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Public Service Motivation and Employee Intent to Leave

Abstract

Lowering turnover rates is something that every manager would like. When it comes to the public sector, there are different motivations involved. This paper seeks to answer how these public motivations (PSM) affect an employee's intent to stay or leave their current organization. The analysis looks at federal employees and finds that high levels of PSM does correlate with lower intent to leave in the coming year.

Introduction

The purpose of this paper is to determine if there is a relationship between an employee's level of public service motivation (PSM) and the likelihood that they will be seeking employment outside of the government in the near future. For this analysis, I will be focusing on data from Federal agencies, but this analysis will be applicable to all levels of government.

The cost of hiring is an expense that is rarely discussed when looking at budgets or organizational finance. Hiring new employees carries a cost with it that can be avoided if you can hire people who will be less likely to leave in the future. The Society for Human Resource Management estimates that the average cost-per-hire as of 2016 is $4,129 (Human Capital Report, 2016). While this report comes from an analysis of the private market, it would be foolish to assume that there is no such cost in the public sector. This paper hopes to provide hiring managers and others making personnel decisions an aide in finding employees that will be less likely to leave. This paper does not intend to measure performance, only intent to leave, so further studies of effects of PSM on performance may be necessary.

The remainder of the paper will be as follows. I will present existing literature on this subject, detailing similar studies in this area. I will then give an account of the data which I will

use in the analysis, proceed with the analysis, share insights and implications of the analysis, and

conclude.

Literature Review

In beginning my study, I wanted to look at what had been already done in this area. The

first step was discovering what metric of how to measure PSM. Many analyses center on very

concrete data, such as total expenditures or revenues, but PSM is different. As a sort of

individual motivation, there is no set way to measure this. As such, researchers have had to be

clever with finding ways to represent PSM in data. The most widely used metric that I have

found is Perry's 24-item PSM Scale (Perry, 1996). This scale contains 24 survey items which are

asked to respondents in order to gauge their individual PSM. Table 1 shows the questions that are

asked as part of this scale. Those who are sent this survey are asked to rate their agreement with

these statements from highly disagree to strongly agree. This table provides the framework for

how other studies, and future studies, can hope to measure PSM.

Table 1
Description of Survey Questions   **Public Service Motivation (Perry, 1996)**

Self-sacrifice
- Making a difference in society means more to me than personal achievements.
- I believe in putting duty before self.
- Doing well financially is definitely more important to me than doing good deeds (R).
- Much of what I do is for a cause bigger than myself.
- Serving citizens would give me a good feeling even if no one paid me for it.
- I feel people should give back to society more than they get from it.
- I am one of those rear people who would risk personal loss to help someone else.
- I am prepared to make enormous sacrifices for the good of society.

Compassion
- I am rarely moved by the plight of the underprivileged (R).
- Most social programs are too vital to do without.
- It is difficult for me to contain my feelings when I see people in distress.

- To me, patriotism includes seeing to the welfare of others.
- I seldom think about the welfare of people whom I don't know personally (R).
- I am often reminded by daily events about how dependent we are on one another.
- I have little compassion for people in need who are unwilling to take the first steps to help themselves.
- There are few public programs that I wholeheartedly support (R).

Public interest
- It is hard for me to get intensely interested in what is going on in my community (R).
- I unselfishly contribute to my community.
- Meaningful public service is very important to me.
- I consider public service my civic duty.
- I would prefer seeing public officials do what is best for the whole community even it if harmed my interest.

Public-policy making
- Politics is a dirty word (R).
- The compromises that are involved in public policy making don't appeal to me (R).
- I don't care much for politicians (R).

Person-organization fit
- My values and goals are very similar to the values and goals of my organization.
- I am not very comfortable within the culture of my organization (R).
- I feel a strong sense of "belonging" to my organization.
- What this organization stands for is important to me.

Job satisfaction
- How satisfied are you with your opportunities for achievement?
- How satisfied are you with your recognition opportunities?
- How satisfied are you with your level of responsibility on your job?
- How satisfied are you with the meaningfulness of your job?
- How satisfied are you with your advancement opportunities?

Turnover intentions
- Within the next 2 years, how likely are you to leave your current organization for a job in another organization?

While I will hypothesize that at the federal level, high levels of PSM will result in lower intention to leave, another study by Leonard Bright found the opposite. Bright looked at 205 public employees in Indiana, Kentucky, and Oregon. While Bright acknowledged that several studies have found that PSM has an impact on employee behavior, he controls for person-organization fit and found that, controlling for this, there was no relationship between

PSM and employee intent to leave (Bright, 2008). This analysis is conducted at the state level, while mind is at the federal level. I anticipate finding different results here because there are a wider range of agencies that will fall under my analysis. I believe that this wider variety of agencies allows employees to find a good fit for them, thus making person-organization fit less of a factor at the federal level.

A similar study intended to measure intent to leave federal work by Millennials. This is an interesting study that focuses on a specific age group, as I focus on all federal employees. The author, Ertas, found that Millennials as a group were more likely to say that the intended to find other work in the near future (Ertas, 2015). Because of this analysis, I can expect that those that have been working at the federal government for less than 10 years will have a higher intention to leave in the coming year, as this group with less tenure is likely to contain more Millennials than the other groups.

These literature provide us with a foundation upon which I can continue to build the analysis. I will be mainly using elements from the 24-item PSM Scale within my analysis. I will also be using other elements from the previous literature in order to inform my hypotheses and implications.

Hypothesis

I hypothesize that higher levels of PSM will correlate with a lowered intention to leave their current job in the coming year. Of course, this means that the null hypothesis is that level of PSM has no effect on intent to leave.

Data

The data that I use in this analysis comes from the Federal Employee Viewpoint Survey for 2018. This survey is conducted by the Office of Personnel Management and is sent out to employees of all sorts of federal agencies, both large and small. This dataset in particular has 597,970 observations, giving us a pretty large and representative look at federal employees.

There are several control variables that I will consider during my analysis. I will consider sex, minority status, level of education, federal tenure, and supervisor status. The variable of sex has two options: male and female. Minority status has two options: minority and not minority. Level of education has three options: less than a bachelor's degree, bachelor's degree, and more than a bachelor's degree. Federal tenure has three options: Less than ten years, ten to twenty years, and more than twenty years. Supervisor status has two options: supervisor and not supervisor.

The explanatory variables that I will include in my analysis revolve around ways to measure PSM. Unfortunately, because I did not create my own survey I was not able to include all of Perry's 24 PSM questions into my analysis, but I was able to find similar questions that were asked in this survey in order to still simulate a measure of PSM. A list of the questions used in the survey are found in Table 2. These seven questions will provide the measures of PSM that will be used in the analysis. Similar to Perry's 24-item PSM scale, the survey asked for respondents to rate their level of agreement with each of the following statements. Their choices were: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. The final three questions asking about satisfaction had similar answer choices: strongly dissatisfied, dissatisfied, neither satisfied nor dissatisfied, satisfied, and strongly satisfied. While these

variables do not provide a look as comprehensive as Perry's 24-item PSM scale would, I believe

that they can sufficiently answer the question at hand.

| **Table 2**
PSM Measures (Perry, 1996 modified) |
| :--- |
| Self-sacrifice
    ● My work gives me a feeling of accomplishment.
Public interest
    ● The work I do is important
Person-organization fit
    ● Trust and confidence in my supervisor
    ● I have a high level of respect for my organization's senior leaders
Job satisfaction
    ● How satisfied are you with your job?
    ● How satisfied are you with your pay?
    ● How satisfied are you with your organization? |

Finally, the variable that we want to measure is intent to leave. This variable was

collected as an answer to the following question: "Are you considering leaving your organization

in the next year?". The answer choices included: No, yes to another federal job, yes to a job

outside the federal government, and other. In order to simplify the analysis, I am going to

combine several of these answers. What I want to measure is the group of people who do not

intend to leave their current organization versus all others, so this will be made into a

dichotomous variable that includes those who are not considering leaving in the coming year and

everyone else.

Analysis

Before running my model, I wanted to take a closer look at the data. Below in Chart 1,

you will see the breakdown of the answers to the PSM questions. As we can see, for each of the

survey items, the most frequent answer was either agree or strongly agree. This shows that a

good amount of those surveyed have high levels of PSM. If my hypothesis is correct, we would

therefore expect to see a low number of employees who are considering leaving their

organization in the coming year. Chart 2 shows the percentage of employees who are intend to

stay versus all others. Sixty-four percent of those surveyed said that they were not considering

leaving their current organization within the next year. This fits with what we see in Chart 1. It

appears that most people are pretty content with working at their organization within the federal

government and as such are not very likely to be seeking outside opportunities.

Chart 1
Answers to PSM Survey Questions

Chart 2
Are you considering leaving your organization within the coming year?
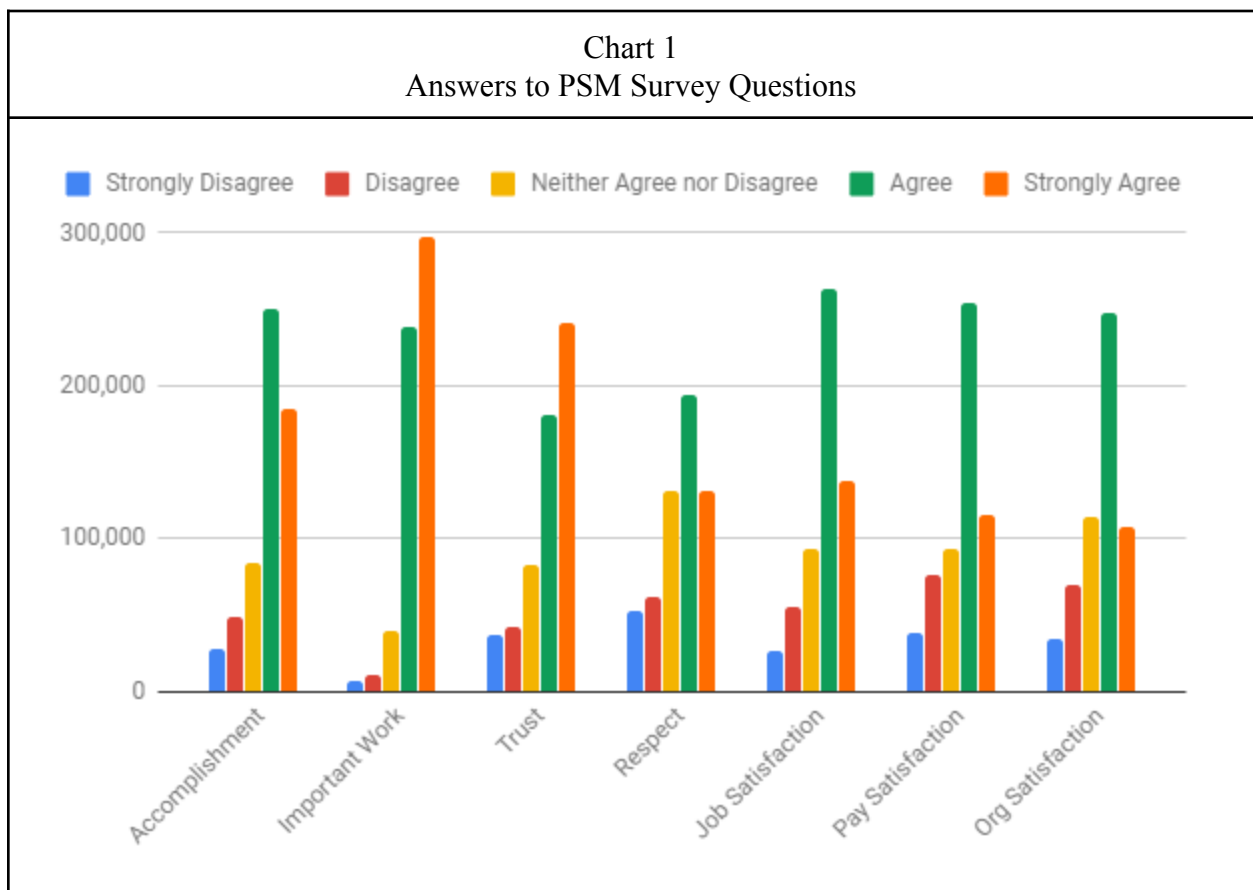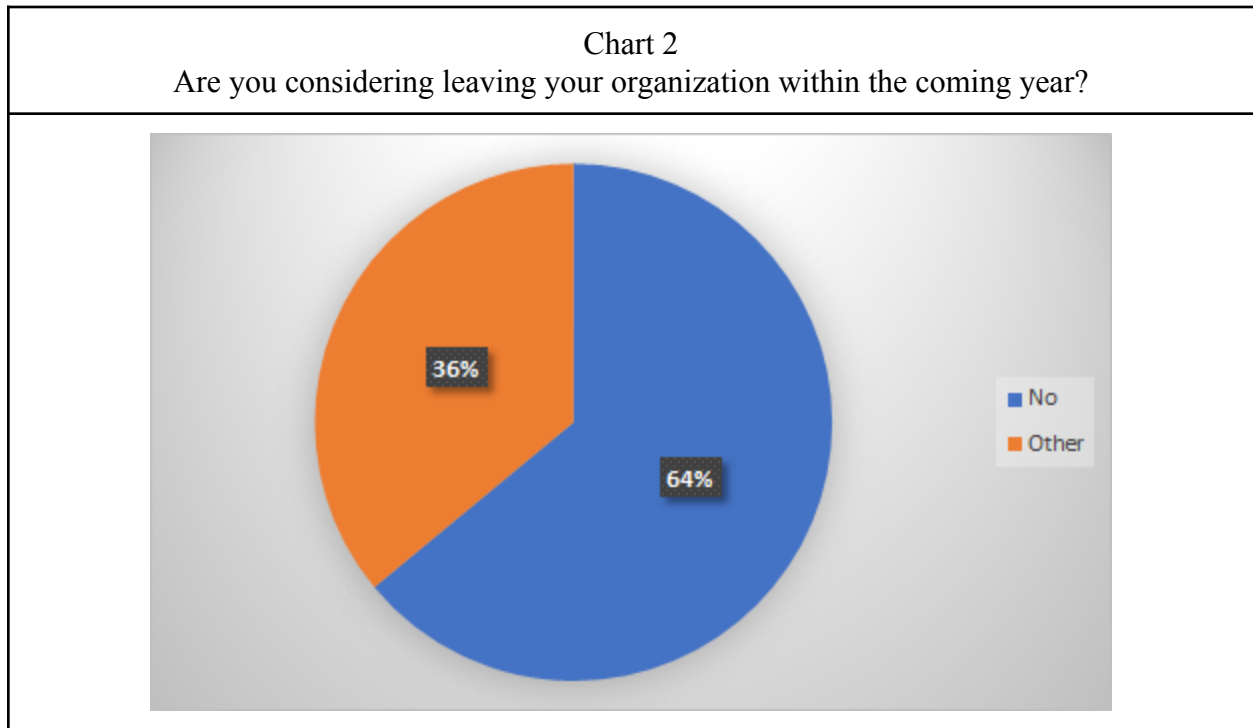
In order to determine the relationship between PSM and intent to leave, I ran a logit

regression, Model 1. We will be focusing on the PSM measures for the analysis. Every single

PSM measure is statistically significant with a p-value less than 0.01. The variables measuring

accomplishment, trust and confidence in supervisors, job satisfaction, pay satisfaction, and

satisfaction with their organization are all negatively related to intent to leave. This means that

those who strongly agreed with the survey statement are less likely to leave than those who

agreed, and those who agreed are less likely to leave than those who neither agreed nor

disagreed, and so on and so forth. The remaining variables that measured feelings about job

importance and respect for the organization's senior leaders were positively significant. This

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means that those who strongly agreed with the survey statement are more likely to be

considering leaving within the next year.

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                            Dependent variable:
  Model 1                  ---------------------------
                            Intent to Leave
-----------------------------------------------------------------------------
Sex                              0.015**
                                (0.007)

Level of Education               0.147***
                                (0.004)

Federal Tenure                  -0.004
                                (0.004)

Supervisor                       0.196***
                                (0.008)

Minority                         0.112***
                                (0.007)

Accomplishment                  -0.090***
                                (0.004)

Important                        0.019***
                                (0.005)

Trust and Confidence            -0.111***
                                (0.003)

Respect for Leaders              0.012***
                                (0.004)

Job Satisfaction                -0.498***
                                (0.005)

Pay Satisfaction                -0.134***
                                (0.003)

Org Satisfaction                -0.303***
                                (0.005)

Constant                         2.912***
                                (0.024)
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-------------------------------------------------------------------------
Observations                       552,469
Log Likelihood                   -298,038.600
Akaike Inf. Crit.                 596,103.100
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Note:          *p<0.1; **p<0.05; ***p<0.01
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In order to better interpret the results of this model, I created odds ratios. Odds ratios will help specifically tell us how specifically PSM is affecting an employee's intent to leave. Table 3 shows the odds ratios of the constant variables along with 95% confidence intervals. An odds ratio of 1.00 signifies no relationship. A ratio greater than 1.00 represents a positive relationship and a ratio less than 1.00 represents a negative relationship. In Table 3, all of the significant relationships are positives, as they are greater than 1.00. According to Table 3, males are 1% more likely to be considering leaving the the coming year, those with greater than a bachelor's degree are 16% more likely to be considering to leave than those with just a bachelor's degree, supervisor's are 22% more likely, and minorities are 19% more likely to be considering leaving within the coming year.

Table 3: Odds Ratios of Constant Variables			
	Odds Ratios	2.5%	97.5%
Sex**	1.01	1.001	1.03
Education***	1.16	1.15	1.17
Federal Tenure	1.00	0.99	1.004
Supervisor***	1.22	1.20	1.24
Minority***	1.19	1.10	1.13

In Table 4, we look at the odds ratios for the PSM measures. All of the measures here are statistically significant, as noted in Model 1. The odds ratios for the accomplished measure, trust and confidence, job satisfaction, pay satisfaction, and organizational satisfaction are all less than

Table 4: Odds Ratios of PSM Measures			
	Odds Ratios	2.5%	97.5%
Accomplished***	0.91	0.91	0.92
Important***	1.02	1.01	1.03
Trust and Confidence***	0.89	0.89	0.90
Respect for Leaders***	1.01	1.005	1.02
Job Satisfaction***	0.61	0.60	0.61
Pay Satisfaction***	0.87	0.87	0.88
Org Satisfaction***	0.74	0.73	0.75

1.00, and therefore represent a negative relationship. The remaining measures of important and respect for leaders have odds ratios greater than 1.00, representing their positive relationship. According to Table 4, those who strongly agreed that they get a sense of accomplishment from the work they do are 9% more likely to be in the group that said they were not considering leaving their organization within the next year than those who said that they agreed with that statement. Those who strongly agreed that they had trust and confidence in their supervisor were 11% more likely to not be considering leaving. Those who were highly satisfied with their job were 39% more likely to not consider leaving in the next year, those with high pay satisfaction

were 13% more likely to not consider leaving, and those with high satisfaction with their

organization were 26% more likely to not consider leaving.

Interestingly, employees who responded saying that they strongly agreed that their job

was important were 2% more likely to be considering leaving their organization in the next year

than those who only agreed with that statement. Perhaps those who have a strong sense of

importance where they work are more ambitious and open to looking at even more important

jobs within the federal government in the next year. This might explain the change here. Also,

those who strongly agreed that they had respect for their organization's senior leaders were 1%

more likely to leave. These two variables, while statistically significant, are not very strong

relationships at only 2% and 1% respectively.

By looking at the PSM measures, the logit model, and the odds ratios, I think that we can

safely say, for the most part, that we can reject the null hypothesis. High levels of PSM appear to

strongly correlate with a lessened intent to look outside of their current organization for

employment in the coming year. While we did see two exceptions, the correlation is not strong

enough to signal to me a real deviation from the overall trend that we have identified here.

Insights and Implications

The analysis has shown that there is a clear relationship between PSM and intent to leave.

This falls in line with what other similar studies have found. With these findings in mind, hiring

managers at public organizations can use this information in order to lower turnover rate at their

respective agencies. Those making these hiring decisions can implement a pre-hire or

pre-interview survey that includes Perry's 24-item PSM Scale in order to determine potential

employees' PSM level, therefore predicting the likelihood of turnover. By doing so, public

agencies can reduce costs involved with hiring and training new employees.

While this analysis provides insight into the relationship between PSM and intent to

leave, what it does not do is provide insight to performance. Future studies should include

performance factors into their analyses in order to determine effects of PSM on outputs. There is

the possibility within my analysis that there are individuals with low PSM that do not intend to

leave within the next year, but also have decreased performance due to their lowered motivation.

Future analysis should account for individuals in this group as well.

Conclusion

In this paper, I have sought to answer the question "does PSM affect an employee's intent

to leave?" After looking at data from the Federal Employee Viewpoint Survey and conducting a

logit regression, we have seen that high levels of PSM does indeed correlate with a lowered

intent to leave in the next year.

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