Mission Congruence: To Agree or Not to Agree, and Its Implications for Public Employee Turnover

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Abstract

Previous studies within and outside of the field of public administration consistently find positive organizational outcomes when there is high compatibility or fit between employees and organizations—a concept now widely known as person-organization fit. Previous public administration scholars have established the link between employees' person-organization fit perceptions and employee turnover intention. However, no previous study has examined whether there is a link with actual turnover. This study addresses this gap in the literature on public sector employee fit by examining the relationship between one particular type of fit—mission congruence—and public employee turnover. Using nationally-representative data on public school teachers, we find that teachers in U.S. schools who perceive themselves to be compatible with their organizations' central mission are at least 11% more likely to remain at their current school. Results are discussed in terms of their implications for research and practice.

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INTRODUCTION

Over the past three decades, research has demonstrated the importance of achieving fit or compatibility between employees and organizations—a concept known as person-organization fit (P-O fit) (Chatman 1989; Edwards 1991; Kristof 1996; Vancouver and Schmitt 1991). Scholars now recognize that any effort to understand, predict, and alter the attitudes and behavior of employees is largely predicated on workers' fit with their organization. Absent adequate P-O fit, organizational initiatives and management practices intended to improve performance will often fail to gain meaningful traction among workers (Edwards 1991; Kristof 1996; Kristof-Brown and Stevens 2001; Lauver and Kristof-Brown 2001; Vancouver and Schmitt 1991).

Previous studies have generated substantial empirical evidence of the concept's relevance. For instance, as Lauver and Kristof-Brown (2001) note, P-O fit is "positively related to individuals' career involvement, job satisfaction, organizational commitment, and career success and negatively related to turnover intentions and behaviors". Consequently, increased effort has been devoted to exploring the precise psychological processes that explain and shape compatibility between workers and their environments (Kristof-Brown and Stevens 2001; Kristof-Brown et al. 2005).

Interestingly, public management scholarship has only recently started to incorporate P-O fit theories into research. Of the existing studies employing P-O fit, some have used the concept to explain why public service motivation (PSM) research produces results that conflict with PSM's core theoretical tenets (Bright 2008; Christensen and Wright 2011; Steijn 2008; Wright and Pandey 2008). Findings here have echoed conclusions from other research traditions about the importance of fit. For example, Wright and Pandey (2008) demonstrate public employees must believe their values are congruent with those of their organization for PSM to operate as anticipated. When employees perceive their values as incompatible with the organization's, it

becomes less likely employees will believe they can fulfill their altruistic motives through the organization and their jobs. Therefore, the potential benefits of PSM appear to be largely contingent on employee fit.

Other public management studies examine the effect of P-O fit on employees' turnover intentions, levels of goal ambiguity, and job sector selections (Caillier 2014; Jin, McDonald, and Park 2018; Lee and Wilkins 2011; Mostafa 2016; Sun and Pandey 2014; Vigod-Gadot and Meiri 2008). One common finding from this literature is that public employees with higher degrees of P-O fit are less likely to report a desire to leave their organization compared to employees with lower levels of P-O fit. Due to data availability challenges, these previous studies often rely on small, non-representative samples of public employees. Additionally, these previous studies rely on turnover intention measures instead of measures of actual turnover.

The current study begins addressing this gap in the literature by examining how one particular type of fit—mission congruence—affects employee turnover. We use a large, nationally-representative random sample of elementary and secondary public school teachers to examine whether variations in the perceived degree of agreement over a school's central mission influence a teacher's decision to remain or leave their school. Unlike other studies, we have access to actual turnover data and are subsequently able to ascertain whether perceived mission congruence drives teachers' decisions to stay in their current schools (stayers), move to another school (movers), or leave full-time employment in the teaching profession (leavers).

While understanding how P-O fit affects turnover intentions is important, it is also vital for practitioners and scholars to understand the relationship between P-O fit and actual employee turnover for at least three reasons. First, previous studies suggest there is an inconsistent relationship between turnover intention and actual turnover, which suggests that factors that predict turnover intention might not be the same factors that predict actual turnover (DeAngelis

et al. 2013; Grissom et al., 2015; Ladd 2011). Second, actual turnover—even healthy turnover—has repercussions for organizations and organizational performance. Organizations incur considerable financial costs when employees turnover (Barnes et al. 2007; Milanowski and Odden 2007). Furthermore, previous research suggests that the most effective teachers are more likely to leave their school compared to less effective teachers, which suggests that the overall effect of turnover may reduce school performance (Guarino et al. 2006). Lastly, schools capable of demonstrating how teachers fit with and help realize a school's mission may be able to stem teacher turnover decisions, thereby alleviating certain performance declines.

In the next section, we begin with a review of P-E fit and mission congruence, before turning to a discussion of mission congruence in the context of schools and its likely relationship to turnover. Subsequent sections describe our measures and methods and then present results and conclusions.

PERSON-ENVIRONMENT FIT

The notion that employees interact with their work environment and that these interactions play a considerable role in shaping employees' job-related attitudes and behaviors is hardly new (e.g., Barnard 1938; Lewin 1935; Murray 1938; Parsons 1909). However, our understanding of the significance of such interactions has grown substantially, due primarily to research in industrial/organizational psychology and organizational behavior. Research in these fields has demonstrated that the degree of compatibility present between employees and their jobs helps predict a number of individual and organizational outcomes, especially those related to employee motivation, job satisfaction, stress, turnover, and occupational choice (Edwards 1991, 284). Stand-alone theories of P-E fit ultimately emerged from this body of research and a growing recognition of the importance of fit (Cable and Edwards 2004; Edwards 1991; Kristof-Brown et al. 2005).

Broadly, person-environment (P-E) fit is defined as "the compatibility between an individual and the work environment that occurs when their characteristics are well matched" (Kristof-Brown et al. 2005, 281). Individual-level characteristics include "individuals' biological or psychological needs, values, goals, abilities, or personality" whereas environmental characteristics "refer to intrinsic or extrinsic rewards, physical or psychological demands, [and] cultural values..." (Cable and Edwards 2004, 822). Several sources of fit exist, including person-vocation, -organization, -supervisor, -teams, and -job fit—although other forms and types of fit are also relevant (Edwards 1991; Kristof 1996; Kristof-Brown and Stevens 2001; Lauver and Kristof-Brown 2001; Kristof-Brown et al. 2005). The current study focuses primarily on P-O fit.

Two approaches are utilized to evaluate P-O fit (Cable and Edwards 2004; Edwards 1991; Kristof-Brown et al. 2005). The first approach focuses on *complementary fit*. Complementary fit encompasses the basic tenets of need-satisfaction theories and presumes fit and compatibility exists when both the employee and the organization provide something tangible the other wants (Edwards 1991; Kristof-Brown et al. 2005; Muchinsky and Monahan 1987). As Cable and Edwards (2004) note, "complementary fit…can mean that an employee has a skill set that an organization requires, or it can mean that an organization offers the rewards that an individual wants" (822).

In contrast, the second approach used to evaluate P-O fit emphasizes *supplementary fit*. Supplementary fit occurs when an employee and the organization possess similar characteristics (Edwards 1991; Kristof-Brown et al. 2005; Muchinsky and Monahan 1987). Although there are different forms of supplementary fit, research assumes fit is most likely present when employees and organizations share similar values and interests (Cable and Edwards 2004; Kristof 1996; Kristof-Brown et al. 2005). Simply, it is the focus on value congruence rather than need fulfillment that ultimately distinguishes supplementary from complementary fit.

MISSION CONGRUENCE AS A SOURCE OF FIT

We opt to focus on one form of supplementary fit, mission congruence (a sub-dimension of value congruence). We do so for two reasons. First, public management research has a long and rich history of treating and viewing mission statements and organizational goals as particularly salient for public organizations and employees. Mission statements and goals are presumed to signal information to current and potential employees on the organization's overarching purpose, values, and social contribution (Rainey and Steinbauer 1999, 16). This signaling process impacts the human resource management capacity of public organizations insofar as it may help or hinder organizational efforts to recruit, retain and motivate workers. As Rainey and Steinbauer (1999) note, "the more engaging, attractive, and worthwhile the mission is to people, the more the agency will be able to attract support from those people, to attract some of them to join the agency, and to motivate them to perform well in the agency" (16). Likewise, mission statements and organizational goals also convey important information on what the organization values, where employee energy should be directed, and how employee effort will be rewarded (AUTHOR CITES). Such information provides employees clarity regarding their place and overall fit in an organization.

So far, evidence supports claims that missions and mission statements matter to employees. For example, employees prefer to associate with organizations they perceive as having attractive missions (Pandey, Wright, and Moynihan 2008) and are more likely to expend additional energy and effort on their behalf (Wright 2007). Employees who struggle to understand how their work relates to broader organizational objectives express greater dissatisfaction, lower organizational commitment, and stronger turnover intentions (AUTHOR CITES). Yet, we still know relatively little about the ways in which missions and mission statements influence employee behavior—a shortcoming we help alleviate in this paper.

The second reason we focus on mission congruence resides in P-O fit theory itself. P-O fit theory encompasses two complementary approaches: one involving psychological needs fulfillment and the second involving notions of value congruence. The psychological needs approach assumes (1) employees possess certain psychological needs, and (2) employees will evaluate their psychological needs against perceived "*environmental supplies*, which refer to extrinsic and intrinsic resources and rewards (e.g., money, social involvement, achievement)" (Cable and Edwards 2004, 823). When individuals perceive an imbalance between their psychological needs and those environmental supplies provided by an organization, job satisfaction decreases; conversely, when psychological needs are met, job satisfaction typically increases (Cable and Edwards 2004; Kristof-Brown et al. 2005).

Alternatively, the value congruence perspective assumes employees possess particular values that guide and direct their individual decisions, conduct, and behavior (Cable and Edwards 2004; Chatman 1989; Kristof 1996). Likewise, organizations are governed by specific value sets and systems (e.g., how resources should be utilized, how employees should behave) and contain other individuals with their own unique value preferences (Cable and Edwards 2004; Chatman 1989; Kristof 1996; O'Reilly et al. 1991; Tsui and O'Reilly 1989). Consequently, the value congruence perspective "refers to the similarity between an individual's values and the cultural value system of an organization [and its individual employees]" (Cable and Edwards 2004, 823). Employees who believe their values are consistent or congruent with those of their co-workers and their broader organization are more likely to believe they fit with their organizations (Kristof-Brown et al. 2005; O'Reilly et al. 1991; Tsui and O'Reilly 1989). Some evidence also suggests congruence improves social exchanges between co-workers and lowers decision-making costs, which results in enhanced productivity and performance (Cable and Edwards 2004; O'Reilly et al. 1991; Tsui and O'Reilly 1989). A lack of congruence leaves

employees feeling disconnected from and dissatisfied with their organizations (Kristof-Brown et al. 2005; O'Reilly et al. 1991).

In this context, mission statements are relevant in several regards. First, as Weiss and Piderit (1999) argue, "mission statements communicate organizational values to employees" (196). Mission statements provide a snapshot of what an organization values, which can help attract, retain and motivate workers (Rainey and Steinbauer 1999). Moreover, because mission statements furnish insight into organizational value systems, they also provide insight into member preferences (i.e., social identity and value congruence) and may signal what sorts of intrinsic rewards and resources an organization will emphasize and afford employees. Second, mission statements also establish a shared culture and understanding among employees (Schein 1992; Weiss 1996). Simply, mission statements direct attention toward certain things (e.g., organizational goals and priorities) and away from others. Finally, mission statements also reflect those values held by key stakeholders and attentive publics inside and outside the organization, which fix the attention of organizations and employees in particular directions (AUTHOR CITE; Bryson 2011).

Nevertheless, mission statements offer an incomplete and partial picture of an organization's value system, how rewards and resources will be distributed, and members' overarching preferences. In fact, mission statements are often intentionally designed to be vague either for political reasons (Moe 1995) or for strategic purposes (AUTHOR CITES; Bryson 2011). Consequently, individuals who self-select into an organization are prone to evaluation and selection errors. For example, those seeking employment in a given organization may overestimate their true or actual fit. Conversely, individuals who opt not to seek employment because they perceive poor fit may actually underestimate their true compatibility.

Employees may also find their preferences and values incompatible with those of their organization at some future point for various reasons. First, individuals' preferences and values are malleable and may change over time. Such changes are often driven by the sorts of unique tasks people need to accomplish at different life stages (Gouveia et al. 2015). For example, the relative importance of having a meaningful work-life balance typically becomes more significant to employees when they have children. Consequently, employees will likely evaluate their fit and compatibility with an organization differently at various points throughout their career.

Second, even when an organization's mission statement accurately portrays its values, employees often self-select into an organization because they hope to *advance and realize* the organization's mission and objectives (Pandey et al. 2008; Rainey and Steinbauer 1999; Wright 2007). Organizations will do a better or worse job of realizing the priorities outlined in their mission statements. Laws, resource constraints, technological limitations, political support, public sentiment, and other problem characteristics can all hinder an organization's efforts to realize its mission and goals (AUTHOR CITES). When employees value an organization's mission but also believe the organization is making insufficient progress toward their realization, workers may turn to other organizations or sectors they believe are better equipped to attain them (Kowske, Rasch, and Wiley 2010).

Third, employees' assessments of their fit and perceived mission congruence are likely to be affected by various instrumental considerations. Satisfaction with pay, benefits, promotions and advancement opportunities as well as educational level are regularly linked to increased turnover intention and turnover among employees (Kowske et al. 2010; McGinnis Johnson and Ng 2016; Su and Bozeman 2009). Simply, mission congruence is unlikely to retain and motivate employees when other key instrumental aspects of one's job are absent or insufficient.

Together, organizational missions and perceived mission congruence are likely to help attract, retain, and motivate workers. However, because (a) mission statements impart only a partial picture of organizational realities and (b) individual values, preferences, and proclivities change over time, incompatibility and misfit are prone to occur. Therefore, it seems likely that employees who report their values are incongruent with those of their organization or their coworkers will be more likely to leave their organization.

To test these assertions, we examine whether perceived mission congruence or compatibility among a sample of public school teachers will shape actual turnover decisions. Previous research indicates that the missions of public schools vary considerably and that this variation has important implications for school performance (Weiss and Piderit 1999). However, no study to our knowledge has examined whether teachers' own assessments of their perceived fit with a school and its overarching mission affects their retention and turnover decisions. Therefore, we examine the following hypotheses:

Hypothesis 1: Teachers who report a high degree of mission congruence are more likely to continue employment at their current school.

Hypothesis 2: Teachers who report a low degree of mission congruence are more likely to seek employment in another school or to leave full-time employment in the teaching profession.

DATA AND MEASURES

The current study relies on public school teacher data from the 2007-2008 *School and Staffing Survey* (SASS) and the 2008-2009 *Teacher Follow-up Survey* (TFS), both collected by the *National Center of Education Statistics* (NCES). SASS is a nationally representative random sample of approximately 39,000 elementary and secondary public school teachers. One year later, TFS randomly samples approximately 5,300 SASS respondents to determine if and where they are still teaching. Numerous studies have utilized SASS and TFS to measure teacher

turnover on a national scale (e.g. AUTHOR CITES; Grissom 2011). Consistent with previous studies, we utilize the teacher, principal, school, and school district questionnaires from SASS and TFS to collect unique information on teachers, including items that capture teachers' socio-demographic profile and turnover status.

Because TFS is a subsample of the SASS sample, the current analysis is restricted to teachers included in both SASS and TFS. The analytical sample is therefore restricted to full-time, regular public teachers who were surveyed in both SASS and TFS surveys and who were not missing data for any of the relevant variables used in this analysis. This results in a sample size of approximately 2,600 teachers. We examined the representativeness of our analytical sample by comparing basic descriptive statistics between the full-sample of SASS teachers and our analytical sample. We find no statistically significant differences in teacher characteristics across the two samples. Additionally, our main analysis includes SASS provided sampling weights, which account for unequal probabilities of sample selection. The main results are also robust to not using these sampling weights. Lastly, the analytical sample includes teachers that left their school due to retirement; however, the results are robust if we remove them.

Dependent Variables

The outcome of interest in this study is teacher turnover. Teacher turnover is measured by linking individual respondents in SASS to TFS. All teachers surveyed in the TFS were mailed the same questionnaire, even those that left the teaching profession. In the questionnaire, a teacher was asked to answer yes or no to the following questions: (1) are you still teaching? (2) are you still teaching in the same school? (3) are you still teaching in the same district (4) are you still teaching the same state? Using these survey questions, we constructed three dummy variables. The stayer dummy variable equals 1 if the teacher was still teaching in the same school from last year and 0 otherwise. The mover dummy variable equals 1 if the teacher was still teaching, but not in the

same school from last year and 0 otherwise. The leaver dummy variable equals 1 if the teacher was no longer teaching and 0 otherwise. These three dummy variables are mutually exclusive, which implies that they sum up to 1, or 100%. This method is consistent with previous studies using the SASS (Grissom, 2011). As a robustness check, the analysis was run with two mover variables: school mover and district/state mover. There is no practical or statistical difference between the main coefficients for the school mover and district/state mover models. Therefore, the main analysis combines school, district, and state movers in one mover category.

Explanatory and Control Variables

The variable of interest in this study is mission congruence among teachers in a school. SASS contains one particular survey question that asks the surveyed teacher to what extent they agree that most of their colleagues share their beliefs and values about what the central mission of the school should be. This survey question was selected based on similar measures of preceptive P-O fit, used in the K-12 context, by Youngs et al. (2015). Using this SASS survey question, we create a dummy variable that equals 1 if the teacher strongly agreed or agreed with the statement above and 0 if the teacher strongly disagreed or disagreed. Table 1 reports 87% of sampled teachers either strongly agreed or agreed that most of their colleagues share their beliefs and values about what the central mission of the school should be.

<<< Insert Table 1 about here >>>

Previous studies illustrate the importance of teacher- and school-level characteristics in predicting teachers' decisions to leave a school (Guarino et al. 2006). Accordingly, our regression models control for relevant teacher and school characteristics. Control variables come from the SASS teacher, principal, and school questionnaires. Teacher characteristics include gender, race, age, teaching experience, education, teacher certifications, the quality of the teacher's undergraduate institution, and academic-year base salary. The quality of the teacher's

undergraduate institution was created using college rankings from *Barron's Profiles of American Colleges*. Barron's ranks all undergraduate institutions in seven categories: most competitive, highly competitive, very competitive, competitive, less competitive, non-competitive, and special.

School characteristics include proportions of students who are African-American, Hispanic, Free and Reduced Lunch, and Limited English Proficiency (LEP). Previous studies find teachers are more likely to leave schools with high levels of non-white and low-income students (Hanushek, Kain, and Rivkin 2004; Scafidi, Sjoquist, and Stinebrickner 2007). Student-to-teacher ratio, teacher-to-administration ratio, teacher aid-to-teacher ratio, principal's race, principal's experience, and indicators for urban, suburban, and rural areas also are included. Lastly, the regression models control for whether or not the teacher's principal left the school after the SASS survey year. Empirical evidence suggests that frequent principal turnover reduces teacher retention rates (Beteille et al 2012).

Table 1 summarizes the teacher and school characteristics from our sample. Our analytical sample is approximately 84% non-Hispanic white, 8% non-Hispanic black, and 7% Hispanic. The remaining 2% is classified as "other race", which includes Asians, Pacific Islanders, Native Americans, and teachers of mixed race. About 77% of teachers are female. The average teacher is 42 years old and has approximately 12 years of teaching experience. Over half of the teachers have a Master's Degree, and 88% hold a state certification. 27% of teachers taught in an urban school, 53% taught in a suburban school, and the remaining teachers taught in a rural school. The average teacher taught in a school with approximately 838 students and a student to teacher ratio of 14.

METHODOLOGY

We examine whether there is a relationship between the probability of teacher turnover and mission congruence among staff. Specifically, we estimate the following baseline binomial logit model for each category of teacher turnover through Maximum Likelihood Estimation (MLE):

$$(1)\ \Pr(y_{isd}) = \Lambda(\alpha_1 MC_{isd} + \beta_1 X_{isd} + c_d)$$

where *y* is a binary indicator of teacher *i*, in school *s*, in district *d*, experiencing a type of teacher turnover; *MC* is a dummy variable that equals 1 if the teacher strongly agreed or agreed that most of their colleagues share their beliefs and values about what the central mission of the school should be and 0 otherwise; *X* is a vector of control variables; *c* is a district fixed effect; and Λ is the logistic cumulative distribution function.

Unfortunately, our analytical sample only contains approximately 2,600 teachers in 2,000 schools. In many cases, there is only one teacher per school, and this reduces the degrees of freedom when using school fixed effects. Therefore, the preferred specification includes all controls and district fixed effects. However, our main results are qualitatively similar when replacing district fixed effects with school fixed effects. Alternative specifications are also considered, including models with and without state fixed effects.

We prefer estimating separate binomial logit models over using a multinomial logit model (MNL). The consistency of MNL coefficient estimates relies on the independence of irrelevant alternatives assumption (IIA). The IIA restriction assumes outcome categories are not nested (Wooldridge 2010, 501). The turnover categories are likely nested because the probability of leaving the school is correlated with the probability of leaving the teaching profession. The main results are robust across other estimators and models, such as linear probability models (LPMs), Probit models, and multinomial logit models. See Appendix Table A.2 for the average partial effects (APEs) from these other models.

The coefficient of interest in equation (1) is α_1, which is expected to be positive and statistically significant when the dependent variable is the stayer category of turnover. Otherwise, this coefficient is expected to be negative and statistically significant when the dependent variable is the mover or leaver category of turnover. Unlike a traditional linear model, the coefficient from a binomial logit model is not interpretable. Therefore, all tables report the average partial effect (APE) in order to interpret the magnitude of the logit results. The advantage of converting a logit coefficient to average partial effect is this allows the reader to interpret the results the same way they would interpret a coefficient from an ordinary least squares (OLS) model.

We also test for heterogeneity in the relationship between mission congruence among staff and the probability of teacher turnover. To this end, we estimate an extension of equation (1) that includes interaction variables between the mission congruence indicator variable and various teacher and school characteristics.

Equation (1) includes district fixed effects, which control for long-term economic and political preferences of the district that do not vary over time. For example, the district fixed effects will control for teacher and non-teacher labor market differences across school districts. Finally, standard errors are robust to district-level clustering, which makes inference robust to serial correlation within districts over time and heteroskedasticity. By clustering at the district-level, inference will also be robust to similar correlations occurring at the school-level, as schools are nested within districts (Angrist and Pischke, 2009).

RESULTS

The first column in Table 2 reports the average partial effect (APE) for mission congruence indicator in equation (1) when the dependent variable is stayer. The APE in Row 1 of Table 2 is 0.079. This coefficient suggests that a teacher is about 8 percentage points more

likely to remain at their school if they report a high degree of mission congruence among the staff. This coefficient is both practically and statistically significant.

<<< Insert Table 2 about here >>>

The next several rows in Table 1 include additional controls described in the methodology section. Notably, the results in Row 2 through Row 4 provide similar coefficients. For example, the APE in Row 4 of Table 2 is 0.109, which is slightly larger than the APE in Row 1. The regression in Row 4 is the preferred specification of equation (1) because it includes district fixed effects and all control variables. This coefficient suggests that a teacher is about 11 percentage points more likely to remain at their school if they report a high degree of mission congruence among the staff. Overall, the results in column one provides support for our first hypothesis that a higher level of mission congruence among staff members can increase the likelihood of teachers remaining in their school.

The second column in Table 2 reports the APE for the mission congruence indicator in equation (1) when the dependent variable is mover. As mentioned above, the regression in Row 4 of Table 2 is the preferred specification of equation (1). The APE in Row 4 is -0.014. This coefficient suggests that a teacher is about 1.4 percentage points less likely to move to another school, district, or state if they report a high degree of mission congruence among the staff. However, this result is not practically or statistically significant. Similar APEs in Row 1 through Row 3 provides similar results. Overall, the results in column 2 indicate that a higher degree of mission congruence does not appear to affect the decision to move to another school.

The last column in Table 2 reports the APE for the mission congruence indicator in equation (1) when the dependent variable is leaver. The APE in Row 4 is -0.105. This coefficient suggests that a teacher is about 10.5 percentage points less likely to leave the teaching profession if they report a high degree of mission congruence among the staff. This APE is both practically

and statistically significant. In fact, this APE suggests that a lack of mission congruence more than doubles the probability that a teacher leaves the teaching profession. Overall, these results from Table 2 suggests that a higher degree of mission congruence is associated with a higher likelihood that a teacher will remain in their school; whereas, the lack of mission congruence is associated with teachers leaving the teaching profession in lieu of moving to another school.

Appendix Table A.1 reports the APE from Row 4 for all other variables in equation (1). Surprisingly, many of the coefficients are not statistically significant, with the exception of rural, non-Hispanic other race, state certification, total teaching experience, and advanced degree. Non-Hispanic other race teachers are less likely to remain in the same school relative to non-Hispanic white teachers. Teachers who hold a state certification are less likely to remain in the same school relative to all other teachers. Finally, teachers located in rural areas are less likely to remain in the same school relative to teachers in suburban areas. The lack of statistical significance on the control variables is likely the result of including district fixed effects. The addition of district fixed effects reduces degrees of freedom and statistical power.

Table 3 reports the interaction variable estimates described in the method section. The regression models interact the mission congruence indicator with a set of control variables, including teachers' race, sex, and degrees/certifications as well as school characteristics. The general lack of individually statistically significant interaction terms is striking. In fact, only the interaction term for national board certification is significant. This result suggests that national board certification teachers will be more likely to stay their school when the school has a high level of mission congruence compared to other national board certification teachers in a school with low levels of mission congruence. The positive sign of the interaction term is theoretically plausible. The act of gaining a national board certification is a signal that the teacher is highly motivated. Therefore, the attitude and motivation levels between national board certification

teachers and all other teachers may be significantly different. A teacher with national board certification may require a higher level of mission congruence among staff members compared to teachers without such a certification.

<<< Insert Table 3 about here >>>

Overall, the results show that teachers are more likely to remain in the same school if they believe a high level of mission congruence is shared among the staff. Interestingly, there appears to be little to no heterogeneity in the relationship between mission congruence and teacher turnover. Shown in the bottom of Table 3, the interaction terms are not jointly significant. This implies that *all* teachers respond *similarly* from mission congruence and the response is strong. One potential caveat to the previous claim is that the study has a sample of only 2,600 teachers. With this sample size, the inclusion of district fixed effects and all of these interaction variables reduces statistical power and the likelihood of having a statistically significant result.

DISCUSSION AND CONCLUSIONS

The current study applied person-organization fit (P-O fit) theory to examine whether employees who perceived higher levels of mission congruence with fellow staff members are more likely to remain in their organizations. Using nationally representative data on U.S. public school teachers, the results of this study suggest that teachers are at least 11% more likely to remain at their current school if they agree that most of their colleagues share their beliefs and values about what the central mission of the school should be compared to teachers who do not agree. In addition, results also provide strong reason to anticipate that the positive relationship between mission congruence among staff and employee turnover is quite robust, given that we find *all types of teachers* respond *similarly* when mission congruence among staff is high.

The current study adds to existing public administration theory by addressing calls for researchers to account for person-environment fit when examining organizational-employee linkages. Consistent with fit theory originating outside of public administration, we are able to provide a concrete demonstration of the importance of fit. Our findings clearly suggest the degree of compatibility perceived by employees' matters. Put another way, compatibility plays a meaningful role in shaping an employee's attachment to her/his organization. Moreover, our results lend additional weight to claims from a small body of public administration scholars who have suggested individual actions are, first and foremost, predicated on employee fit (Bright, 2008; Steijn, 2008; Wright and Pandey, 2008).

In addition, the results of this study provide several practical lessons for public managers, specifically school principals. The results underscore the real need for principals to devote meaningful time and attention to establishing, communicating, and generating buy-in to the organization's mission. Simply, the merits of mission congruence practices—at least in the context of teacher turnover in the public schools examined here—appear to be contingent on two overarching factors. First, principals must establish a mission that is both clear and precise. Only when the mission is clear and specific will teachers understand and perceive value in it. Second, principals must communicate the mission to staff in ways that create some degree of internal organizational consistency. In other words, teachers must believe the mission is shared throughout a school and by other staff.

These practical lessons for public managers have possible financial implications as employee turnover can be costly for organizations. While it is difficult to accurately estimate the total, long-term costs of teacher turnover in public schools, existing evidence suggests the up-front financial costs (*e.g.*, replacement and training costs) associated with turnover are considerable. In fact, a study conducted by Barnes and colleagues (2007) suggests the average

cost to replace and train a single teacher in the Chicago area is $15,325. Another similar study estimates the cost of teacher turnover at $33,403 (Milanowski and Odden, 2007). Given experienced teachers possess skills that are less tangible and more difficult to easily quantify, it is likely these figures underestimate the true costs of teacher turnover for schools and students. Either way these estimates suggest that the loss of teachers is financially significant (Meier & Hicklin 2007; Park & Shaw 2013). To the extent that principals can apply the fundamental tenets of P-O fit in their schools to reduce the teacher turnover, current findings are particularly noteworthy.

Although we believe our findings are considerable, this study is not without limitations. First, employee turnover can be healthy and beneficial for an organization. In the context of education, dismissing teachers who are poor performers likely comes with significant long-term social and economic benefits for students and society. We are unable to determine whether turnover is healthy or harmful in this study. Second, for numerous reasons, our models are not able to control for all observable and unobservable teacher characteristics that likely impact teacher turnover. While our results are robust to alternative model specifications with and without controls, we caution readers that our results warrant only a descriptive interpretation of the relationship between mission congruence and employee turnover. Third, the relationship between employees' perceptions of mission congruence may be different when examined in other organizational and economic contexts. For example, we strategically selected to use the 2007-08 SASS over the 2010-11 SASS because we were concerned about the disruptions in the teacher labor market between 2010 through 2012 as a result of the Great Recession. The teacher labor market was initially buffered in the first few years of the Great Recession because the federal government invested funds into state governments and school districts via the American Recovery and Reinvestment Act (ARRA) funds (Dupor, 2015). However, teachers surveyed in

the 2007-08 SASS and 2008-09 TFS could still have been impacted by disruptions in non-teaching labor markets during this time period. Consequently, some effort should be made to validate our findings in other settings and contexts (e.g. non-economic crisis, other public sector settings, etc.). Lastly, the current study uses cross-sectional data on public school teachers. A cross-sectional dataset only allows us to observe turnover in one time period. Future research should utilize panel data on teachers in order to follow teachers' decisions to relocate to another school over several years.

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TABLE 1. Descriptive Statistics

	Mean	SD	Min	Max
Dependent Variable				
Stayer	0.86		0	1
Mover	0.07		0	1
Leaver	0.07		0	1

Independent Variable				
Mission Congruence Among Staff	0.87		0	1
Teacher Characteristics				
Non-Hispanic White	0.84		0	1
Non-Hispanic Black	0.08		0	1
Non-Hispanic Other Race	0.02		0	1
Hispanic	0.07		0	1
Female	0.77		0	1
Age	42.23	11.54	20	77
Total Teaching Experience	12.44	9.56	0	43
Experience in Current School	8.47	8.28	0	39
Less than Bachelor's Degree	0.01		0	1
Bachelor's Degree	0.47		0	1
Master's Degree	0.45		0	1
More than Master's Degree	0.07		0	1
Academic-Year Base Salary ($)	49,075.77	14,260.32	0	121,000
National Board Certified	0.17		0	1
Holds a State Certification	0.88		0	1
Most Competitive Undergraduate	0.01		0	1
Highly Competitive Undergraduate	0.06		0	1
Very Competitive Undergraduate	0.16		0	1
Competitive Undergraduate	0.46		0	1
Less Competitive Undergraduate	0.19		0	1
Non-Competitive Undergraduate	0.09		0	1
Special Undergraduate Institution	0.02		0	1
School Characteristics				
Principal Remained in School	0.79		0	1
Total Enrollment	838.24	626.10	25	5,300
Proportion of Black Students	0.18	0.24	0	1
Proportion of Hispanic Students	0.19	0.26	0	1
Proportion of Free and Reduced Lunch	0.44	0.29	0	1

TABLE 1 (Cont.) Descriptive Statistics

	Mean	SD	Min	Max
School Characteristics (Cont.)				
Located in Urban Area	0.27	0.44	0	1
Located in Suburban Area	0.53	0.51	0	1
Located in Rural Area	0.20	0.40	0	1
Student to Teacher Ratio	14.42	3.93	2.05	54.77
Prop. Limited English Proficiency	0.08	0.14	0	1

Teacher to Administration Ratio	23.94	8.59	2	104
Teacher Aid to Teacher Ratio	0.16	0.16	0	3
Principal is Black	0.12	0.32	0	1
Principal is Hispanic	0.07	0.24	0	1
Principal is Male	0.51	0.49	0	1
Principal's Base Salary ($)	91,102.19	718.15	30,000	200,000
Total Experience as Principal	7.45	6.47	0	44
Experience as Principal in School	4.30	4.84	0	37
Principal Holds a Doctorate	0.08	0.27	0	1
# of Teachers		2,600		
# of Schools		2,000		
# of Districts		1,600		
# of States		51		

Notes: Estimates adjusted using SASS probability weights. Sample sizes rounded due to NCES nondisclosure rules. Sample is restricted to full-time, regular public teachers who were surveyed in both the SASS and TFS surveys. Sample also excludes any teachers who indicated that they retired in the TFS. However, the results are robust if the sample includes teachers who indicated that they retired in the TFS.

TABLE 2. Mission Congruence and Teacher Turnover: Reported Average Partial Effects (APE) from Three Separate Logit Models

	Stayer	Mover	Leaver
	(1)	(2)	(3)
Row 1: No Controls and No FEs			
Mission Congruence Among Staff Indicator	0.079***	-0.031	-0.046**
	(0.028)	(0.023)	(0.021)

Row 2: All Controls and No FEs			
Mission Congruence Among Staff Indicator	0.080***	-0.021	-0.057***
	(0.028)	(0.023)	(0.021)
Row 3: All Controls and State FEs			
Mission Congruence Among Staff Indicator	0.078***	-0.020	-0.058***
	(0.028)	(0.022)	(0.020)
Row 4: All Controls and District FEs			
Mission Congruence Among Staff Indicator	0.109**	-0.014	-0.105*
	(0.056)	(0.066)	(0.061)

Notes: N= 2,600. FEs is the abbreviation for fixed effects. Each estimate of the mission congruence among staff indicator is from a separate regression of equation (1). All other control variables are included in the model in levels, but their APE are not reported in the interest of brevity. The other logit APE for the control variables from Row 4 are reported in Appendix A. Standard errors are clustered at the district-level, *** p<0.01, ** p<0.05, * p<0.1.

TABLE 3. Heterogeneity in Mission Congruence (MC) and Teacher Turnover: Reported APE from Logit Models

	Stayer	Mover	Leaver
	(1)	(2)	(3)
Mission Congruence Indicator (MC)	-0.152	-0.053	0.204*
	(0.169)	(0.127)	(0.121)
MC × Non-Hispanic Black Teacher	0.080	-0.040	-0.029
	(0.101)	(0.075)	(0.080)
MC × Other Race Teacher	0.043	-0.125	0.108
	(0.146)	(0.093)	(0.091)
MC × Hispanic Teacher	0.178	-0.090	-0.059

	(0.118)	(0.080)	(0.082)
MC × Female	-0.061	0.025	0.025
	(0.060)	(0.048)	(0.046)
MC × National Board Certified	0.160**	-0.017	-0.118**
	(0.072)	(0.061)	(0.053)
MC × Total Experience in Current School	-0.008	0.007	-0.001
	(0.009)	(0.007)	(0.005)
MC × Total Teaching Experience	0.009	-0.002	-0.003
	(0.007)	(0.005)	(0.004)
MC × Master's Degree	-0.003	-0.012	0.006
	(0.064)	(0.053)	(0.047)
MC × More than Master's Degree	0.065	-0.024	-0.015
	(0.133)	(0.100)	(0.077)
MC × Total School Enrollment	0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
MC × Proportion of Free and Reduced Lunch	0.110	-0.011	-0.077
	(0.113)	(0.093)	(0.079)
MC × Prop of Limited English Proficiency	-0.189	0.044	0.106
	(0.220)	(0.164)	(0.142)
MC × Teacher to Administration Ratio	0.002	-0.004	0.001
	(0.004)	(0.003)	(0.003)
MC × Student to Teacher Ratio	0.004	0.011	-0.015**
	(0.008)	(0.007)	(0.006)
Pseudo R^2	0.05	0.05	0.04
Joint Significance of Interactions (F-stat)	17.67	10.66	19.70
p-value	(0.22)	(0.71)	(0.14)

Notes: N=2,600. Standard errors are robust to clustering at the district level. All regressions include district fixed effects and all of the control variables. The variables interacted with mission congruence indicator (MC) and all other control variables are included in the model in levels, but these coefficients are not reported in the interest of brevity. The results are qualitatively when the interactions are added to the baseline model one at a time. *** p<0.01, ** p<0.05, * p<0.1.

APPENDIX A.1 Full Results Row 4 from Table 2, Logit Average Partial Effects (APE)

	Stayer	Mover	Leaver
	(1)	(2)	(3)
Independent Variable			
Mission Congruence Among Staff Indicator	0.109**	-0.014	-0.105*
	(0.056)	(0.066)	(0.061)
Teacher Characteristics			
Non-Hispanic White		omitted	
Non-Hispanic Black	-0.069	0.090	-0.008
	(0.075)	(0.091)	(0.084)
Non-Hispanic Other Race	-0.357***	0.320***	0.179*

	(0.103)	(0.096)	(0.104)
Hispanic	0.035	-0.114	0.034
	(0.086)	(0.102)	(0.083)
Female	0.005	0.005	0.032
	(0.047)	(0.056)	(0.053)
Age	0.001	-0.003	0.001
	(0.002)	(0.003)	(0.003)
Total Teaching Experience	-0.012**	0.003	0.011**
	(0.005)	(0.006)	(0.005)
Experience in Current School	0.012**	-0.012	-0.004
	(0.005)	(0.007)	(0.005)
Less than Bachelor's Degree	0.114	.	-0.008
	(0.195)	.	(0.084)
Bachelor's Degree		omitted	
Master's Degree	-0.035	0.003	0.057
	(0.055)	(0.062)	(0.052)
More than Master's Degree	-0.240**	-0.060	0.247**
	(0.116)	(0.122)	(0.104)
Academic-Year Base Salary ($)	-0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)
National Board Certified	0.002	-0.057	0.046
	(0.057)	(0.069)	(0.062)
Holds a State Certification	-0.141***	0.140**	0.067
	(0.047)	(0.056)	(0.059)
Most Competitive Undergraduate	0.096	-0.023	-0.071
	(0.191)	(0.224)	(0.192)
Highly Competitive Undergraduate	-0.018	-0.129	0.140
	(0.142)	(0.145)	(0.137)
Very Competitive Undergraduate	0.072	0.023	-0.102
	(0.120)	(0.118)	(0.115)
Competitive Undergraduate		omitted	

APPENDIX A.1 (Cont.). Full Regressions from Table 3

	Stayer (1)	Mover (2)	Leaver (3)
Teacher Characteristics			
Less Competitive Undergraduate	0.167	-0.124	-0.094
	(0.118)	(0.124)	(0.115)
Non Competitive Undergraduate	0.166	0.034	-0.256*
	(0.138)	(0.149)	(0.137)
Special Undergraduate	0.205	-0.010	-0.240
	(0.173)	(0.174)	(0.164)
School Characteristics			
Total Enrollment	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)
Proportion of Black Students	-0.107	-0.186	0.380*

	(0.183)	(0.206)	(0.228)
Proportion of Hispanic Students	-0.193	0.002	0.383
	(0.220)	(0.247)	(0.244)
Proportion of Free and Reduced Lunch	-0.218	0.316*	0.052
	(0.158)	(0.171)	(0.153)
Located in Urban Area	-0.028	0.060	0.001
	(0.087)	(0.115)	(0.089)
Located in Suburban Area		omitted	
Located in Rural Area	-5.687***	0.343**	0.583*
	(0.436)	(0.173)	(0.316)
Student to Teacher Ratio	0.005	-0.004	-0.013
	(0.010)	(0.011)	(0.012)
Prop. Limited English Proficiency	0.175	0.106	-0.449*
	(0.250)	(0.271)	(0.250)
Teacher to Administration Ratio	0.002	-0.013**	0.005
	(0.004)	(0.005)	(0.004)
Teacher Aid to Teacher Ratio	0.020	-0.030	-0.043
	(0.113)	(0.124)	(0.180)
Principal is Black	-0.042	0.092	-0.016
	(0.091)	(0.082)	(0.099)
Principal is Hispanic	-0.037	0.127	-0.057
	(0.097)	(0.113)	(0.096)
Principal is Male	0.080	-0.054	-0.022
	(0.052)	(0.056)	(0.063)
Principal's Base Salary ($)	0.000	-0.000	-0.000*
	(0.000)	(0.000)	(0.000)
Total Experience as Principal	-0.007	0.005	0.005
	(0.005)	(0.005)	(0.005)

APPENDIX A.1 Full Regressions from Table 3

	Stayer	Mover	Leaver
	(1)	(2)	(3)
School Characteristics			
Experience as Principal in School	0.010	-0.015*	0.001
	(0.007)	(0.008)	(0.007)
Principal Holds a Doctorate	0.101	-0.090	-0.039
	(0.092)	(0.101)	(0.099)
Adjusted R^2	0.06	0.05	0.05

Notes: N= 2,600. FEs is the abbreviation for fixed effects. Standard errors are clustered at the district-level, *** p<0.01, ** p<0.05, * p<0.1.

APPENDIX A.2 Reported Average Partial Effects (APE) Using Alternative Estimators and Models

	Stayer	Mover	Leaver
	(1)	(2)	(3)
Row 1: Logit Models			
Mission Congruence Among Staff Indicator	0.078***	-0.020	-0.058***
	(0.028)	(0.022)	(0.020)
Row 2: Linear Probability Models (LPMs)			
Mission Congruence Among Staff Indicator	0.080***	-0.019	-0.061**
	(0.030)	(0.024)	(0.024)
Row 3: Probit Models			
Mission Congruence Among Staff Indicator	0.078***	-0.018	-0.057***
	(0.028)	(0.022)	(0.021)
Row 4: Multinomial Logit Models (MNLs)			

Mission Congruence Among Staff Indicator	0.079***	-0.020	-0.059***
	(0.028)	(0.022)	(0.020)

Notes: N= 2,600. Each APE of the mission congruence indicator is from a separate regression of equation (1). All models include all controls and state fixed effects. Row 1 is the exact results from Row 3 in Table 2. The remaining rows are analogous regressions using a different model/estimator. Standard errors are clustered at the district-level, *** p<0.01, ** p<0.05, * p<0.1.