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Do Policy Client Characteristics Correlate with Public Servants' PSM? The Case of Israeli Teachers and Their Students

Master's Thesis

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Abstract

Over the course of the past two decades, researchers have shown a growing interest in understanding the dynamics of Public Service Motivation (PSM). PSM is positively associated with employee performance and job satisfaction, organizational commitment, and job retention. Research on PSM has mostly focused on testing how PSM affects individual and organizational variables. However, very little is known about how contextual antecedents affect PSM. Focusing on the relationship between policy clients' characteristics and public servants' PSM, this study sheds new light on the contextual antecedents of PSM. An analysis of survey data from 349 teachers in Israeli public schools confirms that student characteristics correlate with teacher PSM. Specifically, class size and student diversity were positively associated with PSM, whereas lack of improvement in student achievements, low family support, and difficult student behavior were negatively associated with PSM.

Introduction

Over the course of the past two decades, researchers have shown a growing interest in understanding the dynamics of Public Service Motivation (PSM) (Ritz et al., 2016). Studies of PSM have advanced scholars' understanding of what motivates public service employees (Vandenabeele, 2008). In particular, research has shown that PSM is positively associated with employee performance and organizational commitment, as well as the functioning of public organizations (Bright, 2009; Leisink and Steijn, 2009; Naff and Crum, 1999; Vandenabeele, 2008). Employees with high PSM are more satisfied with their work and exhibit lower turnover rates than workers with low levels of PSM (Bright, 2009; Naff and Crum, 1999).

A specific body of research has explored PSM's antecedents, focusing on its relationship to an employee's age, gender and education level (Bright, 2009; Camilleri, 2007). Related analysis has examined the role of organizational variables including job characteristics and attitudes (Camilleri, 2007; Moynihan and Pandey, 2007), but only a few studies have investigated characteristics related to the day-to-day work environment. The limited research on contextual antecedents of PSM leaves a gap in our understanding of how the daily experiences of public service employees correlate with PSM.

Recently, policy scholars have emphasized the need to expand research on PSM and its contextual antecedents (e.g. Brewer, 2008; Perry, 1997). In light of these calls from researchers, the current analysis explores student characteristics and teachers' PSM in Israel, focusing on context-related variables. Specifically, it addresses a significant gap

in previous research by investigating *whether and how policy-client characteristics correlate with public servants' PSM.* At the same time, it provides a more nuanced view of employees in the public sector, accounting for the importance of policy clients in street-level bureaucrats' work. Focusing on teachers acknowledges the well-documented significance of street-level bureaucrats, including the well-established observation that street-level work depends on contextual characteristics (Gofen, 2014; Lipsky, 2010; Maynard-Moody and Musheno, 2003).

I address the study's research question by analyzing an original survey of 349 teachers employed in Jewish-Israeli public schools. The correlations between student characteristics and teachers' PSM are assessed using a multivariate linear regression test. Findings confirm that class size and student diversity are positively associated with PSM, whereas lack of improvement in student achievements, low family support, and difficult student behavior are negatively associated with teachers' PSM.

Public Service Motivation: Definitions and Measurement

Broadly speaking, motivation is a psychological process resulting from the interaction between individuals and their environment (Latham and Pinder, 2005). Motivation explains why individuals engage in certain behaviors or make particular choices, invest greater levels of effort, and persist in certain types of activity (Dörnyei and Ushioda, 2013). In a professional context, motivation refers to forces that initiate work-related behavior and determine its form, direction, intensity and duration (Pinder, 2014). Unmotivated employees are likely to invest minimal effort in their jobs, avoid the workplace as much as possible, leave the organization if given the opportunity, and

produce low quality work, whereas motivated employees are more likely to be persistent, creative and productive (Amabile, 1993). Because effective supervisors have control over motivation (Pinder, 2014), an employee's motivation plays a central role in management, both practically and theoretically (Camilleri, 2007).

Policy scholars first defined PSM as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions organization" (Perry and Wise, 1990; p. 368). Expanding on this definition, other scholars have presented altruism as a central component of PSM. Bright (2009), for example, describes PSM as an individual's motivation to serve people and care for others within the community and the State. Similarly, Vandenabeele's 2007 definition refers to "the belief, values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a large political entity and that motivate individuals to act accordingly whenever appropriate" (p. 547).

Scholars have argued that PSM is a specific form of intrinsic motivation (see, e.g.: Crewson, 1997; Houston, 2000). According to this view, motivation involves performing an activity out of interest, representing a desire to derive satisfaction from the activity itself (Gagné and Deci, 2005). Others see PSM as internalized extrinsic motivation (see, e.g.,: Jacobsen et al., 2014; Vandenabeele, 2007), meaning that employees' satisfaction comes from internalizing organizational behaviors (Gagné and Deci, 2005). Schott and Pronk (2014) view PSM as a type of autonomous motivation, relating to individuals acting with a sense of volition and having the experience of choice, a concept covering both types of aforementioned motivations (Gagné and Deci, 2005).

PSM is often measured using Perry's four-dimension scale (1996), which maps four key components of the concept: (1) Attraction to public policy making; (2) commitment to public interest; (3) compassion and (4) self-sacrifice. Some scholars have expanded on these core dimensions, advocating for a more complex understanding of PSM. For example, Vandenabeele (2008) proposed the construct dimension of democratic governance: a set of values, such as equality and accountability, which can be considered typical for public services in democratic regimes. So far, no unified scale has succeeded in replacing Perry's indicator, and the four-dimensional scale is the most known and widely-used in the field (Ritz et al., 2016).

Why PSM Matters

PSM provides a theory of motivation that links public interest and administrative behavior (Moynihan and Pandey, 2007). Various studies have provided supporting evidence for the connection between PSM and positive organizational outcomes. Specifically, employees with high PSM are more likely to pursue a career in public service (Houston, 2000; Rainey, 1982; Wittmer, 1991), and after joining an organization, are more willing to engage in whistle blowing to protect the public service (Brewer and Selden, 1998). Moreover, these individuals view their jobs as important, which leads them to work more assiduously, perform better and advance their organizations' outcomes (Bright, 2009; Leisink and Steijn, 2009; Naff and Crum, 1999; Vandenabeele, 2008; Wright, 2003). In general, PSM motivates individuals to do good for others and for society at large (Bøgh Andersen et al., 2014).

Finally, research reveals that employees with high PSM are more satisfied with their daily work. As a result, these individuals show higher levels of organizational commitment and exhibit lower turnover rates than workers with lower PSM (Bright, 2009; Crewson, 1997; Naff and Crum, 1999). In the public sector, investments in human resources are a major expense in areas such as education, health and welfare. Therefore, understanding PSM's effects on organizational commitment and employee turnover may enhance financial decision-making and reduce investments in employee satisfaction and motivation (Miller-Mor Attias and Vigoda-Gadot, 2016).

Antecedents of PSM

As noted previously, several studies have investigated PSM's effect on performance-related variables (Bright, 2009; Leisink and Steijn, 2009; Ritz et al., 2016). By contrast, only a small body of research focuses on the antecedents of PSM (Ritz et al., 2016). In an effort to achieve a broader and more nuanced understanding of PSM, researchers have attempted to identify various predictors of PSM through empirical analysis.

The most frequently studied antecedents of PSM are the employee's ***personal characteristics***, mainly gender, age and education level (Ritz et al., 2016). Evidence indicates that women generally demonstrate higher levels of PSM (see, e.g.: Camilleri, 2007; Naff and Crum, 1999), and that women consistently score higher on the 'compassion' dimension of PSM (Pandey and Stazyk, 2008). However, recent research has produced mixed findings on the relationship between PSM and gender, depending on the dimension measured (Giauque et al., 2010). On a broader level, gender-based

differences in motivation have been attributed to different cultural and social expectations among men and women (Ohlott et al., 1994).

Age has also been presented as an antecedent of PSM. With increasing age and attendant life experiences, such as raising children, individuals become more concerned about making lasting positive contributions to society (Ryff and Heincke, 1983). As a result, older workers tend to demonstrate higher levels of PSM compared to younger employees (Giauque et al., 2010; Pandey and Stazyk, 2008), and individuals with children have higher levels of PSM (Camilleri, 2007). One of the most consistent findings in PSM-related research is that individuals with higher levels of education have higher PSM (see, e.g.: Moynihan and Pandey, 2007; Naff and Crum, 1999; Perry, 1997). This finding can be explained by the key role that higher education plays in teaching practical citizenship and enhancing relationships between individuals and their communities (Pandey and Stazyk, 2008).

Additional dominant antecedents of PSM are ***organizational characteristics***, which reflect the crucial role that organizational settings play in the experiences of employees. Although organizations have received little attention in research on PSM antecedents (Pandey and Stazyk, 2008), they have been identified as a dominant predictor of PSM (Camilleri, 2007; Pandey and Stazyk, 2008). *Job characteristics*, a sub-category of organizational characteristics, play a crucial role in research on PSM antecedents. Research shows that job characteristics, including income, chances for promotion, job security and the degree to which employees derive meaning from their work, have positive correlations with PSM (Houston, 2000; Schott and Pronk, 2014). Interpersonal relationships in the workplace, such as regular interactions with others, friendship

opportunities, and positive employee-leader relations also correlate with higher PSM levels (Camilleri, 2007). Lastly, participation in professional training and management consultations are strongly associated with PSM (Schott and Pronk, 2014).

Another sub-category of organizational characteristics that correlate with employee's PSM is the *context of the work place*. Moyahan and Pandey (2007) developed a model that captures several key aspects of the work environment and contributes to an understanding of PSM's organizational antecedents. They found that bureaucratic red tape is negatively associated with PSM, and that an organization's tendency to improve and make reforms has a positive correlation. Organizational hierarchy also correlates positively with PSM: Employees with higher job status tend to exhibit higher levels of PSM (Camilleri, 2007; Moyahan and Pandey, 2007). Wright (2004) found that employees who experience challenges at the workplace exhibit high levels of PSM (Wright, 2004). On the other hand, conflict and ambiguity in professional settings tend to correlate negatively with PSM (Camilleri, 2007).

As research on PSM has advanced, a new line of study has shown that employees are likely to feel more satisfied when the workplace is consistent with their ambitions (Willamson et al., 2009). This factor, called ***Person-Organization Fit*** **(P-O-F**), acts as an intermediate variable explaining why an employee with higher levels of PSM also shows higher levels of workplace compatibility (Bright, 2007; Wright and Pandey, 2008). The explanation for this phenomenon comes from the field of psychology, specifically from the Interactionist perspective. According to this approach, an employee's attitude and behavior towards the workplace is defined by the interaction

between his own personal characteristics and the work environment (Willamson et al., 2009).

Extending the Theory: the Role Policy Clients Play in Shaping PSM

Recently, it has been suggested that it is necessary to refer to contextual factors in order to better understand the complex concept of PSM (Schott and Pronk, 2014). As Wright (2004) stated, day-to-day experiences on the job typically correlate with an employee's motivation. As mentioned, contextual factors including job characteristics and attitudes have received scholarly attention, whereas contextual factors of the work environment have been overlooked.[1]

Furthermore, Pandey and Stazyk (2008) emphasize that focusing specifically on street-level bureaucrats can advance our understanding of the complex concept of PSM by informing policy makers of the way PSM association differs within the public sector. Contextual characteristics of work environment in general, and the characteristics of policy-clients in particular, are mostly relevant to street-level bureaucrats (SLBs), whose work is defined through their direct interactions with policy clients (Lipsky, 1980, 2010). The work of SLBs is shaped by their relationships with citizen-clients and by a desire to improve clients' well-being and needs (Gofen, 2014; Maynard-Moody and Musheno, 2003). SLBs' commitment to their clients has been well-documented, and often manifests in SLBs' willingness to bend, break or ignore rules to act in response to their clients' needs (Gofen, 2014).

[1] To the best of my knowledge, no research has explored whether the characteristics of policy clients who meet or interact daily with public employees are associated with PSM.

Specifically with respect to teachers, daily interactions with students significantly affect their motivation and their level of commitment to teaching (Kitching et al., 2009). Unmotivated teachers, who often experience burnout, are no longer able to be intensively involved and have a meaningful impact at work (Maslach and Jackson, 1981; Schaufeli et al., 2009). Moreover, factors such as students' disruptive behaviors and poor achievements hamper teachers' motivation (Roth et al., 2007). Thus, promoting teachers' job satisfaction and motivation may have major policy implications. Specifically, increasing satisfaction and motivation has the potential to improve students' learning environments and achievements (Perrachione et al., 2008), prevent teacher shortages, reduce retention efforts cost, and create and enhance policies that will improve teachers' work environment (Van Saane et al., 2003).

Research hypothesis: student characteristics and teacher job satisfaction and motivation

Research shows that teachers who work in schools with characteristics of low-quality school climate, such as budget shortages and deficiencies in teaching and learning technologies, report low levels of job motivation and satisfaction (see, e.g.: Kim and Loadman, 1994; Kocabas, 2009). On the other hand, teachers who work in high-quality school climates, which include available teaching and learning facilities, as well as a positive atmosphere, exhibit high levels of job motivation (see, e.g.: Kocabas, 2009; Ofoegbu, 2004).

Contextual characteristics that correlate with teachers' satisfaction and motivation also include client attributes. Working with challenging students who exhibit behavioral problems and low achievement is strongly correlated with high job pressure and low

job satisfaction (Borg et al., 1991). Similarly, student misbehavior and disruption reduces teacher motivation (Sutton and Wheatley, 2003), as does teaching students from low-income families (Johnson et al., 2012), teaching in large classrooms (Kim and Loadman, 1994), teaching diverse students, and perceiving students' families as irresponsible, unsupportive or indifferent (Kim and Loadman, 1994; Lasky, 2000; Perrachione et al., 2008).

Purpose of this study

In connecting PSM research with studies on teacher motivation and job satisfaction, this study has a twofold aim. First, it seeks to examine the overlooked relationship between PSM and various features of an employee's work context. Second, it attempts to obtain an improved understanding of PSM among SLBs, a unique and well-documented sub-group of public servants. The methodology described in the following section will help to address the main research question presented above: *Do policy client characteristics correlate with public servants' Public Service Motivation?*

Data and Methods

Sample and design of the study

An online survey was conducted during August 2017 and anonymously completed by 349 teachers employed in Jewish-Israeli public schools. This research sample is large enough to be sensitive to small effects (Cohen, 1988), and is similar in size to various samples employed in recent PSM research (see, e.g.: Jensen and Vestergaard, 2016; Moynihan and Pandey, 2007). In addition, the inclusion of 349 observations with ten independent variables is consistent with Hair and colleagues' (1998) criteria for

applying multiple regression,[2] and is similar to Krejcie's and Morgan's (1970) recommendation.[3]

Relative to the overall population of teachers in Israel, young teachers are overrepresented and ultra-Orthodox teachers are slightly underrepresented in the study's sample, but the other distributions are typical of the population from which the sample was drawn.[4] Of the 349 respondents, 75% are female and 25% are male. Eighty nine percent hold bachelor's degrees and the median age is 36 years old. More than half (58%) have job tenure ranging from 1 to 10 years of experience; 32% worked as teachers for 11 to 30 years, and 10% have work experience of 31 years or more. Most (70%) work more than 21 hours per week; 22% work 11 to 20 hours per week, and only 8% work 10 hours or less. Fifty-two percent teach in elementary school (grades 1 through 6); 19% teach in middle school (grades 7 through 9), and 29% teach in high school (grades 10 through 12). As for educational supervision, 66% teach in general education; 28% teach in general religious education, and 6% teach in ultra-Orthodox schools. Sample descriptions and comparisons to the general teacher population in Israel are summarized in Table 1.

[2] Hair's et al. (1998) criteria for applying multiple regression is a ratio of at least five between the number of observations to independent variable.

[3] Krejcie and Morgan (1970) recommend a sample size of around 380 for representation of a population of 100,000 and more.

[4] The population for this study comprised all teachers in Jewish education (N=125,406). Of the total population, 82% are female and 18% are male. Ninety percent of them hold bachelor's degree and the median age is 43 years old. Thirty-six percent have a job tenure ranging from one to ten years of experience; 50% worked as teachers for 11 to 30 years and 14% have work experience of 31 years and more. Most (78%) work more than 21 hours per week; 16% work for 11 to 20 hours per week and only 6% work 10 hours or less. Forty-nine percent teach in elementary school (1st-6th grades); 21% teach in middle school (7th-9th grades) and 30% teach in high school (10th-12th grades). As for educational supervision, 60% teach in general education; 23% teach in general religious education and 17% teach in ultra-Orthodox schools. From: The Israel Central bureau of statistics website, http://www.cbs.gov.il/www/publications16/hinuh/teacher_ishuv_2015_2016.xlsx, accessed: September 2017.

Table 1: Sample description and the general teacher population in Israel:

Criteria	Sample (N=349)	General teacher population (N=125,406)
Gender	Female = 75% Male = 25%	Female = 82% Male = 18%
Education	B.A. = 89%	B.A. = 90%
Age	Median Age = 36	Median Age = 43
Job tenure	1-10 Years = 58% 11-30 Years = 32% More than 31 Years = 10%	1-10 Years = 36% 11-30 Years = 50% More than 31 Years = 14%
Employment status	More than 21 hours per week = 70% 11-20 hours per week = 22% 1-10 hours per week = 8%	More than 21 hours per week = 78% 11-20 hours per week = 16% 1-10 hours per week = 6%
Educational level taught	Elementary school (1^{st}-6^{th} grades) = 52% Middle school (7^{th}-9^{th} grades) = 19% High school (10^{th}-12^{th} grades) = 29%	Elementary school (1^{st}-6^{th} grades) = 49% Middle school (7^{th}-9^{th} grades) = 21% High school (10^{th}-12^{th} grades) = 30%
Educational supervision	General education = 66% General religious education = 28% Ultra-orthodox education = 6%	General education = 60% General religious education = 23% Ultra-orthodox education = 17%

Measures

Three types of measures were included: personal attributes of teachers, students' characteristics and PSM measures. Personal attributes include gender, age, educational level, job tenure, educational level taught, employment status, and educational supervision (see phrasing of questions and scales in Appendix 1). Gender, age and education are the three most frequent personal antecedents measured in recent PSM studies (Ritz et al., 2016). Policy client characteristics were measured using a series of questions about teachers' students during the 2016-2017 school year. These included a personal assessment of class characteristics, a series of items regarding behavioral problems, and several questions on socio-economic background, family support, student achievements and learning disabilities (see phrasing of questions and scales in Appendix 2).[5]

[5] The decision not to group these variables into three dimension was made due to poor validity and reliability results.

PSM was measured using Perry's (1996) four-dimensional scale. This scale is the most known and widely used in the PSM field, and most PSM studies use some or all of the scale's 24 items (Ritz et al., 2016). The current analysis follows recent studies by applying a revised version of the scale, which consists of 12 items as proposed by Kim (2010) (see, e.g.: Jensen and Vestergaard, 2016; Van Witteloostuijn et al., 2016).[6] The scale includes the following items: two items for assessing attraction to public policy making (abbreviated as 'APPM' in the Appendix), three items for the assessment of commitment to the public interest (abbreviated as 'CPI'), three items for the assessment of compassion ('COM') and four items for the assessment of self-sacrifice ('SS') (see Appendix 3 for a list of all items). The 12 items were measured using a five-point scale, ranging from one (strongly disagree) to five (strongly agree).

The reliability coefficient (Cronbach's α) for the overall PSM scale is 0.74; for compassion, $\alpha = 0.68$; for self-sacrifice $\alpha = 0.76$; for attraction to public policy making, $\alpha = 0.60$; and for commitment to the public interest $\alpha = 0.62$. These results are similar to reflect the findings of previous studies that have applied the same PSM measurement (see, e.g.: Kim, 2009; Van Witteloostuijn et al., 2016). A factor structure analysis was conducted to strengthen the validity of the PSM indicator. The analysis showed a clean four-factor structure, with all items loading onto their a priori dimensions. Loading values ranged from 0.539 to 0.843. In addition, all four dimensions significantly correlate ($p<0.01$) with the general PSM construct, with values ranging from 0.31 to 0.67.

[6] In addition, the 24 items questionnaire showed poor validity and reliability results compared to the 12 items questionnaire.

Data analysis

Correlations, descriptive statistics and a multivariate linear regression test were preformed using SPSS 23.0. The first regression (Model 1) referred only to control variables (teachers' background); the second regression (Model 2) referred only to the students' characteristics; the third model (Model 3) referred to the control variables and classroom characteristics; the forth regression (Model 4) referred to the control variables and students' background characteristics; the fifth regression (Model 5) referred to the control variables and students' behavioral characteristics, and the sixth regression (Model 6) referred to the control variables and all students' characteristics variables. Models 7-10 referred to the association between all variables to each of the four dimensions of PSM.

Results

Shapiro-Wilk's test ($p>.05$), and visual inspections of the histograms, normal Q-Q plots, and box plots indicate that the dependent variable (overall PSM), is normally distributed. The correlations between all variables (see Table 2) mostly display a low to medium strength with the strongest connection under 0.7, thus reducing the possibility of a multicollinearity problem.

Descriptive statistics and bivariate correlations of the variables are displayed in Table 2.[7] As seen in the table, most of the variables measuring students' characteristics correlate with one another. Student diversity is positively associated with overall PSM (.12, $p\leq .05$) and with attraction to the public policy making dimension (.11, $p\leq .05$).

[7] Descriptive statistics of the control variables were displayed in the methods chapter of this paper, pp. 13-15.

Low student achievement is negatively associated with overall PSM (-.09, p≤ .1), with the compassion dimension of PSM (-.14, p≤ .05), and with the self-sacrifice dimension (-.12, p≤ .05). Lack of improvement in student achievements during the most recent school year (2016-2017) is negatively associated with overall PSM (-.18, p≤ .01), with the commitment to the public interest dimension (-.14, p≤ .01), with the compassion dimension (-.26, p≤ .01), and with the self-sacrifice dimension (-.21, p≤ .01). Low family support is negatively associated with overall PSM (-.13, p≤ .05), with the compassion dimension (-.10, p≤ .1) and with the self-sacrifice dimension (-.12, p≤ .05). Difficult student behavior is negatively associated with overall PSM (-.12, p≤ .05).

As shown in Table 3, the control variables explain very little variation in overall PSM (Model 1 with R^2 = 3.7%). Similarly, when included as the only independent variables, student characteristics explain relatively low variation in PSM at levels similar to the control variables (Model 2 with R^2 = 4.0%). However, when all student characteristics and control variables are included (Model 6), the R^2 rises substantially to 9.9%.

Moreover, Model 6 reveals significantly positive relationships between overall PSM and class size and student diversity. Additionally, overall PSM has significantly negative correlations with low family support and lack of improvement in student achievements. Models 3-5 show similar results, as well as a significantly negative relationship between difficult student behavior and overall PSM. In all models that included gender (Models 1, 3-6), women exhibit significantly higher levels of overall PSM. In addition, education level taught is positively associated with overall PSM (Model 6). An analysis of all variables with each of the four PSM dimensions (Models 7-10) shows similar results (see Appendix 4).

Table 2: Descriptive statistics and bivariate correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. PSM	3.47	0.50														
2. CPI	3.95	0.70	**.31*****													
3. COM	3.40	0.64	**.57*****	.31***												
4. APPM	3.65	1.01	**.64*****	-.04	-.11**											
5. SS	3.38	0.72	**.67*****	.40***	.42***	.01										
6. Class size	24.30	9.51	**.08**	.06	.02	.08	.04									
7. Student diversity	3.89	0.98	**.12****	.01	.08	.11**	.02	-.05								
8. Low socio-economic background	2.85	1.05	**.04**	-.04	.01	.04	.03	-.28***	-.04							
9. Learning disabilities	1.98	0.81	**.04**	.05	.02	-.01	.07	-.44***	-.03	.47***						
10. Poor achievements	2.32	0.84	**-.09***	-.07	-.14**	.04	-.12**	-.04	-.03	.14***	.19***					
11. Lack of improvement in student achievements	2.23	0.79	**-.18*****	-.14***	-.26***	.05	-.21***	.08	-.09*	.02	-.05	.51***				
12. Low family support	2.67	1.00	**-.13****	.01	-.10*	-.03	-.12**	-.07	-.03	.24***	.12**	.31***	.22***			
13. Difficult student behavior	2.81	1.01	**-.12****	-.01	-.06	-.09	-.08	-.07	-.11**	.23***	.22***	.48***	.26***	.30***		
14. Students don't want to learn	2.57	1.07	**-.07**	-.05	-.05	-.04	-.04	-.10*	-.12**	.27***	.27***	.27***	.23***	.31***	.59***	
15. Dealing with discipline	3.07	1.08	**-.04**	-.01	.01	-.02	-.06	.05	-.08	.17***	.14**	.28***	.22***	.16***	.55***	.54***

Note: Pearson's *r* correlations, *p≤0.1 **p≤0.05 *** p≤0.01

Table 3: Regression results – Overall PSM[8]

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coefficient (SE)	Coefficient (SE)	Coefficient (SE)	Coefficient (SE)	Coefficient (SE)	Coefficient (SE)
Gender	.133** (.063)		.138** (.063)	.142** (.064)	.130** (.063)	.157** (.063)
Age	.000 (.004)		.000 (.004)	.001 (.004)	.001 (.004)	.001 (.004)
Education – B.A	.119 (.083)		.124 (.083)	.112 (.083)	.099 (.083)	.114 (.082)
Job tenure	.007 (.005)		.007 (.005)	.007 (.005)	.007 (.005)	.007 (.005)
Educational level taught	.016 (.032)		.027 (.032)	.030 (.033)	.031 (.033)	.055* (.033)
Working hours	-.023 (.029)		-.017 (.029)	-.030 (.029)	-.021 (.029)	-.029 (.029)
Class size		.007** (.003)	.004 (.003)			.006** (.003)
Student diversity		.050* (.027)	.061** (.027)			.054** (.027)
Low socio-economic background		.039 (.042)		.003 (.041)		.026 (.029)
Learning disabilities		.059 (.039)		.034 (.035)		.048 (.040)
Poor achievements		-.032 (.053)		.012 (.050)		.063 (.041)
Lack of improvement in student achievements		-.089** (.038)		-.105*** (.037)		-.121*** (.039)
Low family support		-.024 (.039)		-.067* (.038)		-.075*** (.029)
Difficult student behavior		-.047 (.037)			-.059* (.034)	-.053 (.037)
Students don't want to learn		.002 (.034)			-.025 (.033)	-.009 (.034)
Dealing with discipline		.018 (.031)			.045 (.031)	.045 (.031)
Adjusted R^2	.037	.040	.050		.044	.099

Note: *p≤0.1 **p≤0.05 *** p≤0.01

[8] Information regarding educational supervision was collected for sample representation only and was not tested in the regressions. A test run of the sixth model was tested and showed no meaningful differences in results (see Appendix 4).

Discussion

This study confirms that PSM correlates with student characteristics: class size and student diversity are positively associated with PSM, whereas lack of improvement in student achievements, difficult student behavior, and low family support are negatively correlated with PSM. Correlations between PSM and other contextual characteristics, including low socio-economic background, learning disabilities, poor achievements (in general), reluctance to learn, and disciplinary issues in the classroom – are found to be statistically insignificant. In line with previous studies, women exhibit significantly higher levels of PSM compared to men (Camilleri, 2007; Naff and Crum, 1999; Pandey and Stazyk, 2008). Associations between PSM and other control variables, including age, education and job tenure are not statistically significant. In previous studies, these variables tend to increase levels of PSM, although the results are not always consistent across studies (Ritz et al., 2016).

Negative associations between PSM and low family support, difficult student behavior and lack of improvement in student achievements are consistent with previous studies that focus on teachers' job satisfaction and motivation. Specifically, students' family support has a crucial role in teachers' feelings and behaviors. Likewise, motivation is associated with teachers' perceptions of responsibility, effort and respect among parents (Lasky, 2000). As noted, research has shown that pupils' achievements and their behavior affect teacher motivation (Borg et al., 1991; Kocabas, 2009). The study's findings indicate that in regression, lack of improvement in student achievements was significantly correlated with PSM, while students' general poor achievements were not significantly correlated. A possible explanation for this difference is that teachers may

feel more responsible and accountable for students' achievements during the most recent school year. Interestingly, lack of student improvement and generally poor achievements were both significantly correlated with overall PSM and two PSM dimensions in a Pearson's R test (see Table 1).

An additional interesting finding is that class size and student diversity both positively correlate with teacher PSM, which conflicts with previous findings (Kim and Loadman, 1994; Perrachione et al., 2008). One possible explanation is that previous studies have relied on different definitions of contextual factors. Wright (2004) draws a distinction between workload or job difficulty and work challenge and feeling of meaning at work. One major source of teachers' satisfaction occurs when children learn and make progress, especially if they initially experience challenges (Emmer, 1994; Hatch, 1993). Hence, it is possible that teachers do not view teaching in larger and more heterogeneous classrooms merely as work load but rather as a challenge that makes their job more meaningful.

An additional explanation for this inconsistency derives from a common disadvantage of PSM analysis, which like many other fields of research, tends to focus on correlation rather than on causality. Hence, high levels of PSM may be the reason for individuals' choice to work as public servants (Brewer and Brewer, 2011; Kirk, 2013; Vandenabeele, 2008; Wright and Grant, 2010). In the context of teachers, it might be that teachers with high PSM are (accurately) perceived as more motivated, and are therefore assigned to larger and more heterogeneous classrooms, which are more challenging.

Lastly, the study's inconsistencies with previous research may be attributed to the specific characteristics of Israeli classrooms, which are larger and more heterogeneous compared to classrooms in other OECD countries. While the OECD average number of students in a classroom is 23 students[9], the average number of students in an Israeli classroom is 27 students.[10] In addition, classrooms in Israel are highly heterogeneous, due to the many sub-groups that exist in Israeli society, along with relative diversity in the socio-economic and cultural backgrounds of students among schools and within schools.[11] Therefore, large and diverse classrooms in Israel do not necessarily reflect what the literature describes as low-quality school climate (Kim and Loadman, 1994; Kocabas, 2009).

Research contributions

The current study offers several contributions to the field of PSM. Most importantly, the study's findings extend scholars' understanding of PSM's contextual antecedents. The finding of the positive association between class size and student diversity and PSM and the negative association between lack of improvement in student achievements, low family support, and difficult student behavior and PSM deepens our knowledge of the factors correlating with public servants' PSM. In addition, the study's unique focus on teachers sheds much needed light on the PSM differences between public servants on different levels. This relatively new perspective can help advance a more nuanced view of PSM and provides important insight into street-level bureaucrats and their PSM. Finally, the study is unique due to the sample population it employs.

[9] "Education indicators in focus", OECD website, http://www.oecd.org/edu/skills-beyond-school/EDIF%202012--N9%20FINAL.pdf, published: September 2012, accessed: November 2017.
[10] "OECD.Stat", OECD website, https://stats.oecd.org/Index.aspx?DataSetCode=EDU_CLASS, published: September 2012, accessed: November 2017.
[11] "Education policy outlook: Israel", OECD website, http://www.oecd.org/israel/Education-Policy-Outlook-Country-Profile-Israel.pdf, published: April 2016, accessed: November 2017.

Most PSM research has been conducted within a North American and European setting (Ritz et al., 2016). By testing Israeli teachers' PSM, this paper contributes to the development of an international view of PSM.

Research limitations and suggestions for future research

The study's methodology has some notable limitations, suggesting that its results should be interpreted with caution. Along with the misrepresentation of ultra-Orthodox teachers and overrepresentation of young teachers, there is a large and meaningful group not represented in the sample. Due to technical difficulties in gathering data, Arab teachers are not represented in this research. Arabs in Israel represent approximately 21% of the general population and 24.3% of the teacher population in Israel.[12] In addition, focusing on teachers calls for future research that would benefit from exploring PSM antecedents among additional groups of street-level bureaucrats, such as nurses and social workers.

Another limitation derives from the measurement and analysis chosen in this study. Although the PSM measurement applied in this study is the most known and widely used (Ritz et al., 2016), scholars have questioned the validity of this indicator. Although the study relied on existing measures in order to compare findings with existing research, future analysis should continue to improve PSM measurement (see, e.g.: Ritz, 2011). Also, as discussed in other studies (Brewer and Brewer, 2011; Kirk, 2013; Vandenabeele, 2008; Wright and Grant, 2010), PSM research would benefit substantially from long-term studies exploring the causality of PSM's antecedents.

[12] The Israel Central bureau of statistics website, http://www.cbs.gov.il/www/publications16/hinuh/teacher_ishuv_2015_2016.xlsx, accessed: September 2017.

Finally, the study's results demonstrate the need for future investigation into student characteristics and teacher PSM. The findings explain only 10% of overall PSM, leaving 90% of the variance left to be explained. In addition, as a result of this study's finding of positive association between class size and heterogeneous classroom, future qualitative and quantitative research should explore which variables are viewed as work load and which variables represent challenge and a sense of meaning at work.

Policy implications

Understanding what motivates teachers can have meaningful policy implications regarding teachers' retention. Specifically, gaining insight into teacher PSM has the potential to lower costs while improving teachers' impact at work. Teachers' readiness to leave their jobs is a major policy problem, and has been a subject of interest for many policy researchers. Turnover is a larger-scale phenomenon among teachers than for individuals in other professions (Jorde-Bloom, 1986). For example, in the U.S alone, twenty percent of teachers report that they would choose a different career if given the chance (Farber, 1984; Solman and Feld, 1989). Research has shown that turnover occurs mostly when teachers are not satisfied or motivated by their work (Jorde-Bloom, 1986; Kremer and Hofman, 1981), and that improving teachers' job satisfaction and motivation can help prevent turnover (Van Saane et al., 2003). As such, improving teachers' retention can help reduce the costs of recruiting and training new teachers (Kremer and Hofman, 1981). Teachers who are not motivated or satisfied and still choose to continue teaching are no longer able to be intensively involved and have a meaningful impact at work (Maslach and Jackson, 1981; Schaufeli et al., 2009). Therefore, promoting teachers' job motivation can help improve students' learning

environments and achievements (Perrachione et al., 2008), create and enhance policies to improve teachers' work environment (Van Saane et al., 2003) and lower investments in employee satisfaction and motivation (Miller-Mor Attias and Vigoda-Gadot, 2016).

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Appendix 1– Items measuring teachers' background:

1. Gender: Female/Male
2. Age: _____.
3. Bachelor's degree: Yes/No
4. Job Tenure (How many years have you been working as a teacher?):_____Years
5. Educational supervision:
    i. General Education
    ii. General religious education
    iii. Ultra-Orthodox education
6. Educational level taught:
    i. Elementary school (1^{st}-6^{th})
    ii. Middle school (7^{th}-9^{th})
    iii. High school (10^{th}-12^{th})
7. Number of working hours per week:
    i. 1-10 hours per week
    ii. 11-20 hours per week
    iii. 21-30 hours per week
    iv. 31 and more hours per week

Appendix 2 – Items measuring policy clients' characteristics:

1. Average number of students in the classroom I usually teach in: _____.
2. The percentage of students with learning disabilities in the classroom I usually teach in is:
    i. Under 10%
    ii. 11-30%
    iii. Over 31%
3. The percentage of students who come from a low socio-economic background in the classroom I usually teach in is:
    i. 1-10%
    ii. 11-30%
    iii. 31-60%
    iv. Over 60%

Please indicate how strongly you agree or disagree with all the following statements by selecting a number from one (strongly disagree) to five (strongly agree):

- It is difficult to teach my students
- My students don't want to learn
- I deal with a lot of discipline in the classroom
- My students' achievements are not good
- My students' achievements did not improve during the last school year
- My students differ substantially in their background
- My students' parents are not interested or supportive of their child's studies

Appendix 3 – Items measuring Public Service Motivation:

Commitment to the public interest (CPI):

- Meaningful public service is very important to me (PSM 30)
- I would prefer seeing public officials do what is best for the whole community, even if it harmed my interests (PSM 34)
- I consider public service my civic duty (PSM 39)

Compassion (COM):

- For me, considering the welfare of others is one of the most important values (PSM 8)
- It is difficult for me to contain my feelings when I see people in distress (PSM 4)
- I am often reminded by daily events about how dependent we are on one another (PSM 13)

Attraction to public policy making (APPM):

- I do not care much for politicians (R) (PSM 31)
- Politics is a dirty word (R) (PSM 11)

Self-sacrifice (SS):

- Making a difference in society means more to me than personal achievements (PSM 1)
- I put civic duty before self (PSM 5)
- People like me are willing to risk personal loss to help society (PSM 19)

- I am prepared to make sacrifices for the good of society (PSM 26)

Note: Items were distributed using Hebrew wording of all questions and may be provided upon request. “PSM + no.” refers to Perry (1996). Survey questions were accompanied by the pretext: "Please state, whether you agree or disagree with the following statements by selecting a number from one (strongly disagree) to five (strongly agree)". R marks a reversed question.

Appendix 4 – Further analysis:

Regression results – Overall PSM – including educational supervision:

	Model 6
	Coefficient (SE)
Gender	.161** (.066)
Age	.001 (.004)
Education – B.A	.115 (.082)
Job tenure	.007 (.005)
Educational level taught	.055* (.033)
Working hours	-.030 (.029)
Educational supervision	-.007 (.038)
Class size	.006* (.003)
Student diversity	.054** (.027)
Low socio-economic background	.026 (.029)
Learning disabilities	.047 (.041)
Poor achievements	.063 (.041)
Lack of improvement in student achievements	-.121*** (.039)
Low family support	-.075*** (.029)
Difficult student behavior	-.053 (.037)
Students don't want to learn	-.008 (.034)
Dealing with discipline	.045 (.031)
Adjusted R^2	.096

Note: *p≤0.1 **p≤0.05 *** p≤0.01

Regression results – PSM dimensions:

	Model 7 – CPI	**Model 8 –** COM	**Model 9 –** APPM	**Model 10 –** SS
	Coefficient (SE)	Coefficient (SE)	Coefficient (SE)	Coefficient (SE)
Gender	-.063 (.092)	.049 (.082)	.228* (.132)	.194** (.093)
Age	.007 (.006)	.000 (.005)	.007 (.009)	-.003 (.006)
Education – B.A	-.063 (.120)	.092 (107)	.252 (.172)	-.002 (.122)
Job tenure	.002 (.007)	.010 (.006)	-.001 (.010)	.012* (.007)
Educational level taught	.020 (.049)	.009 (.044)	.125* (.070)	.032 (.049)
Working hours	-.038 (.042)	-.073* (.038)	.031 (.060)	-.044 (.043)
Class size	.005 (.005)	.001 (004)	.010 (.007)	.007 (.005)
Student diversity	.001 (.039)	.033 (.035)	.123** (.056)	.007 (.040)
Low socio-economic background	-.056 (.043)	-.003 (.038)	.065 (.061)	.016 (.043)
Learning disabilities	.101* (.059)	.027 (.053)	.026 (.084)	.090 (.060)
Poor achievements	-.037 (.061)	.014 (.054)	.130 (.087)	.046 (.061)
Lack of improvement in student achievements	-.133** (.058)	-.218*** (.052)	.052 (082)	-.196*** (.058)
Low family support	.038 (.042)	-.046 (.038)	-.079 (.061)	-.100** (.043)
Difficult student behavior	.051 (.054)	.003 (.048)	-.133* (.077)	-.029 (.055)
Students don't want to learn	-.063 (.049)	-.024 (.044)	-.031 (071)	.029 (.050)
Dealing with discipline	.035 (.046)	.069* (.041)	.061 (.065)	.006 (.046)
Adjusted R^2	.029	.068	.029	.060

Note: *p≤0.1 **p≤0.05 *** p≤0.01