

# Evidence of Public Service Motivation and Job Satisfaction of Public Sector Employees in China

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## Abstract

*The main purpose of this paper is to investigate how generalizable the public service motivation (PSM) is to China and examine the instrumentality through which individual PSM may affect work attitudes in an administrative or public organization. Using the data from the questionnaire among the Provincial Governments in China, the structure of PSM and the effects of PSM on job satisfaction (JS) is explored. The survey is coverage of provincial government departments' employees in China, and a total of 1027 effective samples were collected. A variety of research methods are used, such as descriptive statistics analysis, exploratory factor analysis, correlation analysis, and regression analysis and so on. These studies not only explore and examine the constitution and adaptability of PSM, but also produce interesting results that relate to the history and institutional background of Chinese administrative or public organizations.*

## 1. Introduction

The motivation, micro-management and public performance measurement are considered as three big questions that scholars of public management should be attempting to answer (Behn, 1995), and the motivation of public sector employees generally becomes one of the topical issues of public administration. Interest in Public Service Motivation (PSM) has grown significantly in recent years among practitioners and scholars (Bright, 2007), as well as many desires to use the concept of PSM to improve the selection, retention, and performance of public employees.

Despite increased attention to the effect of public service motivation on job satisfaction, scholars have almost focused on developed countries, and researches on PSM gradually expand from the United States to Britain, Germany, the Netherlands, Switzerland, South Korea and China (Vandenabeele, Scheepers & Hondeghem, 2006; Leisink & Steijn, 2009; the Ritz, 2009; Young, 2001; Liu, Tang, & Zhu,

2008; Li, 2010), which has become a hot topic of the international public management. On the contrary, there is relatively little research on public service motivation in developing countries (Liu, Tang & Zhu, 2008; Wu, 2010; Li, 2010).

Although some studies has proposed that a connection exists between PSM and job satisfaction of public employees (Rainey, 1982; Brewer and Selden, 1998; Naff and Crum, 1999; Liu, Tang & Zhu, 2008), there is other empirical studies came to opposite conclusions that PSM may not have a direct significant influence on job satisfaction (Bright, 2008; Wright & Pandey, 2008). Generally speaking, only a limited number of studies have dealt directly with the relationship between public service motivation and job satisfaction in government, furthermore, the relevant empirical research has produced mixed results, so that it is hard to draw any explicit conclusions on the relationship between PSM and job satisfaction.

The main purpose of this paper is to in-

investigate the validity and generalizability of public service motivation (PSM) in China and examine the instrumentality through which individual PSM may affect work attitudes in an administrative or public organization. The article is organized as follows. Section 2 begins by reviewing the literature on PSM and job satisfaction briefly. In Section 3, the hypotheses, data, methodology and analysis procedures are presented, while Section 4 discusses the empirical findings to examine the construct of PSM of Chinese public servants and investigate the effects of PSM on public employees' job satisfaction. Finally, Section 5 presents the conclusion based on the discussion of research findings and their policy implications for the field of public administration in the last part of the article.

## 2. Literature Review

PSM is a multi-dimensional and exclusive concept, and it's difficult to describe the internal psychological process (Rainey, 1997). According to Perry and Wise (1990), PSM is defined as an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations, and the term (motives) is used here to mean psychological deficiencies or needs that an individual feels some compulsion to eliminate (Perry & Wise, 1990). Brewer and Selden (1998) describe it as a kind of motivational force that induces individuals to perform meaningful public service". According to Rainey and Steinbauer (1999), public service motivation is a general altruistic motivation that serves the interests of a community of people, a state, a nation or mankind. PSM is also studied as the public service ethic or public service values, and the construct has been referred to as a calling, a commitment to public good, a sense of duty and contribution, implying an ethic exists in public service that motivates individuals to self select into public-sector employment (Knapp & McLean, 2003; Simeone, 2004). To develop an encompassing definition, Vandenabeele (2007) defined PSM

as the belief, values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate.

The effectiveness of PSM on public organizations, as well as the relationship between PSM and organizational behavior has increasingly become the important subject that researchers concerned about. Studies show that PSM has been empirically related to various types of organizational behavior and operation of public institutions, such as organizational commitment (Crewson, 1997), individual and organizational performance (Bright, 2007; Kim, 2004; Naff & Crum, 1999; Vandenabeele, 2009), ethical behavior (Brewer & Selden, 1998), job satisfaction (Rainey, 1982; Naff and Crum, 1999) and so on. Therefore, it can be considered an important motivator in a public sector environment.

In PSM research, job satisfaction is considered to be a consequence of PSM, as the particular work situation seems to be able to satisfy the individual need of wanting to help others (Perry and Wise, 1990). Rainey (1982) found that the higher willingness of public service for individuals, the higher satisfaction level on the work, boss, colleagues, and promotion. Brewer and Selden (1998) found that public service motivation has a positive impact on job satisfaction. In a study using the 1996 Merit Principles Survey, Naff and Crum (1999) found that PSM had a strong positive effect on job satisfaction and performance ratings and a weaker negative effect on plans to leave the government.

In addition, there is other evidence shows that PSM had no significant relationship to the job satisfaction and turnover intentions of public employees when person-organization (P-O) fit was considered (Bright, 2008), using a sample of 205 employees from three public organizations. Wright & Pandey (2008) found that the relationship between employee public service motivation and job satisfaction is mediated by the extent of employee-organizational fit.

zation value congruence, which the employee perceives that his or her values are congruent with those of the public sector organization he or she works for.

Job satisfaction is often assumed to be the most intensively studied variable in organizational research (Rainey, 1997). During the past several decades, scholars have paid more attention to job satisfaction, so that there is abundance not only of empirical research but even of review and synthesis articles (Locke 1976). A general definition is provided by Locke (1976), with job satisfaction being understood as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences.

In public administration, job satisfaction has been a popular topic of research. Studies of job satisfaction often focus on distinctive aspects of the public sector environment, the relation of job satisfaction to organizational behaviors and performance, and still others on the impact of government reform on satisfaction (Bright 2008; Su & Bozeman, 2009). Apart from the design of the job and the personal characteristics, a number of elements, such as pay, promotion, job security, supervision, work-group characteristics, participation and organizational structure, are held to determine job satisfaction (Rainey, 1997). Our research is to analysis the effects of public service motivation on job satisfaction in order to test the instrumentality of public service motivation in China.

At present, there is relatively little research on PSM and job satisfaction in China. Liu, Tang, and Zhu (2008) found that the Attraction to Policy Making and Self Sacrifice dimension of PSM positively affect the job satisfaction. Wu (2010) found that the PSM has a significant positive relationship with the civil servants' job satisfaction and organizational commitment. Li (2010) found that there were two dimensions of PSM, self-realization and public interests dimension, were significantly related to the job satisfaction and the rest three dimensions has not been confirmed.

Overall, the researches on the connection between PSM and job satisfaction still remain to be further studied in the context of China.

### **3. Hypothesis, Data and Methods**

#### **3.1. Hypothesis**

After reviewing the literature of PSM, job satisfaction, and relationships between them, it is my belief that people with strong public service motivation is more willing to serve the public welfare and focus on their own intrinsic value and social value, as well as full of the spirit of selfless dedication to the public interest. As government work provides ample opportunities to provide public goods and serve the public interest, employees whose motives were anchored in the need to pursue the common good were likely to be satisfied with their jobs (Taylor, 2007). In contrast with the private sector focused on the interests of company owners, public sectors that broadly benefit the social and a wider range of people are able to attract and retain a sufficient number of employees with high PSM. Consequently, public employees with higher PSM will devote themselves to public affairs and more easily find a sense of accomplishment, job satisfaction and enjoyment in the daily routine, and commitment in public organizations when compared with individuals with lower levels of PSM. For this reason, it is worthwhile for practitioners to use PSM, a guide for recruiting, training, and socializing employees, to identify the characteristics of individuals with high levels of PSM.

The PSM is composed of four dimensions, which are Attraction to Policy Making, Commitment to Public Interest, Compassion and Self Sacrifice (Perry and Wise, 1996). Since an employee's PSM is attributed to a mix of motives, when examining their impact on work-related outcomes, it would be more useful to analyze all four PSM dimensions simultaneously (Taylor, 2007). This research will focus on the relationship of the four dimensions and job satisfactions, assuming that significantly

positive relationships between four dimensions of PSM and job satisfaction are exist. Specifically:

H1. PSM is composed of Attraction to Policy Making Dimension, Commitment to Public Interest Dimension, Compassion Dimension and Self Sacrifice Dimension.

H2. There are significantly positive relationships between Attraction to Policy Making Dimension of PSM and public employees' job satisfaction.

H3. There are significantly positive relationships between Commitment to Public Interest Dimension of PSM and public employees' job satisfaction.

H4. There are significantly positive relationships between Compassion Dimension of PSM and public employees' job satisfaction.

H5. There are significantly positive relationships between Self Sacrifice Dimension of PSM and public employees' job satisfaction.

### 3.2. Participants

The survey was conducted in the provincial government departments include Sichuan Province, Hubei Province, Hunan Province, Liaoning Province and Chongqing Municipality in 2011. The participants were randomly selected from government sectors, such as departments of education, health, culture, environmental protection, civil affairs, human resources and social security, housing and urban-rural development. These organizations were chosen for the purpose of creating a diverse sample of participants who represented a broad range of public sector occupations and localities. A total of 1255 surveys were returned, yielding a response rate of beyond 80%. To create a data file for statistical analysis, the 288 cases with missing and invalid data for any of the PSM and job satisfaction indicators were deleted. Finally, 1027 cases were

retained with a response rate of 81.8%. As shown in Tab. 1, the respondents were also demographically diverse in terms of age, gender, educational attainment, job level, position and history and so on.

**Tab. 1. Description of the Respondent Sample (N=1027)**

|                              | Frequency | Percentage(%) |
|------------------------------|-----------|---------------|
| <b>Provincial government</b> |           |               |
| Sichuan                      | 247       | 24.1          |
| Hubei                        | 110       | 10.7          |
| Hunan                        | 212       | 20.6          |
| Liaoning                     | 266       | 25.9          |
| Chongqing                    | 192       | 18.7          |
| <b>Gender</b>                |           |               |
| Male                         | 336       | 32.7          |
| Female                       | 691       | 67.3          |
| <b>Age</b>                   |           |               |
| 24 years old and below       | 21        | 2.0           |
| 25 to 34                     | 371       | 36.1          |
| 35 to 44                     | 345       | 33.6          |
| 45 to 54                     | 231       | 22.5          |
| 55 years old and above       | 59        | 5.7           |
| <b>Education level</b>       |           |               |
| Below associate degree       | 7         | .7            |
| Associate degree             | 50        | 4.9           |
| Bachelor's degree            | 621       | 60.5          |
| Master's degree              | 340       | 33.1          |
| Doctor's degree              | 9         | .9            |
| <b>Job level</b>             |           |               |
| staff member                 | 140       | 13.6          |
| vice-section level           | 144       | 14.0          |
| section level                | 282       | 27.5          |
| vice-office level            | 263       | 25.6          |
| office level                 | 193       | 18.8          |
| vice-bureau level            | 5         | .5            |
| <b>Job Positions</b>         |           |               |
| general staff                | 731       | 71.2          |
| leadership                   | 296       | 28.8          |
| <b>Job History</b>           |           |               |
| 9 years and below            | 293       | 28.5          |
| 10 to 19                     | 304       | 29.6          |
| 20 to 29                     | 303       | 29.5          |
| 30 to 39                     | 113       | 11.0          |
| 40 years and above.          | 14        | 1.4           |

Source: own elaboration.

### 3.3 Methods

The variable of PSM was operationalized with Perry's (1996) 24 items revised measurement scale, which was tested by the confirmatory factor analysis (CFA) and ultimately developed the construct of four dimensions of PSM (attraction to policy making, commitment to public interest, compassion and self-sacrifice). The questions asked the respondents to consider their PSM and to identify the extent to which these questions expressed their personal perceptions. The research used a 5-point Likert scales rating from "1" Strongly disagree to "5" Strongly agree.

The variable of job satisfaction was derived by asking public managers to indicate the extent to which they agree or disagree with the statement "All in all, I am satisfied with my job" (1=strongly disagree, 2=somewhat disagree, 3=somewhat agree, 4=strongly agree). Some researchers suggest that a single-item measure of overall job satisfaction has validity advantages over scales based on a sum of specific job satisfaction items (Scarpello and Campbell 1983; Wanous et al. 1997; Su & Bozeman, 2009), while using a single item to measure psychological construct is typically discouraged due to the low measurement reliability (Wanous et al. 1997).

Furthermore, individual demographic characteristics, such as gender, race, age, education level and job experience, proved to be important factors determine job satisfaction, resulting from the interaction between the individual and the environment (Bartel, 1981; Clark, 1997; Su & Bozeman, 2009). Therefore, the study fully considered the effect of these individual characters on job satisfaction and analyzed them as control variables.

In addition to the data collection process, the data was analyzed in three stages. First,

using data from a survey of 1027 respondents from a variety of provincial government employees, the study applied exploratory factor analysis and reliability test to examine the validity of the Western PSM scale and to build an integral dimension of the PSM generated in China. Second, descriptive statistics analysis was presented to measure the level of PSM and job satisfaction. Third, Pearson correlation analysis, Partial correlation analysis and regression analysis are used to explore the relationships between China's PSM dimensions and job satisfaction, while taking into account the control variables in the model test.

## 4. Study Findings and Discussions

### 4.1. Exploratory Factor Analysis (EFA) and Reliability Test

First, the study use EFA to examine the generalisability and instrumentality of the four-dimension PSM as observed in Western society to China. The PSM construct scale contained a total of 24 items representing the four dimensions of PSM. The critical factors are extracted by principal components analysis. Before that, it is necessary to apply KMO and Barlett's test to the correlation matrix composed by the variables. If Barlett result is significant at  $p \geq 0.05$ , it indicates common factors do exist in the matrix. And factor analysis always requires the KMO coefficient  $\geq 0.05$ . Generally speaking, the greater the coefficient (ranges between 0-1) is the more common factors there are.

As shown in tab. 2, KMO coefficient (0.860) suggests a high level of factors' correlation. Barlett's test is significant at  $p=0.000$ , which indicates common factors exist in the correlation matrix. The variable population is suit-

**Tab. 2. KMO and Bartlett's Test of the PSM Scale**

|   |                    |          |
|---|--------------------|----------|
| <b>Kaiser-Meyer-Olkin</b> Measure of Sampling |                    | 0.860    |
| <b>Barlett's Test of Sphericity</b>           | Approx. Chi-square | 5847.700 |
|   | df                 | 276      |
|   | Sig.               | 0.000    |

Source: own elaboration.

able for factor analysis.

Apply principal component analysis to extract factors whose eigenvalue  $\geq 1$ , and conduct orthogonal rotation of varimax, five factor levels initially received. Then measure the correlation between the initial variables and the common factors by community, one item in the PSM scale shows a low communality of only 0.177, and its factor loadings are also the lowest. It suggests this variable can explain little variability in every factor level, so delete the item.

Use exploratory factor analysis again, tab. 3 shows the results. KMO coefficient attains 0.861, and Barlett's test is significant at  $p \geq 0.000$ . It is suitable for factor analysis. Apply factor analysis, five component levels are received and all the factor loadings are high, so no item delete. As table 3 shown, the reliability coefficient of overall scale is 0.816 and each factor level also attains at 0.805, 0.660, 0.602, 0.695, and 0.559 respectively which are all more than 0.5, which indicates the scale data has a high internal consistency.

As tab. 3 (on following page) shown, five factors' eigenvalues are greater than 1. The variance explained of the five factors are: Factor 1, commitment to public interest of 13.926% for the highest; Factor 2, self-sacrifice of 9.800%; Factor 3, willingness to help others of 9.425%; Factor 4, attraction to public policy making of 9.336%; Factor 5, compassion of 8.379%. The total variance explained amount to 50.867%, which suggests the five factor levels have an explanatory power of 50.867% on PSM.

According to Knoke and Wright-Isak's (1982) motivation structure, Perry and Wise (1990) divided PSM into three types: rational motivation, standard motivation and emotional motivation. In the five dimensions structure of PSM developed by principal components analysis, attraction to policy making belongs to rational motivation, which indicates that individuals tend to maximize their own rights and self-value by participating in the formulation of public policies, or support certain interests based on personal interest. By in-

quiring the respondents' interest on political activities, political figures, policy making, and community affairs et al., this dimension has a great significance for government agencies and public servants.

Commitment to public interest and willingness to help others reflect the standard motivation of PSM, which including the desire to serve the public interest, loyalty and maintaining social justice, such motivations emphasize individual's responsibilities to society and government in the public service. Commitment to public interest investigates the respondents' willingness on community service, benefiting community, and devoting to social welfare, and their interest on public responsibilities or individual benefit. Willingness to help others adds a new dimension to this research; it emphasizes the attention to the interests and welfare programs of others, and people's dependence on each other. Therefore, compare to the emotional motivation based on personal feelings, this dimension is more appropriate viewed as a standard motivation.

Self-sacrifice and compassion reflect the emotional motives of public services, including individual emotional feelings to social services, and faith to government programs' important responsibilities on society. Self-sacrifice dimension emphasized the behaviors of helping others selfless or strive for others' rights, in order to measure the respondents' willingness on sacrificing personal interest to public interest. Compassion dimension is more in line with „love of patriotism” (Fredrickson & Hatt, 1985; Rainey, 1997; Perry & Wise, 1996), it includes care for the poor underclass, sympathetic and willing to help the distressed. The difference from willingness to help others dimension is that compassion reflects more personal emotion and perceptual choice.

In conclusion, these sample studied shows a five-dimension structure of PSM, which constructed by commitment to public interest, self-sacrifice, willingness to help others, attraction to policy making, and compassion.

**Tab. 3. Factor Analysis and Reliability Test**

| Items  | Factor loading                          |                          |                                      |  |                      | Community | Reliability<br>Cronbach $\alpha$<br>(item deleted) |
|--|---|--------------------------|--------------------------------------|--|----------------------|-----------|--|
|  | Factor 1: commitment to public interest | Factor 2: self-sacrifice | Factor 3: willingness to help others | Factor 4: attraction to public policy making | Factor 5: compassion |           |  |
| I would prefer seeing public officials do what is best for the whole community even if it harmed my interests. | .714                                    |                          |                                      |  |                      | .531      | .806   |
| Meaningful public service is very important to me.   | .681                                    |                          |                                      |  |                      | .632      | .800   |
| Making a difference in society means more to me than personal achievements.                                    | .659                                    |                          |                                      |  |                      | .526      | .804   |
| I serve my community selfless.   | .590                                    |                          |                                      |  |                      | .361      | .809   |
| I unselfishly contribute to my community.  | .587                                    |                          |                                      |  |                      | .685      | .802   |
| I am prepared to make enormous sacrifices for the good of society.   | .563                                    |                          |                                      |  |                      | .572      | .802   |
| I consider public service my civic duty.   | .540                                    |                          |                                      |  |                      | .440      | .802   |
| I am one of those rare people who would risk personal loss to help someone else.                               |   | .698                     |                                      |  |                      | .515      | .813   |
| Serving other citizens would give me a good feeling even if no one paid me for it.                             |   | .659                     |                                      |  |                      | .568      | .803   |
| Much of what I do is for a cause bigger than myself.   |   | .614                     |                                      |  |                      | .446      | .810   |
| I feel people should give back to society more than they get from it.  |   | .561                     |                                      |  |                      | .543      | .804   |
| I am often reminded by daily events how dependent we are on one another.                                       |   |                          | .704                                 |  |                      | .557      | .809   |
| To me, patriotism includes seeing to the welfare of others.  |   |                          | .644                                 |  |                      | .486      | .809   |
| Most social programs are too vital to do without.  |   |                          | .594                                 |  |                      | .464      | .812   |
| I don't care much for politicians. (R)   |   |                          |                                      | .763   |                      | .641      | .808   |
| I'm not interest in benefit exchange and compromise in policy making. (R)                                      |   |                          |                                      | .728   |                      | .547      | .821   |
| Politics is a dirty word.(R)   |   |                          |                                      | .691   |                      | .550      | .807   |
| It is hard for me to get intensely interested in what is going on in my community. (R)                         |   |                          |                                      | .650   |                      | .479      | .809   |
| Doing well financially is definitely more important to me than doing good deeds. (R)                           |   |                          |                                      |  | .620                 | .420      | .811   |
| I seldom think about the welfare of people I don't know personally.(R)   |   |                          |                                      |  | .617                 | .539      | .807   |

|  |        |        |        |        |        |      |      |
|--|--------|--------|--------|--------|--------|------|------|
|  |        |        |        |        | .610   | .381 | .818 |
| There are few public programs that I wholeheartedly support.(R)  |        |        |        |        |        |      |      |
| I am rarely moved by the plight of the underprivileged.(R)   |        |        |        |        | .556   | .414 | .812 |
| I have little compassion for people in need who are unwilling to take the first step to help themselves. (R) |        |        |        |        | .483   | .402 | .821 |
| Eigenvalue   | 3.203  | 2.254  | 2.168  | 2.147  | 1.927  |      |      |
| Variance explained %   | 13.926 | 9.800  | 9.425  | 9.336  | 8.379  |      |      |
| Total variance explained %   | 13.926 | 23.726 | 33.151 | 42.487 | 50.867 |      |      |
| Cronbach $\alpha$ for each factor level  | 0.805  | 0.660  | 0.602  | 0.695  | 0.559  |      |      |
| Cronbach $\alpha$ for total scale  | 0.816  |        |        |        |        |      |      |
| KMO 0.861  |        |        |        |        |        |      |      |
| Approx. Chi-Square 5755.348 df 253 Sig. 0.000  |        |        |        |        |        |      |      |
| Note: (R)=reversed coding.   |        |        |        |        |        |      |      |

Source: own elaboration.

**Tab. 4. Descriptive Statistics of PSM and Job Satisfaction**

| Item                          | N    | Minimum | Maximum | Mean | Std. Deviation |
|-------------------------------|------|---------|---------|------|----------------|
| Commitment to public interest | 1027 | 1.00    | 5.00    | 3.71 | .645           |
| Self-sacrifice                | 1027 | 1.25    | 5.00    | 3.78 | .677           |
| Willingness to help others    | 1027 | 1.33    | 5.00    | 4.31 | .647           |
| Attraction to policy making   | 1027 | 1.00    | 5.00    | 3.61 | .738           |
| Compassion                    | 1027 | 1.00    | 5.00    | 3.50 | .651           |
| PSM                           | 1027 | 2.43    | 4.96    | 3.74 | .438           |
| Job Satisfaction              | 1027 | 1.00    | 4.00    | 3.37 | .668           |

Source: own elaboration.

And the research hypothesis H1 is not established.

#### 4.2. Measurement for PSM and Job Satisfaction

The mean and standard deviation of PSM and job satisfaction partly reflect the levels of PSM and job satisfaction. As shown in table 4, the mean of all the five dimensions are greater than 3.5; willingness to help others of 4.31 is the maximum mean, followed by self-sacrifice of 3.78. The PSM mean of 3.74 has not reached the higher level of 4; job satisfaction of 3.37 is slightly more than 3 and reached a good level.

#### 4.3. PSM's Impact on Job Satisfaction

Tab. 5 presents the results of Pearson correlation analysis. It suggests that the PSM's five dimensions (public interests commitment,

self-sacrifice, willingness to help others, attraction to policy making and compassion) are positively correlated with job satisfaction at a significant level (correlation coefficients are: 0.320, 0.257, 0.157, 0.171, 0.104;  $P < 0.01$ ); and the five factors are also positively correlated with each other significantly. In personal variables, the age, job levels, position, and job history are positively correlated with work satisfaction at a high significance (correlation coefficients are: 0.102, 0.129, 0.119, and 0.098;  $P < 0.01$ ); gender and qualifications are weakly correlated with job satisfaction; gender is significantly correlated with commitment to public interest and compassion in PSM (correlation coefficients are: 0.062, -0.066;  $P < 0.059$ ); education degree is positively correlated with self-sacrifice and compassion at a significant level (correlation coefficients are: 0.076,



**Tab. 5. Descriptive Statistics and Correlation Analysis**

| Variables     | Mean | SD    | 1      | 2       | 3       | 4       | 5      | 6      | 7      | 8      | 9      | 10     | 11     |
|---------------|------|-------|--------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|
| 1 gender      | .67  | .469  |        |         |         |         |        |        |        |        |        |        |        |
| 2 age         | 2.94 | .946  | .081** |         |         |         |        |        |        |        |        |        |        |
| 3 education   | 3.29 | .600  | .042   | -.264** |         |         |        |        |        |        |        |        |        |
| 4 job level   | 3.23 | 1.298 | .081** | .729**  | -.088** |         |        |        |        |        |        |        |        |
| 5 position    | .29  | .453  | .105** | .401**  | .037    | -.542** |        |        |        |        |        |        |        |
| 6 job history | 2.27 | 1.035 | .054   | .861**  | -.283** | .708**  | .401** |        |        |        |        |        |        |
| 7 CPI         | 3.71 | .645  | .062*  | .104**  | .028    | .108**  | .107** | .128** |        |        |        |        |        |
| 8 SS          | 3.78 | .677  | -.006  | .092**  | .076*   | .124**  | .094** | .080*  | .572** |        |        |        |        |
| 9 WH          | 4.31 | .647  | -.023  | -.021   | .014    | .066*   | .002   | -.017  | .373** | .315** |        |        |        |
| 10 APM        | 3.61 | .738  | .048   | .015    | .046    | .061    | .039   | .014   | .192** | .114** | .126** |        |        |
| 11 COM        | 3.50 | .651  | -.066* | .010    | .079*   | .092**  | .028   | .008   | .213** | .139** | .234** | .349** |        |
| 12 JS         | 3.37 | .668  | .055   | .102**  | .006    | .129**  | .119** | .098** | .320** | .257** | .157** | .171** | .104** |

Note: CPI= Commitment to public interest s; SS= Self-sacrifice; WH= Willingness to help others; APM= Attraction to policy making; COM= compassion; JS= Job Satisfaction. \*P<0.05, \*\*P<0.01

Source: own elaboration.

**Tab. 6. Partial Correlation Analysis on the Five Dimensions of PSM, Job Satisfaction and Control Variables**

| Control Variables | CPI    | SS     | WH     | APM    | COM    |
|-------------------|--------|--------|--------|--------|--------|
| Gender(5)         | .320** | .257** | .157** | .171** | .104** |
| Age (5)           | .318** | .258** | .159** | .169** | .108** |
| Education (2)     | .313** | .250** | .160** | .170** | .103** |
| Job level (5)     | .320** | .258** | .157** | .171** | .103** |
| Position (5)      | .311** | .245** | .150** | .165** | .093** |
| Job history (5)   | .311** | .249** | .158** | .167** | .101** |
|                   | .312** | .252** | .160** | .170** | .103** |

note: SS= Self-sacrifice; WH= Willingness to help others; APM= Attraction to policy making; COM= compassion; CPI= Commitments to public interest; JS= Job Satisfaction. \*\*P<0.01

Source: own elaboration.

**Tab. 7. Grade Regression Analysis of PSM to Job Satisfaction**

|                               | Job Satisfaction          |       |                           |          |           |       |
|-------------------------------|---------------------------|-------|---------------------------|----------|-----------|-------|
|                               | Model 1                   |       | Model 2                   |          | Tolerance | VIF   |
|                               | Standardized Coefficients | t     | Standardized Coefficients | t        |           |       |
| Gender                        | .040                      | 1.275 | .027                      | .908     | .965      | 1.036 |
| Age                           | .017                      | .263  | .027                      | .436     | .226      | 4.423 |
| Education                     | .016                      | .467  | -.010                     | -.318    | .859      | 1.164 |
| Job level                     | .075                      | 1.469 | .050                      | 1.034    | .360      | 2.777 |
| Position                      | .064                      | 1.721 | .050                      | 1.418    | .689      | 1.452 |
| Job history                   | .007                      | .111  | -.022                     | -.368    | .236      | 4.243 |
| Commitment to public interest |                           |       | .220                      | 5.826*** | .597      | 1.675 |
| Self-sacrifice                |                           |       | .100                      | 2.748**  | .648      | 1.542 |
| Willingness to help others    |                           |       | .029                      | .884     | .805      | 1.243 |
| Attraction to policy making   |                           |       | .109                      | 3.472**  | .859      | 1.164 |
| Compassion                    |                           |       | -.006                     | -.177    | .816      | 1.226 |
| R <sup>2</sup>                | 0.022                     |       | 0.133                     |          |           |       |
| R <sup>2</sup> Change         | 0.022                     |       | 0.111                     |          |           |       |
| F                             | 3.810**                   |       | 14.189***                 |          |           |       |
| F change                      | 3.810**                   |       | 26.081***                 |          |           |       |
| N                             | 1027                      |       | 1027                      |          |           |       |

Note: \*\*P<0.01, \*\*\*P<0.001

Source: own elaboration.

0.079; P<0.05).

In partial correlation analysis to investigate the correlation between the five-dimension of PSM and job satisfaction, the personal characteristic factors such as gender, age, education degree, job level, job history were used as control variables. The results shown as tab. 6: gender, age, job level, position and job history all had an impact on the correlation between the five dimension of PSM and job satisfaction. Education degree impacted on two dimensions correlation with job satisfaction. We chose gender, age, education degree, job level, position, job history as control variables in the regression analysis.

We performed grade regression analysis to explore PSM how to influence the job satisfaction. In the regression model, six factors of gender, age, education degree, job level,

position and job history were used as control variables, employing the five factors of PSM as independent variables, and job satisfaction as dependent variables. Tab. 7 shows the regression results.

In model 1, personal variables such as gender, age, job level, position and job history explained 2.2% of job satisfaction's variance. In model 2, control variables, the five PSM factors, and job satisfaction total explained 13.3% of variance at a significant level; Taken PSM independently, the five factors also give a variance explain on job satisfaction at a significant level of 11.1%. Generally speaking, if the tolerance is less than 0.1, and VIF is greater than 5, then there might be multicollinearity in model. As shown in tab. 7, the results indicate no multicollinearity here.

According to the standard regression coef-

ficient, the six personal variables in the model 1 did not influence on job satisfaction at a significant level. In model 2, Commitment to public interest, self-sacrifice, attraction to policy making influence job satisfaction positively at a significant level (the standard regression coefficient are: 5.826, 2.748 and 3.472); Willingness to help others and compassion's influence on job satisfaction were not significant, and compassion played negatively.

The results also suggest that, commitment to public interest had a greatest impact on job satisfaction, and followed by attraction to policy making and self-sacrifice. Commitment to public interest of PSM had a key effect on job satisfaction. If the civil servants in public service have a strong commitment to public interest, their job satisfaction would be high. The attraction to policy making and self-sacrifice played an important role in job satisfaction, which indicate that if the civil servants have a strong spirit of self-sacrifice and a high willingness to participate policy making, their job satisfaction would be high. The willingness

to help others also influenced the job satisfaction, but did not significantly. The job satisfaction would increase partly if the civil servants have willingness to help others. We found that compassion produced a negative effect on job satisfaction. In other words, the more compassion the civil servants have, the lower their job satisfaction would be.

Take all the results together, the research hypothesis H2, H3 and H5 are valid, and the research hypothesis H4 does not hold.

## 5. Conclusions

Based on the Perry's 24-item PSM scale, an EFA was made in this study and a list of 23 items measuring five subscales of PSM was developed as considering Chinese culture background. Four dimensions of the five are the same as Perry's Attraction of Policy Making, Commitment to Public Interest, Compassion and Self-Sacrifice dimensions, while Willingness to Help Others Dimension is additional. This is a new exploratory structure of PSM so there may be some differences and con-

**Tab. 8. Comparison with the study and existing academic researches on PSM**

| The study             | Object  | Sample | Dimension | PSM |     |     |    |                                   |
|-----------------------|---|--------|-----------|-----|-----|-----|----|-----------------------------------|
|                       |   |        |           | APM | CPI | COM | SS | Additional                        |
|                       | Provincial government sectors employees               | 1027   | Five      | √   | √   | √   | √  | Willingness to help others        |
| Perry, 1996           | MPA students  | 376    | Four      | √   | √   | √   | √  |                                   |
| Liu, Tang & Zhu, 2008 | MPA students  | 191    | Three     | √   | √   |     | √  |                                   |
| Li, 2010              | MPA students  | 319    | Five      | √   | √   | √   |    | Self Realization, Benefit society |
| Wu, 2010              | Civil servants  | 413    | Three     |     | √   | √   | √  |                                   |
| Ye, Lai, 2011         | Employees from government sectors, social groups etc. | 337    | Four      | √   | √   | √   | √  |                                   |

Note: SS= Self-sacrifice; APM= Attraction to policy making; COM= compassion; CPI= Commitment to public interest.

Source: own elaboration.

flicts with the conclusions of existing related works (Table 8). The accumulated explained variance of this scale is 50.867%, and all the items have high reliability and validity, which supports the conclusions of this research, can explain the PSM of government employees in China.

Using gender, age, education, job level, job position and other personal factors as controlled variables, the hierarchical regression analyses the impacts of PSM on Job Satisfaction. The results show that in the new five-dimension structure, Commitment to Public Interest, Self Sacrifice and Attraction to Policy Making have significant positive impacts on Job Satisfaction, especially the Commitment to Public Interest and Attraction to Policy Making. In the other researches, Liu found that only Attraction to Policy Making and Self Sacrifice had positive impacts (Liu, Tang & Zhu, 2008). In Wu's scale (2010), Commitment to Public Interest, Self Sacrifice and Compassion were positively related with Job Satisfaction. And Li (2010) proved that only Self-fulfillment and Public interest, both of that were dimensions of her PSM structure, were positive. Although the specific dimensions are diverse, all the related studies in China conclude PSM has a positive impact on Job Satisfaction.

As an abstract conception of multiple dimensions, PSM is a mental process beyond description which diverges in different departments (Rainey, 1997; Zhu, Wu & Zhu, 2011). Meanwhile, due to the different research samples and subjects, as well as the standards and methods of the measurements and the inherent

subjectivity of the self-evaluation indices et al, it is difficult to draw firm conclusions from the research (Zhu, Wu & Zhu, 2011). After revising Perry's four-dimension scale and its items, the research structure is more appropriate for application in China. Also, the research based on the four provincial governments and one municipal government in Middle West China, has a large, valid sample size of 1027 depending on the random sampling.

The dimensions of Commitment to Public Interest, Self Sacrifice and Attraction to Policy Making are confirmed to have positive impacts on Job Satisfaction in most of the studies. Commitment to Public Interest shows how much a government employee wants to serve the public interest emphasizes on individual responsibility for the nation and society. Meanwhile, serving for public is the core value of a government. So it is not difficult to understand a man has high Commitment to Public Interest will also have high job satisfaction when he employed by a government. Making public policy is commonly thought to be a critical work in the social development, a glorious accountability of politicians and it is also the main attraction that so many talented youth in China work for government. Confucianism makes the intellects full of the ambition of governing a country, so they will feel satisfied when they deal with public affairs. Also, the nature of the self-sacrifice reflects one's attitude for life, so serving for the public may give him/her back fulfillment.

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