismatch.
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Literature Review: Various Work Needs, Need Fulfillment, and Others

The purpose of this study is to test how various work needs and the fulfillment of needs contribute to public and private employees’ perceived sector mismatch. Perceived sector mismatch is related to sector comparison, sector preference, and sector switching, thus we review the literature in these fields. While a majority of literature is still based in the US and Western Europe, a few studies are now utilizing large-sample international data, and East Asian research has been growing in recent years. We will incorporate them into the literature review.

Extrinsic work needs

A simply extrinsic-intrinsic typology is often used to understand work needs (Lyons, Duxbury, and Higgins 2006, Van de Walle, Steijn, and Jilke 2015). Extrinsic work needs pertain to one’s desire for external rewards; examples of rewards include high pay, job security, and advancement (Gagné et al. 2010, Gagné et al. 2015), which are often ranked among the top five of work needs (Jurkiewicz, Massey, and Brown 1998, Khojasteh 1993, Ko and Jun 2015). There is more conclusive scholarly research explaining how job security affects public sector preference: public employees care more about job security than their peers working in the private sector⁵ (Jurkiewicz, Massey, and Brown 1998, Houston 2011). A need for job security can motivate individuals to choose a public service career (Ko and Jun 2015, Lee and Choi 2016, Lewis and Frank 2002). Public employees who have a weak need for job security are more likely to switch to the private sector (Hansen 2014).

On the other hand, research exploring the relationship between a need for high pay and sector preference is less conclusive. Although it is generally believed that private sector employees are more ambitious (Posner and Schmidt 1996), not all empirical research suggests that private sector employees have a greater need for high pay (Frank and Lewis 2004, Buelens

and Van den Broeck 2007, Houston 2011). In a large-sample study with 32 countries, statistical significance is found in 12 countries in t-tests and 9 countries in regression analyses (Bullock, Stritch, and Rainey 2015). Although a study on sector switching shows that public employees who care about high pay are more likely than others to leave for the private sector (Hansen 2014), another study shows otherwise (Wright and Christensen 2010). In the literature of sector preference, similarly, some studies find negative correlation between a need for high pay and preference for the public sector (Ko and Jun 2015, Lewis and Frank 2002) while others do not (Lee and Choi 2016, Tschirhart et al. 2008). A study finds that a need for higher pay does not necessarily make public servants view the private sector more positively (Feeney 2008).

Regarding a need for advancement, the findings are mixed as well. Some studies show that private employees care more about advancement than public servants (Frank and Lewis 2004, Houston 2011, Khojasteh 1993), but some report insignificant difference (Gabris and Simo 1995). In the literature of sector preference, a need for advancement is positively associated with private sector preference in Singapore, but not in South Korea and Mainland China (Ko and Jun 2015, Lee and Choi 2016). In a large-sample study with 26 countries, the authors combine a need for job security, a need for high pay, and a need for advancement and find them positively correlated with employees' preference for the public sector (Van de Walle, Steijn, and Jilke 2015). Given a lack of research unanimity, we feel the necessity to examine extrinsic work needs in the study of perceived sector mismatch.

The impact of extrinsic needs on perceived sector mismatch may differ among the three countries examined in this study. For example, in New Zealand where merit protection is not present, the correlation between a need for job security and private sector employees' perceived sector mismatch may be less obvious than the US and Taiwan. Meanwhile, competitive salary in

the New Zealand public sector may as well play a role. Perhaps, therefore, public employees in New Zealand are less likely than those in the US and Taiwan to perceive sector mismatch due to their desire for high pay.

Intrinsic work needs

One of the most typical intrinsic work needs is interesting work content. In motivation research, this need has received some attention (Gagné et al. 2010). There are at least some reasons to believe that certain features of government work, such as red tape, formal regulations, and hierarchical control, may mitigate interest level and work satisfaction (Rainey and Bozeman 2000, Van der Wal, De Graaf, and Lasthuizen 2008). Does a need for interesting work reduce one’s propensity to choose the public sector? In fact, studies find that a need for interesting work is more pronounced among public managers than their private sector peers (Frank and Lewis 2004, Karl and Sutton 1998, Houston 2011). However, a broader definition of interesting work content encompasses a chance to learn new things, room for creativity, and challenging work content (Lyons, Duxbury, and Higgins 2006). An early empirical study by Gabris and Simo (1995) finds that public servants view the private sector work as being more challenging than government work. One recent study reports a negative relationship between public sector preference and a desire to learn new things in Mainland China (Ko and Jun 2015), and another one finds that a desire for creativity can drive people to leave the public sector for the business sector (Hansen 2014). Although findings in these studies seem to suggest that a need for interesting work reduces public sector preference, another empirical study based in South Korea shows no significant relationship between the two variables (Lee and Choi 2016).

A need to be useful to society (prosocial motive) and a need to help others (altruistic motive) are sometimes used as proxies for PSM (Van de Walle, Steijn, and Jilke 2015, Kim

2015). Some PSM scholars claimed that they may be considered as a form of intrinsic need (Kim 2006, Taylor 2008).⁶ Most evidence shows that public servants, in contrast to their private sector counterparts, demonstrate stronger prosocial and altruistic inclinations, and higher PSM (Steijn 2008, Bullock, Stritch, and Rainey 2015, Houston 2011). Those who have strong prosocial and altruistic motives and PSM are more interested in government agencies than business enterprises⁷ (Liu et al. 2011, Vandenabeele 2008, Van de Walle, Steijn, and Jilke 2015, Tschirhart et al. 2008, Kjeldsen and Jacobsen 2013), and public servants who report weak prosocial motive are more like to leave for the private sector (Hansen 2014). In addition, Wright and Christensen (2010) find that high-PSM individuals who do not initially select the public sector would eventually do so in their subsequent job choices. Feeney (2008) finds that public servants with high prosocial proclivity tend to perceive that public sector work, compared to private sector work, is more personally gratifying.

There are, however, exceptions. In a large-sample study of public-private comparison, the prosocial motive is not particularly stronger among public servants in 10 out of 32 countries (Bullock, Stritch, and Rainey 2015). One study based in Korea shows that neither PSM nor a prosocial motive necessarily leads to greater preference for a public service career (Lee and Choi 2016). In contrast, another study shows that this proposition holds in South Korea and Singapore, but not in Mainland China (Ko and Jun 2015). Mixed findings obtained in different countries suggest that the effect of cultures and institutional settings is at play.

Following this logic, we propose that prosocial and altruistic motives may be less predictive to private employees' interest in government jobs in Taiwan than in the US or New Zealand. This speculation is espoused by the theory of motivation crowding (Frey and Jegen 2001), a theory that suggests the incompatibility between intrinsic motivation and extrinsic

motivation in many cases, especially when individuals perceive extrinsic rewards or punishments to be controlling. In Taiwan, where holding a public service position means prestige, power, and pride to the family, these rewards along with family pressure may first motivate youngsters to take the public service exam (Yen 2014), and meanwhile, crowd out their prosocial and altruistic motives. In contrast to the case in Taiwan, we expect that prosocial and altruistic motives will be much more closely related to private employees' preference for government jobs in New Zealand than in other places. The undergrounding logic is a lack of crowding: without merit protection, the attractiveness of government jobs may heavily rely on the chance to benefit the society.

Autonomy needs

Aforementioned extrinsic and intrinsic work needs are often referred to as extrinsic and intrinsic work motives. In general, intrinsic motives, as compared to extrinsic motives, can lead to better work performance and attitudes (Chen and Bozeman 2013, Gagné et al. 2015), thus scholars started to investigate how to reinforce intrinsic motives and reduce extrinsic motives. According to self-determination theory, employees' perceived autonomy plays a key role (Ryan and Deci 2000). Autonomy can be understood as individuals' desire to experience flexibility and freedom of choice when carrying out an activity (Broeck et al. 2010). When employees perceive that they are autonomous in action, their extrinsic motives can be internalized and their intrinsic motives appear (Deci et al. 2001, Chirkov et al. 2003).⁸ Given the importance of autonomy in motivation study, in addition to extrinsic and intrinsic work needs, we examine a need for autonomy in the present study.

Regarding the level of perceived autonomy among public and private sector employees, scholars in general agree that there is less workplace autonomy in the public sector due to greater political control, more extensive formal rules, and more legal constraints (Rainey and Bozeman

2000, Van der Wal, De Graaf, and Lasthuizen 2008, Bozeman and Feeney 2011). We can reasonably suspect that those with a high level of need for work autonomy may be encouraged to eschew public sector work (Gabris and Simo 1995). Evidence indeed shows that a need for autonomy and a desire for freedom from conformity are negatively correlated with public sector preference⁹ (Van de Walle, Steijn, and Jilke 2015, Ko and Jun 2015), and public employees who crave for flexible work design are likely to shift to the private sector (Hansen 2014).

Culture and institutions may alter the effect of a need for autonomy on perceived sector mismatch. For example, in most cases where public employees perceive sector mismatch, we may attribute it to employees' strong desire for autonomy. However, as we addressed, with the removal of merit protection, public managers in New Zealand in general feel quite autonomous in making decisions. We expect that a need for autonomy is less predictive to public employees' perception of mismatch in New Zealand than in the US and Taiwan. In contrast to an autonomous environment in New Zealand, public employees (especially junior ones) in Taiwan may feel much less autonomous, partly due to the culture of submission of authority grounded in Confucianism (Yang, Yu, and Yeh 1991). In this regard, a need for autonomy may be more predictive to public employees' perceived sector mismatch in Taiwan than in other two nations.

Fulfillment of extrinsic needs, intrinsic needs, and autonomy needs

We have learned from the literature of turnover that individuals' intention to leave the organization is negatively related to perceived fulfillment of intrinsic work needs (especially interesting work content), perceived levels of autonomy, and perceived fulfillment of extrinsic work needs (Decker, Harris-Kojetin, and Bercovitz 2009, Kim and Stoner 2008, Schwepker 2001, Sverke, Hellgren, and Näswall 2002, Lee and Whitford 2008). The literature of PSM also shows that PSM may not reduce turnover intention in cases where individuals fail to find a good

person-organization fit (Bright 2008). The intention to stay in the current organization increases only when high-PSM people find the “PSM fit” (i.e. feeling that their job is useful to the society) (Steijn 2008).

Although non-fulfillment of aforementioned work needs can increase turnover intention, does it necessarily imply that employees will prefer a different working sector? The evidence is not readily available yet, but the possibility exists. For example, according to Feeney (2008), individuals who feel that red tape compromises their autonomy in the current working sector may have a favorable view of a different sector. We suspect that the views about the specific aspects of their current job, especially non-fulfillment of work needs, may influence employees’ preference to leave for a different working sector. However, special attention is required in some aspects of need fulfillment. According to the literature review, some common features of the public sector include less autonomy, more job security, and more chance to benefit the society. In this situation, do private employees prefer the public sector when they feel that their need for autonomy is not well fulfilled? Similarly, do public employees prefer the private sector when they feel that their need for job security and need for social service are not well fulfilled? We will more carefully look into these dimensions.

Auxiliary variables

In addition to work needs and fulfillment of work needs, we consider the importance of physical working conditions, such as whether individuals need to do hard physical work and whether they work in dangerous conditions. Literature shows that physical working conditions are crucial antecedents of turnover intention (Lee and Whitford 2008), and accordingly may be predictive of perceived sector mismatch. In addition, physical working conditions can help researchers identify employees’ socioeconomic status and whether a job is considered a “good

job” (Olsen, Kalleberg, and Nesheim 2010, Clark 2005). We can reasonably expect that people holding a “bad job” are more likely than their peers to seek job opportunities in a different working sector.

Demographics such as age, education, gender, marital status, and race may help explain perceived sector mismatch as well. These demographics predict sector switching (Su and Bozeman 2009), implying that they may influence perceived sector mismatch. In addition, they are highly correlated with some job-related needs. For instance, PSM or a need for being prosocial is strongly correlated with many of these demographic factors (Vandenabeele 2011, Perry 1997). Likewise a strong need for job security and attendant risk aversion is often determined by age and gender (Bellante and Link 1981).

Data and Variables

To answer our research questions, we examine data from the International Social Survey Programme (ISSP)’s Work Orientation Module III in the year of 2005. Seeking to maintain comparability across countries both in questionnaire and in sample design, ISSP is arguably the most widely recognized cross-national instrument for comparing employee perceptions. This dataset has been used in a few public administration studies about public-private comparison on work motives and sector preference (Houston 2011, Bullock, Stritch, and Rainey 2015, Van de Walle, Steijn, and Jilke 2015). After removing people who were not working for pay at the time of survey, we have N=1009 in the US sample, N=1335 in the Taiwan sample, and N=853 in the New Zealand sample.¹⁰

Measuring the perception of sector mismatch relies on two dichotomous variables: current sector affiliation (public=1; private=0) as well as sector preference (preferring public=1; preferring private=0). Regarding current sector affiliation, both “working for the government”

and “public owned industries” are coded as 1, whereas private firms and self-employed are coded as 0. The question for sector preference is stated as “Suppose you were working and could choose between different kinds of jobs. Which of the following would you personally choose? Working in a private business or working for the government?” Regarding work needs included in this study, the survey question asks “On the following list there are various aspects (job security, high income, good opportunities for advancement, an interesting job, a job that allows someone to help others, a job that is useful to the society, a job that allows someone to work independently, and a job that allows someone to decide their times or days of work), please circle one number to show how important you personally consider it is in a job” (5=very important; 1=not important at all).

Need fulfillment is measured with several ordinal items asking respondents whether their current income is high, their job is secure, their chances for advancement are high, their job is interesting, they can work independently, they can help others, and their job is useful to the society (5=strongly agree; 1=strongly disagree). We add “To what extent do you worry about the possibility of losing your job” (4=I don’t worry at all; 1=I worry a great deal) to more precisely capture the fulfillment of job security. There are three variables that measure whether individuals can flexibly arrange their work without external constraints, such as whether they are free to decide when they start and finish work (3=entirely free; 1=entirely decided by the employer and not at all free), whether they are free to decide how their work is organized (3=entirely free; 1=not at all free), and how difficult it is to take one or two hours off for personal matters (4=not difficult at all; 1=very difficult).

Regarding auxiliary variables, physical working conditions include two items: “How often do you have to do hard physical work?” and “How often do you work in dangerous

conditions?" (5=always; 1=never). Regarding demographics, we first consider employees' current actual income.¹¹ This variable will help us more clearly understand whether employees' perceived pay fulfillment is biased. In addition, we include age, education (5=university degree completed; 0=no formal education), gender (male=1; female=0), and marital status (yes=1; no=0). In the US sample, we also consider race (white=1; nonwhite=0). Please refer to Table 1 for descriptive statistics.

[Insert Table 1 Here]

Statistical Analysis

There are three major parts of our analysis. Using descriptive statistics, we first examine the percentage of perceived sector mismatch of current public and private employees across the nations. This allows us to find out whether perceived sector mismatch varies in different institutional and cultural settings. The second part of analysis is ANOVA (analysis-of-variance), one of the most conventional methods for cross-group comparison. We test whether employees who have disparate sector preference also differ in their work needs, perceived fulfillment of need, and auxiliary variables included in this study. We separately examine public and private employees and juxtapose the results in three countries, permitting comparison across the nations but we also present aggregate results to determine the extent of generalizability. We show that the aggregate results of descriptive statistics and ANOVA in the present study in many aspects are quite similar to the results using all 32 national samples in ISSP (see Appendix A). Finally, we use logistical regression to test the extent to which work needs, need fulfillment, and various auxiliary variables affect employees' perceived sector mismatch and we employ factor analysis to reduce the complexity of predicting variables. In the private sector samples, we use public sector preference (preferring the public sector=1; preferring the private sector=0) as the

dependent variable. In the public sector samples, by contrast, we use private sector preference (preferring the private sector=1; preferring the public sector=0) as the dependent variable.

I. Descriptive statistics

The first part of analysis concerns the percentage of perceived sector mismatch in three countries. Regarding private employees who prefer a public sector job (hereafter mismatched private employees), the percentage is 23.2% in the US, 13.4% in New Zealand, and 55.9% in Taiwan. Compared to private employees in the US, those in New Zealand are less willing to work in the government, perhaps due to a lack of attractive job security. In contrast, Taiwanese employees in the private sector are much more interested in a government job. As mentioned, prestige, job security and attractive benefits may be main reasons. Regarding public employees who prefer a private sector job (hereafter mismatched public employees), the percentage is 39.0% in the US, 59.8% in New Zealand, and 25.5% in Taiwan. Compared to the US, a much higher percentage of mismatch in New Zealand may imply public employees' high job stress and pressure due to the aforementioned radical administrative reform (Plimmer et al. 2013, Le Fevre, Boxall, and Macky 2015). A much lower percentage among Taiwanese public servants, again, shows high attractiveness of public service jobs in Taiwan. Overall, the percentage of perceived sector mismatch is 36.1% among private employees and 42.5% among public employees.

[Insert Table 2.1, 2.2, 2.3, and 2.4 Here]

II. ANOVA

Given differences found in the first part of analysis, should we expect reasons leading to perceived sector mismatch also differ across the nations? The results of ANOVA in Table 3 and Table 4 may provide some hints. Regarding the results of mismatched private employees in Table 3, we find a general trend that they tend to place a higher value on job security and high

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3 income, but a lower value on an interesting job and working independently. Meanwhile, they
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5 report more job insecurity, lower income, lower chances for advancement, less interesting work
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7 content, less work autonomy, and more constraints on work arrangement in their current job.
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10 They do more hard physical work and indeed earn less. Focusing on demographics across the
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12 samples, mismatched private employees are more likely to be minorities (in the US), female, and
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14 the poorly educated. Indeed, scholars have found a higher level of wage equity for women and
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16 minorities in the public sector than in the private sector (Llorens, Wenger, and Kellough 2008),
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18 which explains why public service jobs are more attractive to women and minorities. All these
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20 findings show that across the countries mismatched private employees tend to be more
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22 socioeconomically disadvantaged.
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27 [Insert Table 3 Here]
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29 In addition to these common features, we see some context-specific findings. For
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31 example, different from those in the US and Taiwan, mismatched private employees in New
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33 Zealand do not especially value job security, perhaps due to the abolishment of life-long
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35 employment. Instead, their prosocial need is much stronger than those who plan to remain in the
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37 private sector ($p < .00$). A possible explanation is the removal of job security in the public sector,
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39 which increases the likelihood of attracting high-PSM people. We will elaborate on this point in
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41 a later section.
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45 We report public employees' perceived sector mismatch in Table 4. Unlike the findings
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47 in Table 3, we fail to find a general pattern across the samples. It seems that reasons leading to
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49 their perceived sector mismatch differ greatly in the three countries. In the US, mismatched
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51 public employees perceive lower pay satisfaction ($p < .08$), although their actual personal income
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53 is not significantly lower. However, additional analysis shows that mismatched public
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employees indeed have a lower level of family income than matched public employees (61.38: 71.26, $p<.10$). In addition, their perceived work autonomy and flexibility is in general lower, especially in regard to their desire for flexible personal leaves ($p<.00$). High education (mean=4.16, almost the same as those who plan to stay in the public sector) with relatively lower pay and autonomy may be the main reason that contributes to their perceived mismatch.

[Insert Table 4 Here]

In New Zealand, mismatched public employees in fact are also well educated (mean=3.30, almost the same as those who plan to stay in the public sector); their income is not lower than those who have no plan to switch the sector; they even perceive a better physical working condition ($p<.06$) and a more flexible work schedule ($p<.08$). Reasons that contribute to perceived sector mismatch are a weaker prosocial motive ($p<.00$), a stronger need for advancement ($p<.08$), and the non-fulfillment of prosocial and altruistic needs ($p<.00$).

In Taiwan, mismatched public employees have the following features: compared to matched public employees, they do not feel that their job is secure enough ($p<.08$), although they care less about job security ($p<.07$) and high income ($p<.00$); they report an inability to do something to benefit the society in their current job ($p<.10$) perhaps because they are not given enough work autonomy, especially deciding how to carry out the work ($p<.03$); the lack of autonomy in their current job is accompanied by a stronger desire for an autonomous working environment which provides them with a chance to work independently ($p<.03$). Meanwhile, these people are on average five years younger ($p<.00$), but they receive better education than those who want to stay ($p<.08$). According to additional analyses, age and education are negatively correlated (correlation coefficient = $-.62$, $p<.00$), and the years of schooling among

mismatched public employees are on average one year longer (15.67: 14.51, $p<.03$) compared to matched public employees.

Finally we combine samples of US, New Zealand, and Taiwan and examine aggregate results. We find that mismatched public employees, compared to matched public employees, feel more dissatisfied with the fulfillment of their extrinsic work needs, especially job security ($p<.00$). They are also less satisfied with the opportunities to help others ($p<.03$) and benefit the society ($p<.00$). At the same time, they have weaker needs for job security ($p<.03$) and the chance to benefit the society ($p<.00$), but stronger needs for interesting job ($p<.07$) and work autonomy ($p<.00$). In addition, they do less hard physical work ($p<.02$), and not especially poorly-educated.

III. Logistic regression

The last step is examining the impact of work needs, need fulfillment, and all auxiliary variables on perceived sector mismatch in regression models. The complexity of variables calls for the use of factor analysis. We test work needs, fulfillment of needs, and physical working conditions using principal component analysis with Promax rotation. The detailed analysis is reported in Appendix B for readers interested in the procedures. At the end of analysis, we obtain the following seven distinctive factors: extrinsic work needs, intrinsic work needs, needs for autonomy, fulfillment of extrinsic needs, fulfillment of intrinsic needs, fulfillment of autonomy needs, and physical working conditions.

The results of private employees' perceived sector mismatch are reported in Table 5. Similar to Table 3, there is a general trend (the last column) that preference for the public sector is positively related to extrinsic work needs ($p<.00$) but negatively related to intrinsic work needs ($p<.10$) and needs for autonomy ($p<.02$). Meanwhile, it is also related to poorer fulfillment of

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extrinsic work needs ($p<.00$) and autonomy needs ($p<.00$), less personal income ($p<.00$ in the US and Taiwan), poorer education ($p<.00$), more female ($p<.01$), and more ethnic minorities (in the US only) ($p<.00$). This is an indication of their lower socioeconomic status, suggesting they may be blue-collared workers. However, we also notice that in New Zealand, the intention to leave for the public sector is positively related to intrinsic motives ($p<.04$) and non-fulfillment of intrinsic needs ($p<.02$). Finally, we remind readers to use caution in interpreting statistical significance of demographic variables. The standard errors of personal income (in the New Zealand sample particularly), age, and education may be inflated due to multicollinearity (uncentered variance inflation factors are available upon request).

[Insert Table 5 Here]

The results of public employees' perceived sector mismatch are reported in Table 6. In the US sample, the only statistically significant variable is fulfillment of autonomy needs ($p<.02$). The negative value means that the perception of poor autonomy can increase public employees' willingness to seek opportunities in the private sector. In the New Zealand sample, preference for the private sector is positively associated with a need for autonomy ($p<.05$) but negatively related to intrinsic needs ($p<.10$) and intrinsic need fulfillment ($p<.00$). The results are similar to what we found in Table 4.

[Insert Table 6 Here]

In the Taiwan sample, preference for the private sector is negatively correlated with both extrinsic work needs ($p<.02$) and fulfillment of extrinsic needs ($p<.10$). In other words, poor fulfillment of extrinsic needs may not be the major reason, as individuals do not care too much about extrinsic work needs. If so, what are the major reasons? As we mentioned earlier, they are more likely to be young people who are better educated, but this is not well reflected in

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3 regression due to high multicollinearity. After combining the US, New Zealand, and Taiwan
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5 samples, in the last column, we find three statistically significant variables: the need for
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7 autonomy with a positive sign ($p<.04$) and physical working condition with a negative sign
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9 ($p<.07$). Therefore, individuals who are not involved in hard physical work and have a strong
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11 motive to work independently are more interested in a private sector career. The results are,
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13 again, similar to those in Table 4. We provide a summary of findings in Table 7. As the table
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15 shows, findings from the public and private sectors differ, and findings from three countries also
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17 differ significantly. Therefore, we discuss findings along with the importance of comparative
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19 public administration in the next section.
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24 [Insert Table 7 Here]

25 Discussion

26 Perceived sector mismatch among private employees

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28 Descriptive statistics shows high percentage of sector mismatch in Taiwan but low
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30 percentage in New Zealand. The discrepancy is likely to be a result of the radical reform in New
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32 Zealand and high social status of public service jobs in Taiwan. Despite the differences in
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34 percentage, reasons that contribute to this type of mismatch share some common features: less
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36 education, more female, more minorities (in the US), doing more hard physical work, stronger
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38 extrinsic work needs, weaker intrinsic needs, weaker needs for autonomy, and less satisfaction
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40 with both extrinsic and intrinsic work needs. Mismatched private employees are probably blue-
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42 collared employees working at the bottom of an organizational hierarchy. Their intrinsic work
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44 motives may be crowded out by more fundamental motivations such as job security, pay, and
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46 advancement (Frey and Jegen 2001, Georgellis, Iossa, and Tabvuma 2011). This finding is
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48 consistent with existing literature of public-private comparison on wage based in the US, which
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shows that wage advantage of federal government jobs was found among lower pay grades, especially those lower than Grade 7 (over 15) (Condrey, Facer, and Llorens 2012). As a practical application, public employers may wish to ensure that their low-end jobs provide sufficient job security, income and benefits (e.g., insurance, day care) to satisfy the basic needs of employees whom it seeks to recruit from the private sector. Assessing, comparing and testing alternative compensation features may be suggested for different job categories.

One exception can be found in New Zealand, where public sector preference is unrelated to extrinsic work needs (especially job security) but positively associated with a strong prosocial motive and dissatisfaction with the opportunities to help others and benefit the society. This finding is in line with our earlier speculation, and it implies that the removal of job tenure in public organizations can deter those who seek job security, and accordingly attract those who are interested in serving the society. As we have learned from PSM research, public organizations that attract members with high PSM are likely to be less dependent on utilitarian incentives (Perry, Hondeghem, and Wise 2010). Likewise, we can also understand this proposition as such: public organizations that depend less upon utilitarian incentives, including job security, are likely to attract high-PSM people. However, we call for more empirical evidence before a concrete conclusion can be made. An additional analysis based on all 32 countries in ISSP data in Appendix A shows that mismatched private employees have a stronger prosocial and altruistic tendency. However, we note that few countries in the ISSP dataset have undergone administrative reform as radical as that in New Zealand.

Perceived sector mismatch among public employees

Descriptive statistics shows low percentage of sector mismatch in Taiwan but high percentage in New Zealand. Again, the discrepancy can be attributed to the radical

administrative reform in New Zealand and high social status of public service jobs in Taiwan. Different levels of perceived mismatch across the three nations are accounted for by different reasons that contribute to mismatch. Meanwhile, we provide aggregate results based on the combined sample (of the three countries), which permit greater generalizability.

We begin with the US. As mentioned, high education with relatively low autonomy, low family income (according to an additional analysis, as mentioned), and perceived low fulfillment of pay may be the main reasons. To reduce the perception of mismatch, enhancing work autonomy and ensuring competitive compensation are plausible practical strategies. While efforts have been undertaken (e.g., telecommuting), more can certainly be done, especially in job positions that are difficult to fill. However, given a non-negligible percentage of perceived mismatch (39%), there may be other reasons not identified in the present study. An alternative explanation not reflected in the current data is public sector workers' romanticized view of the private sector. Commonly referred to as bureaucratic bashing, the public sector is so often attacked by politicians, political officials and, sometimes, the general public (Milward and Rainey 1983, McEldowney and Murray 2000, Chen and Bozeman 2014). Possibly, perceived sector mismatch relates less to job characteristics than to the level of perceived worth accompanying public sector work.

In New Zealand, mismatched public employees have a weak prosocial motive and perceive low fulfillment of intrinsic needs. Given the absence of a civil service tenure system, making a difference to society is a major source of work satisfaction for those who choose to work in the public sector. On one hand, if public employees do not have a strong prosocial motive but instead are motivated to pursue personal success in advancement, a poor person-organization fit may eventually result in perceived sector mismatch. On the other hand, if the

organization fails to provide enough opportunities for employees to help others or to contribute to society, or if employees fail to engage with such opportunities, they may choose to leave for the private sector and find other sources of work satisfaction. In personnel practices, HR managers do well to assess prospective employees on job-relevant prosocial contributions and past performance. In addition, public employers are encouraged to ensure that jobs provide opportunities for experiencing tangible impacts on society and/or program clients (e.g., through job analysis).

In Taiwan, mismatched public employees have better education, younger age, and a stronger need for autonomy. It is negatively related to extrinsic work needs. A possible explanation is the conflict between young and old generations regarding a Confucian value: submission to senior authority (Lu, Kao, and Chen 2006, Yang 2006). Older people, especially those at the top of the organizational hierarchy and who are under strong Confucian influence, tend to expect more submissive attitudes from subordinates. However, with fast industrialization and modernization of Chinese societies, the cultural tradition of respecting the aged is diminishing (Yeh 2003, Sung and Kim 2001). Facing the demand of hierarchical compliance from less-educated superiors, well-educated Westernized young generations may feel reluctant to submit. Accordingly, they desire for more autonomy, and expect that working in the private sector is a way out. This finding is consistent with our earlier expectation that a need for autonomy is more predictive to public employees' perceived sector mismatch in Taiwan than in other two nations. To combat this aversive situation, both onboarding and on-the-job training could include lessons of cultural change and mutual adaptation between two generations.

Regarding aggregate results in the combined sample, compared to matched public employees, mismatched public employees are likely to feel less satisfied with extrinsic work

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3 needs, especially job security, although they care less about job security; they are likely to feel
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5 less satisfied with intrinsic work needs, especially prosocial and altruistic needs, although they in
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7 fact exhibit a slightly weaker prosocial tendency; they have a much stronger desire for autonomy,
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9 although their perceived current autonomy is only slightly lower. How can we explain these
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11 seemingly contradictory findings?
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15 Let us examine job security first. Do they really experience less job security as they
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17 claim? It is unlikely, as the other item that measures perceived job security (“I don’t fear losing
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19 my job”) is not statistically significant, and they actually care less about job security. In addition,
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21 they are not particularly disadvantaged in socio-economic status (e.g., education, gender, and
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23 race), and statistics show that they are less involved in hard physical work. Therefore, the
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25 perception of poorer job security is probably a result of work frustration. The most apparent
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27 reason that accounts for mismatched public employees’ work frustration, according to analytical
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29 results, is lacking the opportunity to benefit people and make a difference to the society. Several
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31 factors may exploit public servants’ chance to serve people, such as red tape, conflicting and
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33 ambiguous goals, and political interference (Boyne 2002, Rainey and Bozeman 2000). The
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35 presence of these factors first compromises their perceived autonomy (although the effect is not
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37 significant in the results) and increases their desire for more autonomy. In addition, these factors
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39 can destroy their PSM (Moynihan and Pandey 2007, Ritz, Brewer, and Neumann 2016). This
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41 explains why our results show that mismatched public employees demonstrate a lower level of
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43 prosocial propensity. We can also explain this finding using self-determination theory (Ryan and
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45 Deci 2000): employees’ motivation may be externalized when they perceive the increase of
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47 external control. In sum, making sure that employees are given enough autonomy and
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49 opportunity to serve people may reduce their perceived sector mismatch.
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Recap: The importance of comparative public administration

Perhaps the most significant implication of present research lies less in the specific findings than the “rediscovery” of the importance of comparative public administration. One might at first blush assume that admonitions for comparative public administration should have by this time penetrated the field sufficiently that the need for comparison has become manifest. After all, more than 35 years ago the case for comparative public administration was succinctly stated and widely accepted (Jreisat 1975, Jun 1976, Savage 1976) and at least a few notable advances emerged from the various admonitory articles of the 1970’s (for an overview see Fitzpatrick et al. 2011). However, today, more than in the 1970’s, the comparative scholars in public swim against the tide of empirical trends in the field. To be sure, most comparative administration work is empirical, but the clear majority is focused on case studies, some useful and others largely atheoretical. This is not because empirical scholars eschew comparison; indeed there have been a great many sector-based comparisons in public administration (for overviews see Rainey and Bozeman, 2000; Boyne, 2002). Studies using aggregate data to compare organizations and management in various nations remain scarce, though they are clearly on the rise in recent years (e.g., Klijn et al, 2016; Berman et al. 2013).

We take it as manifest that aggregate data-based comparative public administration studies have value. If scholars can agree on nothing else about theory, there is consensus that theory requires generalization – a point that current, comparative studies emphasize. Failing to compare nations impedes theory, at least if we take theory as knowledge pertaining to the more than 90% of the world outside the US and the UK, the sources of data for the largest percentage of published papers. Thus, we might do well to ask why there are so few empirical studies using aggregate data (as opposed to case study analysis) and what could be done to stimulate studies

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3 seeking a broader geographic and cultural coverage of their findings and their theoretical
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5 implications. Probably the most obvious explanation is that multiple nation studies require
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7 multiple nation data, implying greater cost, and most public administration research, to the extent
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9 it is funded at all, is funded on a nation-by-nation basis. A second obstacle to such research is
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11 that it often requires teams of researchers from various nations. While it is certainly the case that
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13 a lone researcher with good data and strong theory instincts can say something useful in a
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15 comparative study, the whole idea of comparison is taking into account national nuance,
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17 providing explanations based on understanding of national differences in institutions and cultural
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19 aspects of work. In short, it is easy enough to understand that doing empirically-based
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21 comparative research in public administration is difficult. However, we feel the considerable
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23 differences we find here on fundamental issues pertaining to job choice and preference suggest
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25 that failing to do so limits the theory potential of research.
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32 **Limitations and Further Research Direction**

34 The major contribution of the present study is twofold. First, this study advances the
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36 “sector matters” research by integrating sector affiliation, sector preference, work needs, need
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38 fulfillment, and socio-economic factors in a single framework, providing a more comprehensive
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40 view on why people prefer a different working sector. Second, this study examines perceived
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42 sector mismatch using data from three countries that represent different political cultures and
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44 public service employment systems. An international scope allows us to examine whether
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46 cultural and institutional settings contribute to differences in employees’ perceived sector
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48 mismatch. Aggregate results based on the combined sample also permit a higher level of
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However, all studies have limitations, and this one is no exception. ISSP data used in this study were collected in 2005, about a decade ago (the collection of 2015 data is in its process, but the data will not be released until 2018 or 2019). Employment situation nowadays, especially after economic recession, may be significantly different. In addition, the ISSP dataset lacks the option of nonprofit in both sector affiliation and sector preference questions. This is especially a concern in North America. Compared to the Asian countries where the size of the nonprofit sector is much smaller (Defourny et al. 2011), the US has sizable nonprofits that may well compete with government organizations in satisfying needs for public service and job enrichment. Of course, one can argue that nonprofit employees may skip questions of sector affiliation and sector preference so not too much bias is generated. However, a more thorough understanding of sector mismatch, we believe, should still include the nonprofit sector. Finally, occupational composition, compensation, educational attainment requirements, and other factors may vary across the local, state/provincial, and federal/central levels (Kilpatrick, Cummings Jr, and Jennings 1964, Ehrenberg 1973). While government is treated as a collective entity in the present study, an oversample of any level could potentially affect the results of perceived sector mismatch. Is it possible that the attractiveness of the public sector is related to the level of government? In short, many issues remain to be resolved before one can conclude that propositions about sector preference are well validated (e.g. Cho and Lewis 2012, Georgellis, Iossa, and Tabvuma 2011). This paper provides another small step.

References

- Andrews, Rhys, George A Boyne, and Richard M Walker. 2011. "Dimensions of publicness and organizational performance: A review of the evidence." *Journal of Public Administration Research and Theory* 21 (suppl 3):i301-i319.
- Bellante, Don, and Albert N. Link. 1981. "Are Public Sector Workers More Risk Averse Than Private Sector Workers?" *Industrial and Labor Relations Review* 34 (3):408-412.
- Berman, Evan M, Meghna Sabharwal, Chun-Yuan Wang, Jonathan West, Yijia Jing, Chung-Yuang Jan, Wei Liu, Alex Brillantes, Chung-An Chen, and Ricardo Gomes. 2013. "The Impact of Societal Culture on the Use of Performance Strategies in East Asia: Evidence from a comparative survey." *Public Management Review* 15 (8):1065-1089.
- Boyne, George A. 2002. "Public and Private Management: What's the Difference?" *Journal of Management Studies* 39 (1):97-122.
- Bozeman, Barry. 1987. *All Organizations Are Public*. San Francisco: Jossey-Bass.
- Bozeman, Barry, and Mary K. Feeney. 2011. *Rules and Red Tape: A Prism for Public Administration Theory and Research*. New York: M. E. Sharpe.
- Bright, Leonard. 2008. "Does Public Service Motivation Really Make a Difference on the Job Satisfaction and Turnover Intentions of Public Employees?" *The American Review of Public Administration* 38 (2):149-166.
- Broeck, Anja, Maarten Vansteenkiste, Hans Witte, Bart Soenens, and Willy Lens. 2010. "Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale." *Journal of Occupational and Organizational Psychology* 83 (4):981-1002.
- Buelens, Marc, and Herman Van den Broeck. 2007. "An Analysis of Differences in Work Motivation between Public and Private Sector Organizations." *Public Administration Review* 67 (1):65-74.
- Bullock, Justin B, Justin M Stritch, and Hal G Rainey. 2015. "International comparison of public and private employees' work motives, attitudes, and perceived rewards." *Public Administration Review* 75 (3):479-489.
- Carson, Kerry D., and Paula Phillips Carson. 1997. "Career Entrenchment: A Quiet March toward Occupational Death?" *The Academy of Management Executive* 11 (1):62-75.
- Chen, Chung-An, and Barry Bozeman. 2013. "Understanding Public and Nonprofit Managers' Motivation Through the Lens of Self-Determination Theory." *Public Management Review* 15 (4):584-607.
- Chen, Chung-An, and Barry Bozeman. 2014. "Am I a Public Servant or Am I a Pathogen? Public Managers' Sector Comparison of Worker Abilities." *Public Administration* 92 (3):549-564.
- Chirkov, Valery, Richard M Ryan, Youngmee Kim, and Ulas Kaplan. 2003. "Differentiating autonomy from individualism and independence: a self-determination theory perspective on internalization of cultural orientations and well-being." *Journal of personality and social psychology* 84 (1):97-110.
- Christensen, Robert K., and Bradley E. Wright. 2011. "The Effects of Public Service Motivation on Job Choice Decisions: Disentangling the Contributions of Person-Organization Fit and Person-Job Fit." *Journal of Public Administration Research and Theory* 21 (4):723-743.

- Clark, Andrew. 2005. "What makes a good job? Evidence from OECD countries." In *Job Quality and Employer Behaviour*, edited by S. Bazen and C. Lucifora, 11-30. Basingstoke: Palgrave Macmillan.
- Condrey, Stephen E., Rex L Facer, and Jared J Llorens. 2012. "Getting It Right: How and Why We Should Compare Federal and Private Sector Compensation." *Public Administration Review* 72 (6):784-785.
- Cook, John, and Toby Wall. 1980. "New Work Attitude Measures of Trust, Organizational Commitment and personal Need Non-Fulfillment." *Journal of Occupational Psychology* 53 (1):39-52.
- Crewson, Philip E. 1997. "Public-Service Motivation: Building Empirical Evidence of Incidence and Effect." *Journal of Public Administration Research and Theory* 7 (4):499-518.
- Crossley, Craig D., Rebecca J. Bennett, Steve M. Jex, and Jennifer L. Burnfield. 2007. "Development of a Global Measure of Job Embeddedness and Integration into a Traditional Model of Voluntary Turnover." *Journal of Applied Psychology* 92 (4):1031-1042.
- Deci, Edward L., Richard M. Ryan, Marylene Gagné, Dean R. Leone, Julian Usunov, and Boyanka P. Kornazheva. 2001. "Need Satisfaction, Motivation, and Well-Being in the Work Organizations of a Former Eastern Bloc Country: A Cross-Cultural Study of Self-Determination." *Personality and Social Psychology Bulletin* 27 (8):930-942.
- Decker, Frederic H, Lauren D Harris-Kojetin, and Anita Bercovitz. 2009. "Intrinsic job satisfaction, overall satisfaction, and intention to leave the job among nursing assistants in nursing homes." *The Gerontologist* 49 (5):596-610.
- Defourny, Jacques, Yu-Yuan Kuan, Jacques Defourny, and Shin-Yang Kim. 2011. "Emerging models of social enterprise in Eastern Asia: a cross-country analysis." *Social enterprise journal* 7 (1):86-111.
- Ehrenberg, Ronald G. 1973. "The demand for state and local government employees." *The American Economic Review* 63 (3):366-379.
- Feeney, Mary K. 2008. "Sector Perceptions among State-Level Public Managers." *Journal of Public Administration Research and Theory* 18 (3):465-494.
- Fitzpatrick, Jody, Malcolm Goggin, Tanya Heikkila, Donald Klingner, Jason Machado, and Christine Martell. 2011. "A new look at comparative public administration: Trends in research and an agenda for the future." *Public Administration Review* 71 (6):821-830.
- Frank, Sue A., and Gregory B. Lewis. 2004. "Government Employees: Working Hard or Hardly Working?" *The American Review of Public Administration* 34 (1):36-51.
- Frey, Bruno S., and Reto Jegen. 2001. "Motivation Crowding Theory." *Journal of Economic Surveys* 15 (5):589-611.
- Gabris, Gerald T., and Gloria Simo. 1995. "Public Sector Motivation as an Independent Variable Affecting Career Decisions." *Public Personnel Management* 24 (1):33-51.
- Gagné, Marylene, Jacques Forest, Marie-Helene H. Gilbert, Caroline Aubé, Estelle Morin, and Angela Malorni. 2010. "The Motivation at Work Scale: Validation Evidence in Two Languages." *Educational and psychological measurement* 70 (4):628-646.
- Gagné, Marylene, Jacques Forest, Maarten Vansteenkiste, Laurence Crevier-Braud, Anja Van den Broeck, Ann Kristin Aspeli, Jenny Bellerose, Charles Benabou, Emanuela Chemolli, and Stefan Tomas Güntert. 2015. "The Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries." *European Journal of Work and Organizational Psychology* 24 (2):178-196.

- Georgellis, Yannis, Elisabetta Iossa, and Vurain Tabvuma. 2011. "Crowding out intrinsic motivation in the public sector." *Journal of Public Administration Research and Theory* 21 (3):473-493.
- Groeneveld, Sandra, Bram Steijn, and Peter van der Parre. 2009. "Joining the Dutch Civil Service: Influencing motives in a changing economic context." *Public Management Review* 11 (2):173-189.
- Hansen, Jesper Rosenberg. 2014. "From Public to Private Sector: Motives and explanations for sector switching." *Public Management Review* 16 (4):590-607.
- Houston, David J. 2011. "Implications of Occupational Locus and Focus for Public Service Motivation: Attitudes toward Work Motives across Nations." *Public Administration Review* 71 (5):761-771.
- Jreisat, Jamil E. 1975. "Synthesis and relevance in comparative public administration." *Public Administration Review* 35 (6):663-671.
- Jun, Jong S. 1976. "Renewing the study of comparative administration: Some reflections on the current possibilities." *Public Administration Review* 36 (6):641-647.
- Jurkiewicz, Carole L., Tom K. Massey, Jr., and Roger G. Brown. 1998. "Motivation in Public and Private Organizations: A Comparative Study." *Public Productivity & Management Review* 21 (3):230-250.
- Karl, Katherine A., and Cynthia L. Sutton. 1998. "Job Values in Today's Workforce: A Comparison of Public and Private Sector Employees." *Public Personnel Management* 27 (4):515-527.
- Khojasteh, Mak. 1993. "Motivating the Private vs. Public Sector Managers." *Public Personnel Management* 22 (3):391-401.
- Kilpatrick, Franklin Peirce, Milton C Cummings Jr, and M Kent Jennings. 1964. *The image of the federal service*. Washington DC: Brookings Institution Press.
- Kim, Hansung, and Madeleine Stoner. 2008. "Burnout and turnover intention among social workers: Effects of role stress, job autonomy and social support." *Administration in Social Work* 32 (3):5-25.
- Kim, Sangmook. 2006. "Public Service Motivation and Organizational Citizenship Behavior in Korea." *International Journal of Manpower* 27 (8):722-740.
- Kim, Sangmook. 2009. "Testing the structure of public service motivation in Korea: A research note." *Journal of public administration research and theory* 19 (4):839-851.
- Kim, Sangmook. 2015. "National culture and public service motivation: investigating the relationship using Hofstede's five cultural dimensions." *International Review of Administrative Sciences* (online first):DOI: 10.1177/0020852315596214.
- Kjeldsen, Anne M., and Christian B. Jacobsen. 2013. "Public Service Motivation and Employment Sector: Attraction or Socialization?" *Journal of Public Administration Research and Theory* article first published online: doi: 10.1093/jopart/mus039.
- Klijn, Erik Hans, Vicenta Sierra, Tamyko Ysa, Evan Berman, Jurian Edelenbos, and Don Y Chen. 2016. "The Influence of Trust on Network Performance in Taiwan, Spain, and the Netherlands: A Cross-Country Comparison." *International Public Management Journal* 19 (1):111-139.
- Ko, Kilkon, and Kyu-Nahm Jun. 2015. "A Comparative Analysis of Job Motivation and Career Preference of Asian Undergraduate Students." *Public Personnel Management* 44 (2):192-213.

- Le Fevre, Mark, Peter Boxall, and Keith Macky. 2015. "Which workers are more vulnerable to work intensification? An analysis of two national surveys." *International Journal of Manpower* 36 (6):966-983.
- Lee, Geon, and Do Lim Choi. 2016. "Does public service motivation influence the intention to work in the public sector? Evidence from Korea." *Review of Public Personnel Administration* 36 (2):145-163.
- Lee, Soo Young, and Andrew B. Whitford. 2008. "Exit, Voice, Loyalty, and Pay: Evidence from the Public Workforce." *Journal of Public Administration Research and Theory* 18 (4):647-671.
- Lewis, Gregory B., and Sue A. Frank. 2002. "Who Wants to Work for the Government?" *Public Administration Review* 62 (4):395-404.
- Liu, Bangcheng, Chun Hui, Jin Hu, Wensheng Yang, and Xinli Yu. 2011. "How well can public service motivation connect with occupational intention?" *International Review of Administrative Sciences* 77 (1):191-211.
- Llorens, Jared J, Jeffrey B Wenger, and J Edward Kellough. 2008. "Choosing public sector employment: The impact of wages on the representation of women and minorities in state bureaucracies." *Journal of Public Administration Research and Theory* 18 (3):397-413.
- Lu, Luo, Shu-Fang Kao, and Fen-Yi Chen. 2006. "Psychological Traditionality, Modernity, Filial Piety and Their Influences on Subjective Well-Being: A Parent-Child Dyadic Design [in Chinese]." *Indigenous Psychological Research in Chinese Societies* 25:243-278.
- Lyons, Sean. T., Linda. E. Duxbury, and Christopher. A. Higgins. 2006. "A Comparison of the Values and Commitment of Private Sector, Public Sector, and Parapublic Sector Employees." *Public Administration Review* 66 (4):605-618.
- McEldowney, Rene, and William L Murray. 2000. "Not Just for Bureaucrats Anymore Bureaucrat Bashing, Overhead Democracy, and Managed Care." *Administration & Society* 32 (1):93-110.
- Milward, H. Brinton, and Hal G. Rainey. 1983. "Don't Blame the Bureaucracy." *Journal of Public Policy* 3 (2):149-168.
- Moynihan, Donald P, and Sanjay K Pandey. 2007. "The Role of Organizations in Fostering Public Service Motivation." *Public Administration Review* 67 (1):40-53.
- NZSSC. 1998. "New Zealand's State Sector Reform: A Decade of Change." <http://www.ssc.govt.nz/resources/964/all-pages>.
- Olsen, Karen M, Arne L Kalleberg, and Torstein Nesheim. 2010. "Perceived job quality in the United States, Great Britain, Norway and West Germany, 1989-2005." *European Journal of Industrial Relations* 16 (3):221-240.
- Perry, James L. 1997. "Antecedents of Public Service Motivation." *Journal of Public Administration Research and Theory* 7 (2):181-197.
- Perry, James L., Annie Hondeghem, and Lois Recascino Wise. 2010. "Revisiting the Motivational Bases of Public Service: Twenty Years of Research and an Agenda for the Future." *Public Administration Review* 70 (5):681-690.
- Plimmer, Geoff, Jessie Wilson, Jane Bryson, Stephen Blumenfeld, Noelle Donnelly, and Bill Ryan. 2013. *Workplace dynamics in New Zealand public services*. Wellington: Industrial Relations Centre, Victoria University of Wellington.

- Posner, Barry Z., and Warren H. Schmidt. 1996. "The Values of Business and Federal Government Executives: More Different than Alike." *Public Personnel Management* 25 (3):277-289.
- Rainey, Hal G. 2009. *Understanding and Managing Public Organizations*. San Francisco: Jossey-Bass.
- Rainey, Hal G., and Barry Bozeman. 2000. "Comparing Public and Private Organizations: Empirical Research and the Power of the A Priori." *Journal of Public Administration Research and Theory* 10 (2):447-470.
- Ritz, Adrian, Gene A Brewer, and Oliver Neumann. 2016. "Public service motivation: A systematic literature review and outlook." *Public Administration Review* 76 (3):414-426.
- Ross, Ian C, and Alvin Zander. 1957. "Need satisfactions and employee turnover." *Personnel psychology* 10 (3):327-338.
- Ryan, Richard M., and Edward L. Deci. 2000. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being." *American Psychologist* 55 (1):68-78.
- Savage, Peter. 1976. "Optimism and pessimism in comparative administration." *Public Administration Review* 36 (4):415-423.
- Schwepker, Charles H. 2001. "Ethical climate's relationship to job satisfaction, organizational commitment, and turnover intention in the salesforce." *Journal of business research* 54 (1):39-52.
- Steijn, Bram. 2008. "Person-Environment Fit and Public Service Motivation." *International Public Management Journal* 11 (1):13-27.
- Su, Xuhong, and Barry Bozeman. 2009. "Dynamics of Sector Switching: Hazard Models Predicting Changes from Private Sector Jobs to Public and Nonprofit Sector Jobs." *Public Administration Review* 69 (6):1106-1114.
- Sung, Kyu-Taik, and Han Sung Kim. 2001. "Elder respect: Exploration of ideals and forms in East Asia." *Journal of Aging Studies* 15 (1):13-26.
- Sverke, Magnus, Johnny Hellgren, and Katharina Näswall. 2002. "No security: a meta-analysis and review of job insecurity and its consequences." *Journal of occupational health psychology* 7 (3):242-264.
- Taylor, Jeannette. 2008. "Organizational Influences, Public Service Motivation and Work Outcomes: An Australian Study." *International Public Management Journal* 11 (1):67-88.
- Tschirhart, Mary, Kira Kristal Reed, Sarah J Freeman, and Alison Louie Anker. 2008. "Is the grass greener? Sector shifting and choice of sector by MPA and MBA graduates." *Nonprofit and Voluntary Sector Quarterly* 37 (4):668-688.
- Van de Walle, Steven, Bram Steijn, and Sebastian Jilke. 2015. "Extrinsic motivation, PSM and labour market characteristics: a multilevel model of public sector employment preference in 26 countries." *International Review of Administrative Sciences* 81 (4):833-855.
- Van der Wal, Zeger, Gjalt De Graaf, and Karin Lasthuizen. 2008. "What's Valued Most? Similarities and Differences between the Organizational Values of the Public and Private Sector." *Public Administration* 86 (2):465-482.
- Van der Wal, Zeger, and Lijing Yang. 2015. "Confucius meets Weber or "Managerialism takes all"? Comparing civil servant values in China and the Netherlands." *International Public Management Journal* 18 (3):411-436.

- Vandenabeele, Wouter. 2007. "Toward a Public Administration Theory of Public Service Motivation: An Institutional Approach." *Public Management Review* 9 (4):545-556.
- Vandenabeele, Wouter. 2008. "Government Calling: Public Service Motivation as an Element in Selecting Government as an Employer of Choice." *Public Administration* 86 (4):1089-1105.
- Vandenabeele, Wouter. 2011. "Who Wants to Deliver Public Service? Do Institutional Antecedents of Public Service Motivation Provide an Answer?" *Review of Public Personnel Administration* 31 (1):87-107.
- Winter, Vera, and Julia Thaler. 2016. "Does Motivation Matter for Employer Choices? A Discrete-Choice Analysis of Medical Students' Decisions Among Public, Nonprofit, and For-Profit Hospitals." *Nonprofit and Voluntary Sector Quarterly* 45 (4):762-786.
- Wright, Bradley E., and Robert K. Christensen. 2010. "Public Service Motivation: A Test of the Job Attraction–Selection–Attrition Model." *International Public Management Journal* 13 (2):155-176.
- Yang, Kuo-Shu, A. B. Yu, and M. H. Yeh. 1991. "Chinese individual modernity and traditionality: Construction definition and measurement." In *Chinese psychology and behavior [Huaren de Xinli yu Xingwei]*, edited by Kuo-Shu Yang and Kwang-Kuo Hwang, 241-306. Taipei: Laureate.
- Yang, Kuo-Shu. 2006. "Indigenized conceptual and empirical analyses of selected Chinese psychological characteristics." *International Journal of Psychology* 41 (4):298-303.
- Yeh, Kuang-Hui. 2003. "The beneficial and harmful effects of filial piety: An integrative analysis." In *Progress in Asian social psychology: Conceptual and empirical contributions*, edited by Kuo-Shu Yang, Kwang-Kuo Hwang, Paul B. Pedersen and Ikuro Daibo, 67-82. Westport, CT: Praeger Publishers/Greenwood Publishing Group.
- Yen, Hsueh-Cheng. 2014. "Education and social order: an analysis of the entrance examination." *Journal of Education Practice and Research [Jiaoyu Shizheng yu Yanjiu]* 27 (1):121-144.

Endnotes

¹ The boundary between the public and private sectors is indeed blurry nowadays, as frequently addressed in the research of publicness (Bozeman 1987, Andrews, Boyne, and Walker 2011). However, public management remains to be a distinctive field of research, and fundamental differences can still be found between traditional public and private organizations (Rainey 2009, Boyne 2002). Rainey (2009, 66) notes that while "(c)lear distinctions between public and private organizations are impossible... scholars and officials make the delineation repeatedly in relation to important issues, and public and private organizations do differ in some obvious ways." Rainey and Bozeman (2000, 466), after providing an argument that the dimensional publicness and core publicness approaches are mutually compatible, with one representing the effects of sector blurring and hybridization, the other representing the enduring effects of core legal and ownership status, offer this summation: "The consistency and convergence in findings of studies that compare public and private organizations are noteworthy and, at least in a few cases, remarkable for the social sciences." The goes on to note that "research on the public-private distinction...shows a rare combination of rigorous examination and convergent results(."

² Feeney (2008) finds that public servants who experience strong red tape are likely than other public servants to perceive that private sector work is more autonomous and personally gratifying. As red tape is a sign of excessive rules that limit one's autonomy, we may infer that perceiving a poor condition of

autonomy in the public sector can be projected on public sector employees' high expectation on work autonomy in the private sector.

³ http://news.xinhuanet.com/tw/2015-07/12/c_128010599.htm

⁴ <http://www.enz.org/new-zealand-salaries.html>

⁵ A few exceptions show limited or insignificant difference between public and private employees on their need for security (Lyons, Duxbury, and Higgins 2006, Karl and Sutton 1998, Crewson 1997). Sampling techniques and economic situations may contribute to the findings of limited difference or insignificant difference (Groeneveld, Steijn, and van der Parre 2009, Rainey 2009).

⁶ Other scholars, however, assert that PSM is a type of autonomous motivation, but not necessarily a type of intrinsic motivation (Vandenabeele 2007). Intrinsic motivation is a form of autonomous motivation in the motivation typology in self-determination theory (Ryan and Deci 2000).

⁷ Some researchers claim that having work with a strong service component may be more important than sector and that in such cases sector choice is only incidental (Christensen and Wright 2011).

⁸ In addition to autonomy, relatedness and competence are also important psychological needs that determine the success of internalizing motivations.

⁹ Van de Walle, Steijn, and Jilke (2015), in fact, labeled a need for autonomy as intrinsic work value and had it combined with a need for interesting work.

¹⁰ Datasets that target at general organizations as a whole (e.g. ISSP, National Organization Survey, and General Social Survey) have the feature that private organizations/employees are a lot more than public organizations/employees in the sample. This may result in different statistical significance between results from public and private samples (significance is more pronounced in the private sector sample due to a larger sample size). Readers are encouraged to use caution when they interpret statistical significance.

¹¹ Annual salary is reported in the US (per 10,000 USD) sample and the NZ sample (per 10,000 NZD), whereas monthly salary is reported in the Taiwan (per 10,000 NTD) sample.

Tables and Figures

Table 1. Descriptive statistics

	Scale	US	New Zealand	Taiwan	All
<u>Work needs/values</u>					
Job security	1/5	4.50 (0.76)	4.33 (0.69)	4.42 (0.67)	4.44 (0.68)
High income	1/5	4.03 (0.86)	3.85 (0.80)	3.88 (0.81)	3.93 (0.82)
Opportunities for advancement	1/5	4.23 (0.83)	4.05 (0.76)	3.81 (0.86)	4.01 (0.85)
An interesting job	1/5	4.50 (0.66)	4.55 (0.58)	4.14 (0.75)	4.41 (0.67)
Helping others	1/5	4.31 (0.72)	3.96 (0.77)	3.94 (0.66)	4.11 (0.71)
Usefulness to the society	1/5	4.34 (0.75)	3.69 (0.92)	4.01 (0.65)	4.12 (0.73)
Working independently	1/5	4.09 (0.87)	4.12 (0.71)	3.46 (0.87)	3.89 (0.86)
Deciding times or days of work	1/5	3.50 (1.06)	3.69 (0.92)	3.81 (0.87)	3.68 (0.96)
<u>Perceived need fulfillment</u>					
My job is secure	1/5	3.81 (1.07)	3.70 (1.06)	3.42 (1.04)	3.62 (1.07)
I don't fear losing the current job	1/4	3.32 (0.88)	3.42 (0.81)	3.43 (0.83)	3.39 (0.84)
My income is high	1/5	2.72 (1.10)	2.81 (1.08)	2.83 (0.94)	2.79 (1.03)
My opportunities for advancement are high	1/5	2.91 (1.14)	2.85 (1.06)	2.69 (0.94)	2.81 (1.05)
My job is interesting	1/5	4.09 (0.92)	3.94 (0.87)	3.43 (0.91)	3.77 (0.95)
In my job I can help other people	1/5	4.23 (0.82)	4.00 (0.86)	3.85 (0.67)	4.01 (0.79)
My job is useful to the society	1/5	4.11 (0.91)	3.80 (0.97)	3.83 (0.70)	3.91 (0.86)
I can work independently	1/5	3.97 (1.02)	4.06 (0.88)	3.82 (0.80)	3.93 (0.90)
I can freely change work time	1/3	1.71 (0.72)	1.71 (0.70)	1.78 (0.82)	1.74 (0.76)
I can freely decide how to do my work	1/3	2.12 (0.71)	2.15 (0.69)	2.16 (0.78)	2.14 (0.73)
I can freely take personal leaves	1/4	3.02 (1.06)	3.21 (0.91)	2.93 (1.04)	3.04 (1.02)
<u>Physical working conditions</u>					
I do hard physical work	1/5	2.54 (1.37)	2.47 (1.26)	2.60 (1.17)	2.55 (1.26)
I work in dangerous conditions	1/5	2.06 (1.27)	2.06 (1.16)	1.98 (1.09)	2.02 (1.17)
<u>Demographics</u>					
Personal income (USD/NZD/NTD)	Continuous	3.94 (3.39)	4.45 (2.85)	4.00 (3.48)	--
Age	Continuous	47.13 (16.46)	42.85 (13.32)	44.16 (16.91)	41.26 (12.56)
Education	0/5	3.50 (1.21)	3.02 (1.80)	2.81 (1.52)	3.30 (1.45)
Gender (male=1; female=0)	0/1	0.47 (0.50)	0.49 (0.50)	0.51 (0.50)	0.53 (0.50)
Marital status (yes=1; no=0)	0/1	0.50 (0.50)	0.66 (0.48)	0.63 (0.48)	0.61 (0.49)
Race (white=1; nonwhite=0)	0/1	0.73 (0.44)	--	--	--

Mean values reported; standard deviations in parentheses

Table 2.1 Percentage of perceived sector mismatch in the US

	Currently private (n=775)	Currently public (n=193)	Total (n=968)
Preferring private	76.8%	39.0%	69.2%
Preferring public	23.2%	61.0%	30.8%
Total	100%	100%	100%

Table 2.2 Percentage of perceived sector mismatch in New Zealand

	Currently private (n=501)	Currently public (n=194)	Total (n=695)
Preferring private	86.6%	59.8%	79.1%
Preferring public	13.4%	40.2%	20.9%
Total	100%	100%	100%

Table 2.3 Percentage of perceived sector mismatch in Taiwan

	Currently private (n=1073)	Currently public (n=157)	Total (n=1230)
Preferring private	44.1%	25.5%	41.7%
Preferring public	55.9%	74.5%	58.3%
Total	100%	100%	100%

Table 2.4 Percentage of perceived sector mismatch in all three nations

	Currently private (n=2349)	Currently public (n=544)	Total (n=2893)
Preferring private	63.9%	42.5%	59.9%
Preferring public	36.1%	57.5%	40.1%
Total	100%	100%	100%

Table 3. Private sector workers’ perceived sector mismatch: ANOVA

	US		New Zealand		Taiwan		All three nations	
	Like private	Like public	Like private	Like public	Like private	Like public	Like private	Like public
<u>Work needs/values</u>								
Job security	4.45	4.70**	4.30	4.33	4.37	4.53**	4.38	4.55**
High income	3.98	4.22**	3.86	3.88	3.90	3.99†	3.92	4.03**
Opportunities for advancement	4.16	4.50**	4.07	4.01	3.82	3.85	4.03	4.00
An interesting job	4.49	4.43	4.56	4.42†	4.31	4.15**	4.45	4.24**
Helping others	4.31	4.31	3.98	4.12	3.98	3.93	4.12	4.03**
Usefulness to the society	4.30	4.42†	3.86	4.20**	4.02	4.01	4.09	4.11
Working independently	4.16	4.09	4.14	4.07	3.59	3.52	3.97	3.68**
Deciding times or days of work	3.52	3.53	3.68	3.69	3.86	3.82	3.68	3.75†
<u>Perceived need fulfillment</u>								
My job is secure	3.76	3.69	3.67	3.50	3.51	3.20**	3.66	3.33**
I don’t fear losing my job	3.37	3.14**	3.48	3.39	3.54	3.38**	3.45	3.33**
My income is high	2.79	2.56*	2.89	2.44**	2.96	2.67**	2.87	2.64**
The chances for advancement are good	2.94	2.89	2.94	2.38**	2.84	2.57**	2.91	2.63**
My job is interesting	4.08	3.88*	4.00	3.65**	3.56	3.32**	3.89	3.46**
In my job I can help other people	4.16	4.14	3.93	3.77	3.83	3.81	3.99	3.88**
My job is useful to the society	3.98	4.08	3.67	3.50	3.77	3.81	3.82	3.84
I can work independently	4.07	3.82**	4.18	3.91*	3.87	3.81	4.04	3.82**
I can freely change work time	1.84	1.57**	1.84	1.57**	1.95	1.76**	1.88	1.70**
I can freely decide how to do my work	2.17	2.01**	2.26	2.02*	2.30	2.12**	2.24	2.09**
I can freely take personal leaves	3.11	2.91**	3.39	3.05**	3.12	2.89**	3.19	2.90**
<u>Physical working conditions</u>								
I do hard physical work	2.57	2.92**	2.56	2.86†	2.52	2.72**	2.55	2.77**
I work in dangerous conditions	2.02	2.14	2.05	2.21	1.89	1.99	1.99	2.04
<u>Demographics</u>								
Actual personal income	4.55	2.86**	4.77	3.26**	4.71	3.39**	--	--
Age	43.06	40.45*	43.85	41.57	37.10	40.16**	41.41	40.32*
Education	3.65	3.12**	2.97	2.72	3.37	2.88**	3.37	2.92**
Gender (male)	0.57	0.48*	0.59	0.42**	0.62	0.53**	0.59	0.51**
Marital status	0.51	0.47	0.70	0.67	0.57	0.69**	0.59	0.64*
Race (white)	0.77	0.52**	--	--	--	--	--	--

**p<.01; *p<.05; †p<.10

Table 4. Public sector workers' perceived sector mismatch: ANOVA

	US		New Zealand		Taiwan		All three nations	
	Like private	Like public	Like private	Like public	Like private	Like public	Like private	Like public
<u>Work needs/values</u>								
Job security	4.45	4.53	4.41	4.50	4.40	4.59†	4.42	4.54*
High income	3.83	3.92	3.91	3.81	3.60	3.97**	3.83	3.91
Opportunities for advancement	4.15	4.16	4.18	4.00†	3.75	3.82	4.10	3.99
An interesting job	4.64	4.62	4.62	4.58	4.35	4.29	4.58	4.49†
Helping others	4.40	4.44	4.02	4.17	4.23	4.09	4.18	4.24
Usefulness to the society	4.44	4.52	3.96	4.26**	4.10	4.18	4.14	4.32**
Working independently	4.09	4.24	4.24	4.14	3.85	3.49*	4.13	3.93**
Deciding times or days of work	3.44	3.45	3.73	3.69	3.78	3.70	3.64	3.60
<u>Perceived need fulfillment</u>								
My job is secure	3.95	4.16	3.67	3.77	3.88	4.15†	3.80	4.06**
I don't fear losing my job	3.41	3.31	3.29	3.21	3.28	3.38	3.33	3.31
My income is high	2.48	2.75†	2.87	2.95	3.13	3.05	2.79	2.91
The chances for advancement are good	2.77	2.90	2.87	2.86	2.63	2.84	2.79	2.87
My job is interesting	4.36	4.25	3.96	4.09	3.53	3.55	4.01	3.95
In my job I can help other people	4.51	4.49	4.07	4.43**	3.98	4.09	4.19	4.32*
My job is useful to the society	4.47	4.58	3.90	4.47**	3.95	4.17†	4.10	4.39**
I can work independently	3.76	3.97	3.90	3.97	3.60	3.79	3.80	3.90
I can freely change work time	1.41	1.53	1.59	1.45†	1.35	1.32	1.49	1.43
I can freely decide how to do my work	2.12	2.08	2.10	1.97	1.70	1.96*	2.03	2.01
I can freely take personal leaves	2.69	3.09**	3.16	2.96	2.60	2.55	2.91	2.86
<u>Physical working conditions</u>								
I do hard physical work	1.96	2.20	2.04	2.30	2.38	2.43	2.07	2.31*
I work in dangerous conditions	2.10	2.13	1.93	2.25†	2.23	2.14	2.04	2.16
<u>Demographics</u>								
Actual personal income	3.88	4.28	4.78	4.83	4.85	4.95	--	--
Age	43.40	43.08	42.23	44.65	36.80	41.96**	41.67	43.05
Education	4.16	4.15	3.30	3.28	4.33	4.00†	3.76	3.88
Gender (male)	0.37	0.47	0.41	0.37	0.55	0.56	0.42	0.48
Marital status	0.56	0.63	0.63	0.62	0.63	0.78*	0.60	0.68†
Race (white)	0.72	0.73	--	--	--	--	--	--

**p<.01; *p<.05; †p<.10

Table 5. Logit regression: Private employees' perceived sector mismatch (preferring public=1)

	US		New Zealand		Taiwan		All three nations	
	Coef	p	Coef	p	Coef	p	Coef	p
Extrinsic needs	0.32	0.01*	0.07	0.67	0.23	0.00**	0.17	0.00**
Intrinsic needs	-0.09	0.42	0.39	0.04*	-0.12	0.18	-0.09	0.10†
Autonomy needs	-0.04	0.68	-0.12	0.52	-0.09	0.29	-0.12	0.02*
Extrinsic need fulfillment	-0.01	0.96	-0.10	0.57	-0.21	0.01*	-0.23	0.00**
Intrinsic need fulfillment	0.06	0.59	-0.38	0.02*	0.16	0.10†	-0.03	0.57
Autonomy need fulfillment	-0.16	0.15	-0.17	0.35	-0.28	0.00**	-0.25	0.00**
Physical working conditions	0.11	0.29	0.16	0.33	0.08	0.37	0.02	0.77
Actual personal income	0.12	0.01*	0.12	0.12	0.15	0.00**	--	--
Age	0.00	0.67	-0.01	0.59	0.02	0.06†	-0.02	0.00**
Education	-0.08	0.41	0.05	0.62	-0.04	0.61	-0.17	0.00**
Gender (male)	-0.22	0.34	-0.41	0.27	-0.17	0.29	-0.28	0.01*
Marital status	0.19	0.38	0.14	0.71	0.38	0.03*	0.35	0.00**
Race (white)	-0.51	0.03*	--	--	--	--	--	--
Constant	-0.09	0.87	-1.24	0.05*	0.01	0.99	0.54	0.02*
N	625		412		889		2091	
Prob > chi2	0.000		0.005		0.000		0.000	
McKelvey and Zavoina's R2	0.180		0.184		0.147		0.108	

**p<.01; *p<.05; †p<.10

Table 6. Logit regression: Public workers' perceived sector mismatch (preferring private=1)

	US		New Zealand		Taiwan		All three nations	
	Coef	p	Coef	p	Coef	p	Coef	p
Extrinsic needs	-0.06	0.81	0.04	0.85	-0.53	0.02*	-0.10	0.36
Intrinsic needs	-0.08	0.74	-0.37	0.10†	0.24	0.41	-0.12	0.31
Autonomy needs	-0.10	0.59	0.46	0.05*	0.32	0.16	0.24	0.02*
Extrinsic need fulfillment	-0.08	0.69	0.03	0.89	-0.43	0.10†	-0.10	0.32
Intrinsic need fulfillment	-0.02	0.93	-0.64	0.00**	-0.24	0.37	-0.14	0.19
Autonomy need fulfillment	-0.54	0.02*	0.21	0.34	-0.20	0.45	-0.03	0.77
Physical working conditions	-0.21	0.29	-0.10	0.61	-0.08	0.76	-0.19	0.07†
Actual personal income	0.01	0.99	0.09	0.23	0.18	0.17	--	--
Age	0.00	0.97	-0.03	0.08†	-0.05	0.13	-0.01	0.16
Education	-0.02	0.93	-0.03	0.80	0.16	0.57	-0.09	0.22
Gender (male)	-0.29	0.45	0.10	0.79	0.24	0.58	-0.19	0.32
Marital status	-0.48	0.19	0.68	0.12	-0.81	0.14	-0.21	0.30
Race (white)	0.14	0.75	--	--	--	--	--	--
Constant	-0.25	0.83	1.94	0.02*	-0.44	0.79	0.79	0.10†
N	161		168		153		514	
Prob > chi2	0.000		0.000		0.000		0.000	
McKelvey and Zavoina's R2	0.104		0.189		0.232		0.054	

**p<.01; *p<.05; †p<.10

Table 7. Summary of findings

	Mismatch Type 1: Mismatched private employees (vs. matched private employees)	Mismatch Type 2: Mismatched public employees (vs. matched public employees)
Commonalities across borders	Likely to be socio-economically disadvantaged blue-collared workers: less education, more female, more minority, doing more hard physical work, stronger extrinsic work needs, weaker intrinsic needs, weaker needs for autonomy, and less satisfaction with both extrinsic and intrinsic work needs	Unlikely to be socio-economically disadvantaged, and not especially interested in extrinsic rewards
Findings from the US sample	N/A	(i) Higher education with relatively lower autonomy, lower family income, and lower fulfillment of pay; (ii) possibly their romanticized view of the private sector, but need more robust evidence
Findings from the New Zealand sample	Not particularly interested in job security but more prosocial, which makes them long for public sector jobs without merit protection	(i) Lower prosocial tendency; (ii) perceiving less chance to help others and benefit the society; the first feature may be a result of the second one (the decrease of aspiration)
Findings from the Taiwan sample	N/A	Better education, younger age, and a stronger need for autonomy, showing that well-educated young people may be fighting against the culture of submission to authority
Findings from the aggregate sample	The same as finding in the first box: commonalities across borders	(i) Less satisfied with job security, although they care less about job security; (ii) less satisfied with prosocial and altruistic needs, although they exhibit a slightly weaker prosocial tendency; (iii) stronger desire for autonomy, although their perceived autonomy is only slightly lower

Appendix A. Three (3) nations in this study vs. thirty two (32) nations in ISSP data

In Table A1 we report the percentage of perceived sector mismatch using data from the three countries we selected for the present study (the US, New Zealand, and Taiwan). In Table A2, we report the percentage of perceived sector mismatch using data from all 32 countries in the ISSP dataset. It is shown that the preference for the public sector is 40.1% in Table A1 and 42.4% in Table A2. The results are very close. Mismatched private employees are 36.1% in Table A1 and 33.6% in Table A2 – also very close. The major difference appears in the middle column, which shows that matched public employees are 57.5% in Table A1 but 66.6% in Table A2. This is probably because there are significantly more public sector employees in the New Zealand sample (194 employees), especially compared to Taiwan (157 employees). The preference for the public sector in New Zealand is about 21% overall, much lower than the average.

Table A1. Percentage of perceived sector mismatch: 3 nations in this study

	Currently private (n=2349)	Currently public (n=544)	Total (n=2893)
Preferring private	63.9%	42.5%	59.9%
Preferring public	36.1%	57.5%	40.1%
Total	100%	100%	100%

Table A2. Percentage of perceived sector mismatch: 32 nations in ISSP dataset

	Currently private (n=15932)	Currently public (n=5865)	Total (n=21797)
Preferring private	66.4%	33.4%	57.6%
Preferring public	33.6%	66.6%	42.4%
Total	100%	100%	100%

We also compare ANOVA results (reasons that contribute to perceived sector mismatch) in Table A3. Regarding mismatched private employees, the results are similar in both samples: they are more likely to be socioeconomically disadvantaged and experience lower fulfillment of extrinsic, intrinsic, and autonomy needs; do more hard physical work; have stronger desires for extrinsic rewards. They also tend to be female and less well-educated. However, a major difference is slightly stronger prosocial and altruistic tendency in the 32-country sample, which is different from what we found in the present study. We encourage researchers to use different samples and test this proposition in the future.

Regarding mismatched public employees, the results are similar as well, except there is greater statistical significance in the 32-country sample: they are well-educated, younger, and enjoy a relatively higher level of work flexibility; they are not very satisfied with the fulfillment of extrinsic work needs; they do not think they have enough opportunities to help people and serve the society. At the same time, they care less about job security and income; they care less about having opportunities to make a difference to the society and people; they care more about autonomy and interesting work content. The major differences appear in two variables: performance of hard physical work, and gender. We have no clear answer regarding the discrepancy; perhaps gender and physical working conditions have different implications across the nations.

Table A3. ANOVA results

	Private employees				Public employees			
	3 nations in the present study		32 nations in ISSP dataset		3 nations in the present study		32 nations in ISSP dataset	
	Like private	Like public	Like private	Like public	Like private	Like public	Like private	Like public
<u>Work needs/values</u>								
Job security	4.38	4.55**	4.39	4.58**	4.42	4.54*	4.44	4.58**
High income	3.92	4.03**	4.09	4.31**	3.83	3.91	4.07	4.12*
Opportunities for advancement	4.03	4.00	3.94	4.03**	4.10	3.99	3.93	3.87*
An interesting job	4.45	4.24**	4.43	4.33**	4.58	4.49†	4.49	4.45*
Helping others	4.12	4.03**	3.94	4.04**	4.18	4.24	4.07	4.13**
Usefulness to the society	4.09	4.11	3.90	4.05**	4.14	4.32**	4.02	4.16**
Working independently	3.97	3.68**	4.12	3.96**	4.13	3.93**	4.15	3.97**
Deciding times or days of work	3.68	3.75†	3.76	3.77	3.64	3.60	3.78	3.68**
<u>Perceived need fulfillment</u>								
My job is secure	3.66	3.33**	3.60	3.33**	3.80	4.06**	3.74	3.95**
I don't fear losing my job	3.45	3.33**	3.10	2.83**	3.33	3.31	3.12	3.04*
My income is high	2.87	2.64**	2.90	2.54**	2.79	2.91	2.65	2.75**
The chances for advancement are good	2.91	2.63**	2.87	2.53**	2.79	2.87	2.68	2.73
My job is interesting	3.89	3.46**	3.88	3.48**	4.01	3.95	3.89	3.96*
In my job I can help other people	3.99	3.88**	3.72	3.64**	4.19	4.32*	4.07	4.10
My job is useful to the society	3.82	3.84	3.72	3.70	4.10	4.39**	4.13	4.25**
I can work independently	4.04	3.82**	3.93	3.56**	3.80	3.90	3.70	3.66
I can freely change work time	1.88	1.70**	1.82	1.60**	1.49	1.43	1.50	1.41**
I can freely decide how to do my work	2.24	2.09**	2.14	1.90**	2.03	2.01	1.92	1.86**
I can freely take personal leaves	3.19	2.90**	3.03	2.69**	2.91	2.86	2.69	2.61**
<u>Physical working conditions</u>								
I do hard physical work	2.55	2.77**	2.54	2.76**	2.07	2.31*	2.28	2.28
I work in dangerous conditions	1.99	2.04	2.02	2.18**	2.04	2.16	2.05	2.07
<u>Demographics</u>								
Age	41.41	40.32*	41.11	40.76	41.67	43.05	41.91	43.22**
Education	3.37	2.92**	3.01	2.71**	3.76	3.88	3.55	3.50
Gender (male)	0.59	0.51**	0.60	0.53**	0.42	0.48	0.43	0.39**
Marital status	0.59	0.64*	0.60	0.63**	0.60	0.68†	0.64	0.65

Appendix B. Principal Component Factor Analysis (with Promax rotation)

The combined sample (the US, New Zealand, and Taiwan) is used for factor analysis. We first enter all variables into a model, but find that intrinsic needs and autonomy needs fall into the same factor. Meanwhile, intrinsic need fulfillment and autonomy need fulfillment fall into two different factors, as shown in Table B1. Therefore, we choose to separate work needs from need fulfillment (plus physical working conditions) in factor analysis. By doing so, we obtain 3 factors of work needs, 3 factors of fulfillment of work needs, and one factor of physical working conditions, in total 7, as shown in Table B2 and B3. We prefer the second approach as it is more in line with the review of literature in this study. After determining which variables loaded on which factors, we ran factor analysis on each individual factor and predicted their scores using the “predict” command in Stata. In total, we generated seven variables based on factor analysis. As 1-3, 1-4, and 1-5 Likert scales are applied to different items, additive indices are thus less desirable.

Table B1. All items (work needs and need satisfaction) together

	F1	F2	F3	F4	F5	F6
Work needs						
Need: Job security	0.68					
Need: High income	0.76					
Need: Opportunities for advancement	0.72					
Need: An interesting job		0.51				
Need: Helping others		0.79				
Need: Usefulness to the society		0.75				
Need: Working independently		0.61				
Need: Deciding times or days of work		0.50				
Perceived need fulfillment						
My job is secure			0.71			
I don't fear losing my job			0.46			
My income is high			0.73			
The chances for advancement are good			0.72			
My job is interesting				0.54		
In my job I can help other people				0.78		
My job is useful to the society				0.75		
I can work independently					0.52	
I can freely change work time					0.79	
I can freely decide how to do my work					0.73	
I can freely take personal leaves					0.65	
Physical working conditions						
I do hard physical work						0.84
I work in dangerous conditions						0.85
Eigenvalue	1.95	2.46	2.19	2.18	2.26	1.65
Variance explained	0.09	0.12	0.10	0.10	0.11	0.08

Factor loading under .40 not reported

Table B2. Items of work needs only

	Extrinsic work needs	Intrinsic work needs	Autonomy needs
Need: Job security	0.69		
Need: High income	0.80		
Need: Opportunities for advancement	0.75		
Need: An interesting job		0.53	
Need: Helping others		0.88	
Need: Usefulness to the society		0.86	
Need: Working independently			0.53
Need: Deciding times or days of work			0.86
Eigenvalue	1.88	2.23	1.34
Variance explained	0.23	0.28	0.17

Factor loading under .40 not reported

Table B3. Items of perceived need satisfaction + physical working conditions

	Extrinsic need fulfillment	Intrinsic need fulfillment	Autonomy need fulfillment	Physical working conditions
My job is secure	0.73			
I don't fear losing my job	0.43			
My income is high	0.75			
The chances for advancement are good	0.73			
My job is interesting		0.55		
In my job I can help other people		0.87		
My job is useful to the society		0.83		
I can work independently			0.46	
I can freely change work time			0.83	
I can freely decide how to do my work			0.74	
I can freely take personal leaves			0.68	
I do hard physical work				0.86
I work in dangerous conditions				0.85
Eigenvalue	2.14	2.11	2.21	1.65
Variance explained	0.16	0.16	0.17	0.13

Factor loading under .40 not reported