

Is This Work Sustainable? Teacher Turnover and Perceptions of Workload in Charter Management Organizations

Urban Education
2016, Vol. 51(8) 891–914
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sagepub.com/journalsPermissions.nav
DOI: 10.1177/0042085914549367
uex.sagepub.com


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Abstract

An unsustainable workload is considered the primary cause of teacher turnover at Charter Management Organizations (CMOs), yet most reports provide anecdotal evidence to support this claim. This study uses 2010–2011 survey data from one large CMO and finds that teachers' perceptions of workload are significantly associated with decisions to leave across schools and teachers. About 1 out of 3 teachers who rated their workload “unmanageable” left their school compared with 1 in 10 who did not rate their workload unmanageable. However, controlling for perceptions of leadership and professional growth, workload was no longer associated with turnover. Accounting for measures of working conditions across schools and teachers, perceptions of the CMO's student disciplinary systems were the only significant predictor of turnover.

Keywords

charter school, urban education, charter management organizations, teacher turnover, working conditions, teacher workload, leadership

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Introduction

Charter Management Organizations (CMOs), defined as non-profit organizations that manage multiple charter schools with a home office offering centralized support, now operate about one third of all charters in the country, and many are receiving considerable public and philanthropic money to replicate high-achieving education models for low-income students (Farrell, Wohlstetter, & Smith, 2012). CMOs are concentrated in urban areas: According to a national study on CMO schools, they serve larger percentages of Black and Hispanic students (91% vs. 76%) and students who qualify for free or reduced-price lunches (71% vs. 64%) compared with other schools in their districts (Furgeson et al., 2011). Similar to the broader charter school sector, there is substantial variability and heterogeneity across CMO schools in terms of their practices and effectiveness (Scott & DiMartino, 2011; Wohlstetter, Smith, & Farrell, 2013; J. L. Woodworth & Raymond, 2013). However, CMOs that are achieving significant academic success with low-income students of color receive special attention because some see them as a successful and replicable school model that can be scaled up within the charter sector (Fabricant & Fine, 2012; Fryer, 2011; Whitman, 2008; Wilson, 2009; J. L. Woodworth & Raymond, 2013).

Some characteristics of CMO charter schools that are associated with higher than average academic achievement for urban, low-income students are longer school days and school years, a culture of high expectations for teachers and students, frequent teacher observation/coaching, and school-wide disciplinary systems (e.g., merits/demerits or “paycheck” systems) to reward or punish specific student behaviors that must be frequently enforced and monitored by teachers (Angrist, Pathak, & Walters, 2011; Fryer, 2011; Lake et al., 2012; Merseth, 2009; Tuttle et al., 2013; Whitman, 2008; Wilson, 2009). Although expectations for teachers and students can promote school effectiveness, they may also contribute to teacher burnout in the CMO sector (Brill, 2011; Lake, Dusseault, Bowen, Demeritt, & Hill, 2010; K. R. Woodworth, David, Guha, Wang, & Lopez-Torkos, 2008). To date, there is very little empirical data to test to what extent teacher burnout is associated with turnover in CMOs, especially after taking into account differences between schools, teachers, and perceptions of working conditions in CMOs. The literature on teacher turnover consistently finds that working conditions, particularly perceptions of leadership, are among the strongest predictors of teacher retention and turnover across various teachers and schools (Boyd et al., 2011; Ingersoll, 2001; Johnson, Kraft, & Papay, 2012; W. H. Marinell & Coca, 2013). Therefore, the extent to which one’s workload is associated with turnover should simultaneously consider teachers’ perceptions of their

school environments and leaders. This study accounts for these perceptions to take a more nuanced look at the workload effect using 2010-2011 survey data from one large CMO operating over 25 schools in the United States.

Despite widespread support for CMOs to scale up existing schools and disseminate best practices, there is very little research examining the ability of these organizations to functionally grow (Farrell et al., 2012). Recently, researchers have noted that studies of human capital in CMO settings can help determine how sustainable CMOs are as a “long-term solution” (Wohlstetter et al., 2013, p. 134). CMO leaders themselves express concerns over being able to recruit and develop enough high-quality teachers and leaders while retaining effective ones (Furgeson et al., 2011; Wilson, 2009). Other reports indicate that some CMOs have an inadequate pipeline of school leaders and face a looming shortage of willing and able teachers on the horizon (Hassel, Hassel, & Ableidinger, 2011), which is contributing to a decrease in their rate of growth since 2009 (Furgeson et al., 2011). CMOs are partnering with organizations like *Teach for America* (TFA) to increase teacher and leader supply (Chadwick & Kowal, 2011), but teacher turnover is an equally important and poorly understood barrier to the growth and quality of CMO schools.

Some have questioned whether teacher turnover is a problem specifically for charter schools that have systems and policies that may help them deal with high turnover (Lake, 2007). For example, Merseeth (2009) illustrated how some high-performing charter schools approach the issue of teacher turnover and retention differently. Administrators at Roxbury Prep and MATCH charter schools, two high-performing schools in Boston, “indicate that teacher turnover is not necessarily a problem they feel they need to remedy” (p. 160). Instead, they accept turnover of even their best teachers as a given, carefully systematize their curricula to support new staff, and place remaining veteran teachers in key positions. Other schools prioritized teacher retention and took actions to keep their best teachers because, as one administrator put it, “there is something lost in the school culture, in the quality of the curriculum” (p. 161).

Regardless of each school’s approach to teacher retention, many CMOs have difficulty finding teacher candidates because of their highly defined standards for hiring. For instance, school leaders in Merseeth’s (2009) study screened for candidates with “youthful energy,” and high initial alignment to the school’s mission, policies, and goals (Merseeth, 2009, pp. 155-156). A recent *Mathematica* study showed that 86% of middle school principals in more than 20 Knowledge is Power Program (KIPP) schools reported teacher vacancies being difficult to fill—citing insufficient qualifications, candidates not being a good fit for the school culture or goals, and vacancies in

high-need areas (Tuttle et al., 2013). Such specificity facilitates success in implementing the vision of school leadership or an organization, but narrows the pool of potential candidates (DeArmond, Gross, Bowen, Demeritt, & Lake, 2012). A narrow definition of teacher–organization fit limits the supply of desirable teacher candidates and can exacerbate the problem of turnover because of the difficulty of replacing a departing teacher. So although the mentality toward turnover illustrated by Merseth at MATCH and Roxbury Prep might be an acceptable or functional approach for individual schools, it may be far less sustainable in the context of growing CMOs that can struggle to recruit, hire, and develop enough willing and able staff in new *and* existing schools. In preliminary case studies, Robin Lake and colleagues (2010) found that CMOs that are seeding new schools with experienced staff from other schools in the network can “struggle to maintain quality in the older schools that lose staff” (p. 55). High teacher turnover in this context puts a strain on the ability of the CMO to “scale up,” or grow while staffing multiple schools with high-quality people. In this context, it is critical to measure the degree to which teachers are burning out because of a heavy workload and whether this effect can be mediated. Examining this could help CMOs find solutions to keeping more of their teachers without compromising their organizational cultures.

The next section briefly reviews the role of working conditions (particularly teachers’ perceptions of school leadership) in predicting turnover and makes the case for including perceptions of workload as a key working condition in CMOs.

Literature Review

Teacher Turnover and Perceptions of Leadership

Hiring and retaining high-quality teaching staff for urban schools serving low-income students of color continues to be a massive challenge (Ingersoll & Merrill, 2012). These schools experience higher than average teacher turnover and are most frequently assigned the least experienced, least effective teachers (Allensworth, Ponisciak, & Mazzeo, 2009; Borman & Dowling, 2008; Ingersoll, 2001; W. H. Marinell & Coca, 2013; Ronfeldt, Loeb, & Wyckoff, 2013; Sanders & Rivers, 1996). Moreover, between 1998 and 2008, teacher turnover in high-poverty, high-minority, urban schools has increased by 41% (Ingersoll & Merrill, 2012).

Recent studies offer significant and rigorous evidence that a school’s working conditions can have a profound influence on teacher turnover regardless of school type or student demographics (Allensworth et al.,

2009; Boyd et al., 2011; Johnson et al., 2012; Ladd, 2011; W. H. Marinell & Coca, 2013). Perceptions of principal support and leadership are among the strongest, most significant predictors of teacher stability and turnover (Allensworth et al., 2009; Boyd et al., 2011; Johnson et al., 2012; Ladd, 2011; W. H. Marinell & Coca, 2013). For example, studies by Ladd (2011) and Boyd and colleagues (2011) found that, controlling for student composition and various measures of working conditions and school climate, perceptions of leadership and administrative support are the strongest predictors of intentions to leave and turnover for experienced and novice teachers. As school leadership has such a strong and mediating effect on teachers' decisions to leave, it is important to account for these perceptions in an assessment of the effect of workload on teachers' decisions to leave CMO schools.

Teacher Turnover and Workload in CMOs

Multi-year averages show that teacher turnover in charter schools is around 20% to 25% nationally and in various state contexts (Gross & DeArmond, 2010; Miron & Applegate, 2007; Silverman, 2012, 2013; Stuit & Smith, 2010), which is about twice as high as the national average at traditional urban public schools (Stuit & Smith, 2010). Available data show similar turnover rates in CMO schools. Average CMO turnover rates were around 20% for the 17 CMO schools funded by the New Schools Venture Fund, and some leaders reported 35% annual turnover rates (Furgeson et al., 2011). Twenty-seven percent of teachers in KIPP schools nationwide left their classroom teaching position in 2010-2011 (KIPP Foundation, 2012) and 32% did in the 2011-2012 school year (KIPP Foundation, 2013). While these reports and studies are important to describing and understanding charter school teacher turnover, there is wide variation between different *types* of charter schools in terms of student achievement (Hoxby, Murarka, & Kang, 2009; Woodworth & Raymond, 2013), characteristics of students and teachers, their mission and purpose, expectations for teachers, and organizational factors such as the length of the school day (Fryer, 2011). These differences can result in variation of teacher turnover rates and reasons for leaving. For example, Stuit and Smith (2010) find that conversion charter schools, or charters that are converted from traditional public schools to charter schools, have lower odds of teachers leaving compared with other types of charter schools, likely because of differences in personnel policies (i.e., the types of teachers they are able to hire when they convert to charter status, or differences in unionization). Other studies have attributed some charter school teacher turnover to a lack of job security (Gross & DeArmond, 2010; Miron & Applegate, 2007) which could

be a reflection of differences in the types of teachers in their sample and not as relevant for younger teachers who may have different expectations about their own job security or teaching as a career (Johnson & The Project on the Next Generation of Teachers, 2004). CMOs have been described and assessed for their impact on student achievement (Furgeson et al., 2011; J. L. Woodworth & Raymond, 2013), but their practices and characteristics have not been empirically linked to teacher turnover. Because of potential differences between CMOs and other charters as well as the growth, size, and calls for replication that characterize the CMO sector (Fabricant & Fine, 2012; Farrell et al., 2012), it is increasingly important to examine these outcomes within it.

Teachers across all kinds of charter schools report higher workloads than teachers in traditional public schools. Ni (2012) used 2003-2004 *Schools and Staffing Survey* (SASS) data to show that charter and traditional public school teachers compared through matched schools with similar characteristics (e.g., location, student demographics) perceive their working conditions to be similar in many regards, but charter school teachers reported workloads about one fifth of a standard deviation higher than that in traditional public schools. Expectations for teachers' work may be especially high in CMO models that rely heavily on young, energetic teachers who often work 60 to 80 hours a week, which can lead to "an intensity of work effort that *could* [emphasis added] translate to teacher burnout and high turnover rates" (Lake et al., 2010, p. 58). Other reports show that "burnout" is the most frequently cited example teachers give for leaving certain KIPP charter schools (K. R. Woodworth et al., 2008) and newer charter schools (Vasudeva & Grutzik, 2002) due to the intensity of effort and amount of time teachers must put into their jobs. One study found an association between teachers' working hours and the likelihood of turnover across school types. Stuit and Smith (2010) found that the odds of teachers who worked more than 60 hours a week leaving are 1.6 times greater compared with teachers who worked fewer than 60 hours a week after accounting for a variety of teacher characteristics, school characteristics, and organizational conditions. In theory (and up to a certain threshold of hours), the number of hours a teacher works could be less important than their *perception* of that work. For instance, an organizationally committed teacher could feel deeply engaged working more than 60 hr a week. This could be true for some CMO teachers who go through intensive hiring processes, know what is expected of them, and are a good fit for their organization or school. As perceptions influence the likelihood of leaving, examining how teachers perceive their workload is as important as accounting for the number of hours they work.

Data Sources

This study uses de-identified mid-year survey data from school year 2010-2011 administered anonymously by a CMO central office to about 25 of their schools.¹ The CMO used the data formatively to help principals understand and improve working conditions for staff and wanted a more in-depth analysis of the relationship between working conditions and turnover across their schools. Because of a self-identified culture of high expectations and long working hours required to create successful, college preparatory schools for low-income children of color, they were especially interested in looking at how teachers perceived their workload and how this perception influenced turnover.

Mid-year survey data were paired by the organization with each teacher's decision to stay at or leave their classroom teaching position at the end of the year as well as available teacher and school characteristics. The survey was completed by 78% of all teachers at the CMO ($n = 398$). All of the schools had some missing survey data, with relatively similar distributions of missing data and percentages of leavers across schools. As one check against non-response bias, the voluntary turnover rates of responders were compared with the voluntary turnover rates of non-responders. The turnover rate of teachers who responded voluntarily (13%) is equivalent to the voluntary turnover rate of teachers who did not respond (13%), showing that teachers who did not complete the survey did not differ in terms of the outcome variable.

Involuntary leavers ($n = 15$) were omitted from the analysis. Although involuntary leavers are clearly important to consider in terms of assessing the overall costs of turnover, the purpose of this study is to identify patterns regarding why teachers *voluntarily* leave their classroom teaching positions, and how workload is related to that decision. Involuntary leavers could also be more satisfied with their jobs than voluntary leavers, thus obscuring my ability to understand why teachers chose to leave. Therefore, a dichotomous variable was created with "stayers" in one group ($= 0$) and "leavers" in the other ($= 1$), excluding involuntary leavers. For the purpose of the analysis, I considered leavers to be teachers who voluntarily left and no longer work at the CMO.

Workload and voluntary turnover were represented as dichotomous variables in the analysis, and responses to survey questions were used to create measures of organizational conditions (see Table A1 in the appendix for full definition of measures). An exploratory factor analysis was conducted to identify empirically the underlying relationships between questions in the survey, to reduce the number of variables in the regression models, and to eliminate the potential for multicollinearity. Principal axis factoring (PAF)

extraction followed by varimax rotation clarified and further defined the set of constructs relevant to organizational conditions. The three resulting factors produced good internal-consistency reliability (Cronbach's alpha; $\alpha > .80$), indicating that each composite is a good representation of a single underlying construct. They are defined as follows:

1. **Principal communication and support:** The extent to which principals effectively communicate expectations, encourage and provide opportunities for teachers' professional growth and development, and build relationships with teachers through trust and praise ($\alpha = .84$).
2. **Professional development:** The extent to which teachers feel that summer and school year professional development helps them improve student achievement ($\alpha = .84$).
3. **Perception of principal leadership:** The extent to which teachers feel that their principal is an inspiring, caring, and "urgent" leader ($\alpha = .80$).

Finally, one survey item was used to represent teachers' perceptions of their school's discipline system. This item was the fourth measure of organizational conditions used in the analysis.

Although the impact of perceptions of leadership on turnover was discussed in an earlier section, discipline and professional development are also important. Perceptions of students' behavior and schoolwide discipline are known predictors of teacher turnover across kinds of schools (Ingersoll, 2001; Johnson, Berg, & Donaldson, 2005), and many CMO models often prescribe schoolwide behavior policies and systems that all teachers in a school are responsible for implementing (Lake et al., 2010; Whitman, 2008; K. R. Woodworth et al., 2008). Teacher coaching and professional development systems are strongly associated with student achievement in CMOs and can help facilitate teachers' sense of success with students (Lake et al., 2012; Tuttle et al., 2013), which in turn, can reduce teacher turnover (Johnson & The Project on the Next Generation of Teachers, 2004). Thus, these measures of working conditions are associated with teacher retention and important to assess in a CMO context.

In the regression models, I include control variables for the number of years of teaching experience at the organization as this generation of teachers often re-evaluates their career choices and many leave teaching after 2 or 3 years (Huberman, 1993; Johnson & The Project on the Next Generation of Teachers, 2004). This is especially true in charter schools and CMOs (Rich, 2013). Because of this and the fact that 71% of respondents were in their first or second year teaching at the CMO, I compared groups based on whether

they were in their first year, second year, or third year or more teaching at the organization (see the appendix, Table A1). I also included school characteristics found to be associated with teacher turnover generally, such as school type (middle/high vs. elementary). For instance, middle school teachers are much more likely to leave their jobs than elementary teachers (W. Marinell, 2011; W. H. Marinell & Coca, 2013). In addition, the age of a charter school is associated with turnover. Teachers in newer charter schools tend to show high levels of commitment and engagement in starting a new school, but this engagement is often offset by the need to take on many additional responsibilities outside of teaching to help start and build a newer school compared with schools that are older and may have more stability in their policies and practices (Malloy & Wohlstetter, 2003; Vasudeva & Grutzik, 2002).

Empirical Analysis

The analysis is divided into two stages. First, voluntary turnover rates and differences between stayers and leavers in ratings of organizational conditions are reported. Second, an exploratory logistic regression analysis is conducted that examines the relationships between available teacher characteristics, school characteristics, and organizational conditions on the dependent variable: teachers' decisions to stay in or leave their teaching position at the end of the year. Three models cumulatively examine groups of predictors of turnover. As workload is the variable of most interest, it is included in every model, with control variables added in successive models. The first model examines teacher experience and workload, the second model adds school characteristics, and the third adds organizational conditions. Similar to the approach used by Ingersoll (2001), inferences can be drawn according to changes in the statistical significance of variables in each subsequent regression model.

The logistic regression models that included ratings of organizational conditions used Likert-type scale questions and I treated them as continuous measures in the analysis. To boost confidence in the results, I did the same analyses but created dummy variables to represent *not agreeing* (0) and *agreeing* (1) with the four organizational measures. The results were roughly similar in magnitude and the same in terms of statistical significance.

This study is not able nor does it attempt to provide a comprehensive analysis of the many possible factors that affect the turnover of these or other CMO teachers. Relationships found between turnover and school or organizational characteristics could be a result of other unobserved factors not included in the analysis. Despite these limitations, the analysis and discussion provide needed data to determine how workload affects turnover after accounting for different types of CMO schools, teachers, and ratings of organizational conditions.

Results

The voluntary turnover rate for all teachers at the CMO was 13% ($n = 50$) for teachers who responded to the survey. This rate is lower than charter school turnover averages reported in other studies. However, 44% of survey respondents were new to the organization in that school year, which suggests a far higher rate of turnover the previous year (see Table A2 in the appendix for additional teacher/school characteristics and workload rating distributions). Table 1 shows that the overall mean response ratings of organizational conditions were high, averaging over 4.0 (equal to an “agree” rating on the survey) for each item or factor. Mean differences between leavers and stayers were most notable in ratings of discipline systems and professional growth, with teachers rating these organizational conditions lower on average compared with other questions. These questions also had a greater degree of variability compared with ratings of principal leadership, communication, and support.

Table 2 contains odds ratios for four logistic regression models, followed by a brief interpretation and discussion. Effects of each explanatory variable were compared relative to an omitted group. For example, effects on turnover of being in a school with a second-year principal were compared with those of a first-year principal (the omitted group). Similarly, teachers in schools with third-year principals were compared with teachers in schools with first-year principals. The first-year principal comparison group was chosen because newer principals, particularly in charter schools, are known to struggle balancing the instructional and operational demands of their new jobs compared with more experienced principals (Gross, 2011). Teachers in their third year or more teaching (the omitted group) were compared with teachers finishing their second year, and with teachers finishing their first year. The effects of dichotomous variables (workload, school type, school age) are compared against the case where the variable is 0. For example, workload is unmanageable which appears labeled on the left-hand side of the table (= 1) is compared with workload is not unmanageable (= 0). To interpret this with an example, in Model 1, if a teacher rated their workload unmanageable, the odds of leaving are 370% (odds ratio = 3.7) greater compared with teachers who did not rate their workload unmanageable. This result can also be inverted ($1/3.7 = 0.27$) to show the odds of leaving are 27% less likely for teachers who did not rate their workload unmanageable compared with those who did.

Workload was associated with turnover across 3 of 4 models. A supplementary descriptive analysis showed that 30% of teachers who rated their workload unmanageable (14% of all respondents) left at the end of the year compared with 1 in 10 leaving who did not rate their workload unmanageable. Model 1 shows that when workload is assessed independently, the odds

Table 1. Mean Comparisons of Organizational Conditions by Turnover Status.

| Variables | Overall <i>M</i> | <i>M</i> by turnover status | |
|---------------------------------|------------------|-----------------------------|---------|
| | | Stayers | Leavers |
| Principal communication/support | | | |
| <i>M</i> (1-5 range) | 4.40 | 4.45** | 4.08** |
| <i>SD</i> | 0.65 | 0.62 | 0.76 |
| <i>n</i> | 386 | 336 | 50 |
| Discipline systems | | | |
| <i>M</i> (1-5 range) | 4.02 | 4.1** | 3.4** |
| <i>SD</i> | 1.04 | 0.98 | 1.22 |
| <i>n</i> | 384 | 335 | 49 |
| Professional growth | | | |
| <i>M</i> (1-5 range) | 4.04 | 4.11** | 3.63** |
| <i>SD</i> | 0.88 | 0.84 | 1.07 |
| <i>n</i> | 367 | 318 | 48 |
| Principal leadership | | | |
| <i>M</i> (1-5 range) | 4.43 | 4.47** | 4.2** |
| <i>SD</i> | 0.69 | 0.7 | 0.7 |
| <i>n</i> | 386 | 336 | 50 |

* $p < .05$. ** $p < .01$. (based on *t* tests)

of leaving for teachers who rated their workload “unmanageable” were 3.7 greater compared with those who did not. There was little change when teacher experience was added in Model 2, showing that workload matters to turnover across all levels of experience. This indicates that workload did not have a stronger influence on turnover of newer teachers as compared with more experienced teachers. Equal proportions (14%) rated their workload unmanageable across experience groups. Controlling for differences in school type, principal experience, and a school’s age in Model 3, the effect of workload on turnover diminished (odds ratio = 2.9) but was still statistically significant. Model 4 shows that once teacher perceptions of organizational conditions are added, workload is no longer statistically significant. When teachers’ perceptions of principal support/communication was combined with their perception of professional development, workload no longer held significance (odds ratio = 1.8). With all other combinations that did not include both of these variables in the model, workload remained statistically significant ($p < 0.1$; odds ratio = 2.4). There are two potential interpretations. One interpretation is that when perceptions of support and professional growth/development are considered, a teacher’s career decision is less likely

Table 2. Logistic Regression Models With Turnover as Dependent Variable.

| | Odds ratios for teacher turnover models | | | |
|-----------------------------------|---|--|---|---------------------------------|
| | Model 1: Workload only | Model 2: Teacher characteristics | Model 3: Teacher school characteristics | Model 4: All variables |
| | Odds ratio (<i>n</i> = 386) | Odds ratio (<i>n</i> = 386) | Odds ratio (<i>n</i> = 386) | Odds ratio (<i>n</i> = 365) |
| Workload | | | | |
| Workload is unmanageable | 3.7** | 3.8** | 2.9** | 1.8 |
| Teacher characteristics | | | | |
| First-year teaching ^a | — | 0.39** | 0.21** | 0.23** |
| Second-year teaching ^a | — | 0.73 | 1.1 | 0.87 |
| School characteristics | | | | |
| Principal Year 2 ^b | — | — | 0.34* | 0.42* |
| Principal Year 3+ ^b | — | — | 0.47 | 0.48 |
| Middle school | — | — | 0.52* | 0.47* |
| Newer school (1-4 years) | — | — | 0.37** | 0.29** |
| Working conditions | | | | |
| Principal support | — | — | — | 0.72 |
| Professional growth | — | — | — | 0.87 |
| Discipline systems | — | — | — | 0.72* |
| Principal leadership | — | — | — | 1.0 |

^aCompared with teachers in third year or more at the organization.

^bCompared with teachers in schools with principals in first year.

p* < .05. *p* < .01.

to be influenced by their perception of the workload. Said simply, teachers who cite a heavy workload may be more likely to stay so long as they perceive these working conditions favorably. A second interpretation is that a teacher's perception of their workload is accounted for within their feeling of how their principal supports them and manages the school. Extensive research on working conditions in schools (Johnson, 2006) and burnout in various professions suggests that effective leadership and job engagement moderate turnover and various types of burnout (Maslach, Schaufeli, & Leiter, 2001), which lends credibility to the first interpretation.

Across models, teachers in their first year at the organization are consistently less likely to leave compared with teachers who are in their third year or more at the organization. The odds of teachers in their third year leaving are between 2.5

and 4.75 times greater than for teachers in their first year at the organization. Teacher experience is even more important to explaining turnover after accounting for measured school characteristics and working conditions, as shown by the odds ratios in Models 3 and 4. Teachers in these schools may be more likely to leave regardless of working conditions because they have fulfilled a TFA commitment or because of an increase in desirable career opportunities (Wilson, 2009). Teachers with higher academic ability may have better opportunities which makes them more likely to leave than their peers with less experience (Hanushek, Kain, & Rivkin, 2004; Johnson et al., 2005). At the same time, high-performing urban charter schools tend to have higher proportions of academically talented teachers compared to traditional public schools (Wilson, 2009).

The odds of teachers deciding to leave a school where a principal is in their first year are between 2.4 and 3 times greater compared with teachers in schools with a principal in their second year in Models 3 and 4. Twenty percent of all teachers who responded were in a school with a first-year principal but that has been open for 3 or more years. This could be the result of a mismatch between the new principal and teachers hired by the previous principal. More research is needed to determine whether this is the case.

The odds of elementary school teachers leaving are 1.9 to 2.1 times greater compared with middle and high school teachers. Most research on middle school teacher turnover shows the opposite result (W. Marinell, 2011). For example, middle and charter high schools in Los Angeles Unified School District lost 45% of their teachers in the 2007-2008 school year (Newton, Rivero, Fuller, & Dauter, 2011), which was a much higher rate than elementary charter teachers and all other teachers. One reason may be because elementary teachers perceive their workload as more unmanageable. On average, 18.4% of elementary teachers rated their workload "consistently unmanageable" compared with just 11.4% of middle/high school teachers. A chi-square test indicated a significant difference between the groups: $\chi^2(1) = 3.85, p = .036$. Although differences in turnover and workload between elementary and middle/high school teachers in this sample cannot necessarily be attributed to greater job responsibilities, this finding merits additional research and discussion.

Model 4 shows that the odds of teachers in newer schools (open for 1-4 years) leaving are 3.4 times greater than for teachers at older schools (open 5 or more years). This is consistent with research on small, new charter schools. Vasudeva and Grutzik (2002) interviewed teachers at newer charter schools, who cited enjoying the size and intimacy of their small charter schools, the shared "esprit de corps" of working with like-minded colleagues, and the excitement of building a growing school. This came with a tradeoff, however, as one teacher in their study reported, "having a small staff that has a lot to say is really wonderful, and it's overwhelming sometimes because there is so

much that we all need to do above and beyond our teaching” (p. 168). Teachers at newer charter schools who begin with a sense of idealism may become burnt out or feel a diminished sense of efficacy (K. R. Woodworth et al., 2008), especially if their school or personal performance is not living up to their initial expectations (Miron & Applegate, 2007).

The only organizational condition that had an association with turnover was teachers’ perceptions of school discipline systems; although this may be because two factors measure aspects of leadership and other variables likely capture leadership effects (i.e., principal experience). Every one-unit increase on the scale of the school discipline system question ($M = 4.01$; $SD = 1.04$) is associated with a 38% decrease in the odds of teachers leaving. This finding and the standard deviation of the discipline measure suggest that teachers’ perceptions of student discipline at their schools vary substantially and are relevant to teachers’ career decisions at these CMO schools. Certain disciplinary policies (i.e., student behavior contracts, behavior management systems) are becoming more prevalent and prescriptive in CMOs (Furgeson et al., 2011) and are common features of many CMO schools (Dobbie & Fryer, 2011; Lake et al., 2012; Tuttle et al., 2013). Others have noted that these systems can be very difficult to successfully and consistently execute. KIPP schools in San Francisco that struggled to adapt discipline systems involving explicit rewards and consequences (i.e., “paychecks” or merits/demerits to reinforce desired behavior) also had a more negative school atmosphere and lower staff satisfaction (K. R. Woodworth et al., 2008). Prescriptive policies related to the socialization of students need consistent implementation and buy-in from all staff to succeed, and these policies have the strongest relationship with high conflict across school types (Ingersoll, 2003). Teachers who have difficulty managing student behavior with these systems or who simply do not believe they are appropriate for students might become disillusioned with the school or organization’s mission and their own ability to make an impact with students. The significant association between turnover and teachers’ perceptions of discipline systems across schools and teachers in this study adds empirical evidence to the debate about comprehensive schoolwide disciplinary systems in CMOs. Recent studies indicate that these comprehensive schoolwide disciplinary systems are critical predictors of student achievement (Lake et al., 2012; Tuttle et al., 2013). This study shows that the way they are implemented and understood by teachers are also important predictors of teacher retention and turnover.

Discussion

The trends observed in this CMO raise important questions about turnover, the role of workload, and other issues related to the functional growth (i.e., “scale”) of the CMO sector. This discussion focuses on policy implications,

directions for future research, and ideas about how the analysis informs literature and discussions surrounding CMO teachers, turnover, and growth.

The analysis adds empirical evidence to the discussion about teachers' workload in CMOs. One conversation posits that the number of hours teachers work leads to exhaustion and burnout (Lake et al., 2010). The intensity of the work has caused some to question the sustainability of the job and by extension, the ability of CMOs to scale up (Brill, 2011). This study supports the idea that workload is a strong predictor of teacher turnover, though some of this effect can be alleviated when teachers perceive working conditions and school leadership to be strong. This idea has important implications for how CMOs should think about supporting, developing, and retaining their best teachers. Some principals have focused on actually reducing teachers' overall workload and responsibilities. Gabor (2012) described how Joe Negron, a KIPP principal, confronted the issue of teacher burnout head-on by shortening the school day by an hour, allowing teachers to come in late one morning per week, and rotating the Saturday schedule so teachers would only have to come in 3 to 4 Saturdays per semester instead of every Saturday. Principals can clearly work to find ways to protect teachers' time and reduce their workload.

However, this study suggests that strategies to alleviate teacher burnout could focus not just on *reducing* teachers' overall workload and responsibilities but also on optimizing and regularly monitoring how teachers feel about support from their principal and the efficacy of professional development they receive. Formatively and regularly checking teacher perceptions can help schools adjust their systems and practices rather than waiting to improve them once teachers are gone. Measuring teacher–principal relationships and working to improve them can be an especially high-leverage strategy to increase teacher commitment and retention in CMO schools with intense job demands. This strategy is well supported by literature on relational trust and school improvement (Bryk & Schneider, 2002) as well as studies of teacher turnover across kinds of schools and teachers (Boyd et al., 2011; Ingersoll, 2001; Ladd, 2011). Including staff in conversations about improving working conditions may also help build teacher trust and commitment by recognizing and respecting their struggles, and working to do something about it.

Nearly half of the teachers in the sample (44%) were brand new to the organization and more experienced teachers were much more likely to leave than newer teachers. This calls into question the viability of scaling up CMO schools and whether they are overly “novice-oriented” (Johnson & The Project on the Next Generation of Teachers, 2004). Although there may be financial benefits to employing less experienced teachers (Toch, 2009), losing the institutional knowledge of more experienced teachers can make it more difficult to maintain instructional quality and a healthy school culture (Guin, 2004; Toch, 2009).

While some turnover of experienced teachers could be a result of simply hiring young, idealistic teachers willing to work long hours for a short period of time, there is an opportunity to retain a higher proportion of experienced teachers by having principals develop individualized retention strategies (The New Teacher Project, 2012) and optimizing working conditions.

The relationship between turnover and schools with new principals is worth additional research. Principal turnover can be disruptive to existing relationships that are important to maintaining a school's social resources such as trust and shared norms (Ronfeldt, Loeb, & Wyckoff, 2013). Principal turnover is detrimental, on average, to school performance and teacher retention, and this is especially true for schools serving urban, low-income students (Beteille, Kalogrides, & Loeb, 2011). Although it is unclear whether principal turnover affects school effectiveness in the CMO setting, the analysis shows an association between new principals and higher teacher turnover. In this sense, principal turnover can disrupt organizational effectiveness and the ability of CMOs to grow to scale by increasing the organizational costs associated with teacher turnover.

Although more research is needed across a large number of CMOs, this study adds empirical evidence to the discussion about turnover in CMOs. These organizations have substantively different teachers and working conditions compared with other charter or traditional public schools and are therefore likely to vary in terms of turnover rates and teachers' reasons for leaving. Future studies should assess the variation in CMO charter school types and describe how these differences (e.g., in types of teachers, mission, school culture, and policies) affect school effectiveness and turnover.

This study had several limitations that can be improved upon in future studies. As workload is a very important predictor of turnover, future studies should gather more data about different aspects of workload (e.g., hours worked) and ask teachers themselves how it factors into their career decisions. Teacher turnover is likely related to other teacher characteristics (i.e., TFA status, age, race) and other unmeasured working conditions that are especially relevant to teacher satisfaction and turnover in charter schools and CMOs, such as how teachers perceive teacher autonomy and control over decision making in their schools and classrooms (Bulkley, 2005; Renzulli, Parrott, & Beattie, 2011; Scott & DiMartino, 2011). Although many turnover studies do not include every possible measure, future studies should measure those constructs, and results from this study should be interpreted conservatively with this understanding in mind. Results may hold in a "best case" setting, as evidenced by this CMOs low voluntary turnover and high satisfaction rates. Findings could change in different years or settings where teacher characteristics and their ratings of working conditions vary.

Teacher turnover has potential benefits and costs for students and organizations. There can be benefits for both if ineffective teachers leave and are replaced by more effective teachers, or teachers who are a better fit for the organization. However, this is still problematic from an organizational perspective because a narrow definition of an ideal teacher already contributes to a situation where teacher supply is low and demand is high (Tuttle et al., 2013). This issue is compounded with the problem of higher than average teacher turnover, which calls into question to what degree CMOs can functionally scale as well as whether CMO policies and practices can be replicated in the wider education system (e.g., traditional public schools). For example, many teachers are either unable or unwilling to work the kinds of hours CMO teachers are often required (or feel compelled) to work. In this sense, it is important to understand the reasons and describe the context for why teachers leave CMOs if policymakers and practitioners seek to apply practices in schools with different kinds of teachers and characteristics. Finally, research is needed on whether and why turnover is functional or dysfunctional in particular CMO contexts.

Very little research exists on the conditions that promote or impede the functional growth of CMOs in spite of the proliferation of these organizations and the political and financial support they enjoy (Scott & DiMartino, 2011; Wohlstetter et al., 2013). Using student achievement as the sole basis for this support is arguably too narrow a lens to judge the potential an organizational model has for functional growth. Data on CMO staff satisfaction and retention should be considered more thoughtfully in the context of growth and scale. Are teachers satisfied with their working conditions? Are organizations and their models “churning” through their employees? Do they have an adequate supply of teachers and leaders and the means to effectively and efficiently develop new teachers? These and other questions should be considered *in addition* to student achievement.

There are two main human capital strategies to increase the ability of CMOs to functionally grow. As proposed by Wilson (2009), policy levers can focus on increasing the supply of teachers who are organizationally aligned and willing to work at CMOs while building systems and structures that might allow for functional turnover. A second strategy is to increase the average retention rates of effective teachers. This could help the organization by increasing the stability of conditions critical to effective schooling such as staff trust and instructional cohesion, reaping the benefits of more effective (on average, compared with newer teachers) instruction associated with more teaching experience (McCaffrey, Lockwood, Koretz, & Hamilton, 2003), and reducing the various costs of replacing a large number of departing teachers. Policy makers and practitioners interested in the growth of CMO charter schools should aim to address both strategies.

Appendix

Table A1. Definition of Measures Used in Analysis.

Teacher turnover (Outcome): a dichotomous variable where 1 = voluntarily decision to leave teaching position and 0 = continuing to teach fulltime at the organization next year.

Teacher characteristics

Years teaching at organization: a categorical variable, 1 = *First year*, 2 = *Second year*, and 3 = *Third year or more*

School characteristics

Principal experience: a categorical variable where 1 = *first year at school*, 2 = *second year at school*, and 3 = *third year or more leading the school*

School type: a dichotomous variable where 0 = *elementary (K-5)*, and 1 = *middle/high school*

School age: a dummy variable where 0 = *one to four years open* and 1 = *Five or more years open*

Organizational conditions (Likert-type scale: 1-5)^a

Factor 1: Principal communication and support

Comfortable going to principal: a teacher's agreement with the statement "*I am comfortable going to my school leader with concerns.*"

Principal praise: a teacher's agreement with the statement "*My principal regularly recognizes and praises good teacher/staff work.*"

Opportunities to learn and grow: agreement with the statement "*I feel that this is a place where I have opportunities to learn and grow.*"

I know what's expected of me: a teacher's agreement with the statement "*I know what is expected of me in order to be successful at work.*"

Someone encourages my development: a teacher's agreement with the statement "*Someone at work encourages my development.*"

Principal support factor: the average score of the five survey questions in the "principal communication and support" category.

Perception of school discipline

School discipline system: a teacher's agreement with the statement "*I believe the school's code of conduct and discipline systems minimize time spent on disciplinary matters.*"

Factor 2: Perception of professional development

School year Professional Development: a teacher's agreement with the statement "*The school's school-year professional development sessions improve my ability to raise student achievement.*"

Summer orientation: a teacher's agreement with the statement "*The school's summer professional development sessions improve my ability to raise student achievement.*"

Professional growth factor: the average score of the two survey questions in the "professional growth and development" category.

(continued)

Table A1. (continued)

Factor 3: Perception of principal leadership

Principal inspires: a teacher’s agreement with the statement “*My principal is an inspiring leader.*”

Principal urgency: a teacher’s agreement with the statement “*My principal conveys a sense of urgency.*”

Principal cares about me: a teacher’s agreement with the statement “*My principal seems to care about me.*”

Perception of principal leadership factor: the average score of the three survey questions in the principal leadership category.

Other

Workload rating: an ordinal variable where 1 = *manageable workload*, 2 = *sometimes unmanageable*, and 3 = *consistently unmanageable*.

Workload dummy: a dummy variable, 0 = not consistently unmanageable and 1 = consistently unmanageable.

^aOrganizational conditions are measured on a scale of 1 = strongly disagree and 5 = strongly agree (except workload).

Table A2. Distributions for Teacher Characteristics, School Characteristics, and Workload.

| Categories | <i>n</i> | % | <i>M</i> | <i>SD</i> | % Stayers | % Leavers |
|--------------------------------|----------|------|----------|-----------|--------------|--------------|
| Years teaching at organization | | | | | | |
| 1st year | 173 | 44 | 1.86 | 0.84 | 93 | 7 |
| 2nd year | 108 | 27 | | | 91 | 9 |
| 3rd year or more | 117 | 29 | | | 84 | 16 |
| Principal experience | | | | | | |
| 1st-year principal | 133 | 33 | 1.88 | 0.74 | 81 | 19 |
| 2nd-year principal | 178 | 45 | | | 91 | 9 |
| 3rd-year+ principal | 87 | 22 | | | 88 | 12 |
| Elementary or middle/high | | | | | | |
| Elementary schools (0) | 152 | 38 | 0.62 | 0.49 | 82 | 18 |
| Middle/high schools (1) | 246 | 62 | | | 90 | 10 |
| School age | | | | | | |
| 1-4 years open (0) | 205 | 51.5 | 0.48 | 0.50 | 83 | 17 |
| 5 years or more open (1) | 193 | 48.5 | | | 90 | 10 |
| Workload rating | | | | | | |
| Not consistently unmanageable | 342 | 86 | 0.14 | 0.35 | 90 | 10 |
| Consistently unmanageable | 56 | 14 | | | 70 | 30 |

Table A3. Standard Errors for Logistic Regression Models.

| | Standard errors for teacher turnover models | | | |
|-----------------------------------|---|--|--|------------------------------|
| | Model 1: Workload only | Model 2: Teacher characteristics | Model 3: Teacher + school characteristics | Model 4: All variables |
| | SE (n = 386) | SE (n = 386) | SE (n = 386) | SE (n = 365) |
| Workload | | | | |
| Workload is unmanageable | 0.35** | 0.36** | 0.38** | 0.42 |
| Teacher characteristics | | | | |
| First-year teaching ^a | — | 0.40* | 0.46** | 0.47** |
| Second-year teaching ^a | — | 0.37 | 0.42 | 0.46 |
| School characteristics | | | | |
| Principal Year 2 ^b | — | — | 0.41** | 0.43* |
| Principal Year 3+ ^b | — | — | 0.46 | 0.53 |
| Middle school | — | — | 0.33* | 0.35* |
| Newer school (1-4 years) | — | — | 0.37** | 0.41** |
| Working conditions | | | | |
| Principal support | — | — | — | 0.33 |
| Professional growth | — | — | — | 0.23 |
| Discipline systems | — | — | — | 0.17* |
| Principal leadership | — | — | — | 0.29 |

^aCompared with teachers in third year or more at the organization.

^bCompared with teachers in schools with principals in first year.

*p < .05. **p < .01.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. A Charter Management Organization (CMO) in the United States; the exact number of schools is excluded to maintain the confidentiality of the organization.
2. Because the survey was administered mid-year (i.e., November), it is expected that most teachers did not make their career decisions for the following year, which might have adversely influenced their ratings.

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