

# The Impact of Charter Schools on Student Achievement in Abu Dhabi: An Inspection-Based Mixed-Methods Analysis of Leadership, Organizational Capacity, and School-Level Conditions

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**Abstract:** Charter schools have been promoted internationally as a governance reform intended to improve student achievement through increased operational autonomy combined with public accountability. While extensive empirical research has examined charter school effectiveness in decentralized education systems, comparatively little is known about how charter reforms function within highly centralized, inspection-led accountability environments. This study examines the impact of charter schools on student achievement in Abu Dhabi using a mixed-methods design anchored in the Abu Dhabi Department of Education and Knowledge (ADEK) Inspection Framework.

The study integrates inspection outcomes aligned with the official ADEK performance standards, teacher and school leader perception data, and qualitative evidence to examine how charter governance operates through mediating mechanisms rather than direct effects. Inspection judgements related to Teaching and Learning (PS1), Student Achievement (PS2), Leadership and Management (PS3), Behaviour and Wellbeing (PS4), and Overall Effectiveness (PS5) are analysed alongside survey measures of instructional leadership, organizational capacity, behaviour management systems, policy enactment, and stakeholder pressure. Quantitative analyses are presented as illustrative pilot findings to demonstrate analytic feasibility in a data-constrained context, while qualitative findings provide theory-driven explanations of observed patterns.

Findings indicate that charter school performance in Abu Dhabi is highly variable and that differences in inspection outcomes are more strongly associated with leadership capacity, behaviour management, and organizational conditions than with charter status per se. Behaviour and Wellbeing (PS4) emerges as a persistent system-level constraint, with implications for teaching quality and achievement. The study contributes a contextually grounded evaluation framework for charter school reform in centralized education systems and offers policy-relevant insights for system leaders seeking to align autonomy, inspection, and sustainable school improvement.

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**Keywords:** Charter Schools, Abu Dhabi, Student achievement, School inspection, instructional leadership, accountability

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## 1. Introduction

Charter schools have become a prominent education reform strategy worldwide, grounded in the assumption that changes in governance structures—rather than direct prescription of pedagogy—can improve student achievement. The charter model typically grants schools increased operational autonomy in areas such as staffing, budgeting, and internal organization, while holding them accountable for performance outcomes through external evaluation mechanisms (Gill et al., 2001; Zimmer et al., 2009). This reform logic reflects broader New Public Management approaches, which seek to enhance public sector performance through decentralization, performance monitoring, and accountability (Lubienski, 2009).

Over the past three decades, charter school reforms have expanded rapidly across diverse policy contexts, particularly in the United States, prompting a substantial body of empirical research on their effectiveness. Early large-scale quantitative studies produced mixed findings, with charter schools, on average, performing similarly to traditional public schools while exhibiting considerable variation in outcomes (Hanushek et al., 2007; Zimmer et al., 2003). Subsequent multi-state and longitudinal analyses reinforced this

conclusion, demonstrating that charter school effects on student achievement are highly heterogeneous and context-dependent (Booker et al., 2007; Sass, 2006; Zimmer et al., 2009).

As the evidence base developed, scholarly attention increasingly shifted away from sector-level comparisons toward an examination of the mechanisms that explain why some charter schools succeed while others do not. Rigorous quasi-experimental and lottery-based studies identified a subset of high-performing charter schools that generated substantial gains in student achievement and longer-term outcomes, such as college enrollment (Angrist et al., 2013; Dobbie & Fryer, 2011). These studies emphasized the role of strong instructional leadership, coherent school-wide instructional models, extended learning time, and consistent behaviour management systems (Fryer, 2012; Angrist et al., 2016). At the same time, research cautioned that autonomy without sufficient leadership capacity and organizational support can exacerbate fragmentation and limit instructional improvement (Wohlstetter et al., 2013; Sass & Zimmer, 2013).

Leadership has emerged as a particularly important mediating factor in the charter school literature. Instructional leadership

theory suggests that school leaders influence student achievement indirectly by shaping teaching quality, professional learning, and school climate rather than through direct classroom instruction (Hallinger, 2011; Schneider, 2017). Empirical studies demonstrate that effective principals contribute to improved student outcomes by setting clear expectations, monitoring instructional practice, and supporting teacher development (Jacob & Lefgren, 2008). In charter school contexts, where leaders typically exercise greater discretion over staffing and instructional decisions, leadership capacity plays an even more central role in determining school performance (Angrist et al., 2013; Wohlstetter et al., 2013).

Beyond leadership, organizational capacity has been identified as a critical condition for sustained school improvement. Organizational capacity theory emphasizes the importance of aligned resources, including protected time for teacher planning, meaningful professional development, and collaborative routines that support instructional coherence (Elmore, 2004; Schneider, 2017). Studies of charter schools indicate that even strong instructional models struggle to produce consistent achievement gains when teachers face excessive workload, limited planning time, or compliance-driven professional development (Fryer, 2014; Gill et al., 2001).

Behaviour management and school climate further interact with leadership and organizational capacity to shape learning conditions. Research consistently shows that effective behaviour systems protect instructional time and support teacher efficacy, while weak or inconsistently enforced behaviour policies undermine teaching and learning (Imberman, 2011; Dobbie & Fryer, 2011). In accountability-driven environments, behaviour and wellbeing are often assessed explicitly, making them both a direct and indirect determinant of school performance outcomes.

While the charter school literature is extensive, it is heavily concentrated in decentralized education systems with relatively high levels of data transparency, particularly in relation to standardized student achievement outcomes. Far less is known about how charter school reforms operate within highly centralized, inspection-led accountability regimes, where school quality is primarily evaluated through formal inspection frameworks rather than publicly accessible longitudinal achievement datasets (Ladd & Fiske, 2001; Zimmer et al., 2009). In such systems, inspection judgements often function as the principal indicators of school effectiveness, shaping public accountability, school improvement priorities, and system-level decision-making.

Abu Dhabi represents a distinctive and under-researched context in which to examine these issues. The Abu Dhabi Department of Education and Knowledge (ADEK) introduced charter schools as a strategic reform intended to improve the quality and sustainability of public education while maintaining centralized regulatory oversight (ADEK, 2019). Unlike charter systems in decentralized contexts, Abu Dhabi

charter schools operate within a strong inspection regime, where school performance is evaluated against defined performance standards encompassing Teaching and Learning, Student Achievement, Leadership and Management, Behaviour and Wellbeing, and Overall Effectiveness. These inspection outcomes serve as system-recognized proxies for educational quality and are central to accountability processes.

Research on inspection and accountability systems suggests that inspection can support school improvement when evaluation feedback is developmental and aligned with leadership capacity and professional support (Ehren et al., 2013; AlKutich & Abukari, 2018). However, accountability pressures may also incentivize compliance-oriented behaviours, particularly in contexts where inspection outcomes carry high stakes and schools prioritize documentation and short-term performance signals over deep instructional change (Schneider, 2017). For charter schools, which are expected to leverage autonomy to innovate and improve outcomes, the interaction between inspection pressures and internal capacity is therefore critical.

Evaluating charter schools in Abu Dhabi is further complicated by constraints on data availability. The absence of publicly accessible, longitudinal student-level achievement datasets limits the feasibility of conventional impact evaluation designs commonly employed in charter school research (Zimmer et al., 2009). In this context, inspection outcomes, supplemented by systematically collected stakeholder perceptions and qualitative evidence, provide a pragmatic and policy-relevant basis for examining school performance.

Responding to these empirical, theoretical, and methodological gaps, the present study examines the impact of charter schools on student achievement in Abu Dhabi using an inspection-based mixed-methods approach. Rather than assessing charter effectiveness in aggregate, the study investigates how charter governance operates through mediating mechanisms related to instructional leadership, organizational capacity, behaviour management systems, and policy enactment. By analytically mapping inspection outcomes to the official ADEK performance standards and integrating these with teacher and leader perspectives, the study seeks to explain variation in school performance within the charter sector.

In doing so, this research contributes to the international literature in three ways. First, it extends charter school research into a centralized, inspection-led system that differs fundamentally from the contexts in which most empirical studies have been conducted. Second, it demonstrates how inspection outcomes can be used as analytically meaningful proxies for student achievement and school effectiveness in data-constrained environments. Third, it offers a theoretically grounded evaluation framework that can inform both scholarly inquiry and policy decision-making in Abu Dhabi and in other education systems pursuing governance-based reform under strong regulatory oversight.

## 2. Policy Context: Charter Schools in Abu Dhabi

Charter schools were introduced in Abu Dhabi as part of a broader system-level reform agenda aimed at improving the quality, efficiency, and sustainability of public education while maintaining centralized oversight. The reform was initiated by the Abu Dhabi Department of Education and Knowledge (ADEK) and formally announced in 2019 as a “third education model,” positioned alongside traditional public schools and private schools (ADEK, 2019). The charter model was designed to combine public funding and accountability with private-sector operational expertise, reflecting international governance-based reform approaches adapted to the local policy environment.

The initial phase of the charter schools initiative involved the conversion of selected government schools to charter status rather than the creation of entirely new institutions. This conversion approach allowed ADEK to pursue rapid system improvement while retaining control over student admissions, curriculum alignment, and inspection processes. Following a competitive procurement process, ADEK appointed private education operators—most notably Aldar Education, Bloom Education, and Taaleem—to manage and operate charter schools under fixed-term agreements (ADEK, 2019). These operators were selected based on criteria that emphasized organizational capacity, experience with international curricula, and the ability to deliver measurable improvements in teaching and learning.

Since their introduction, charter schools in Abu Dhabi have expanded rapidly in both number and student enrollment. Publicly available system information indicates steady growth across multiple regions of the Emirate, including Abu Dhabi city and Al Ain, with charter schools serving an increasingly diverse student population (ADEK, 2021). International research suggests that rapid expansion of charter systems can place significant strain on leadership pipelines, professional development structures, and organizational coherence if capacity-building does not keep pace with scale (Wohlstetter et al., 2013; Sass & Zimmer, 2013). These dynamics are particularly relevant in Abu Dhabi, where charter schools were introduced within a short time frame and under high public and political expectations.

Unlike charter school systems in decentralized governance contexts, Abu Dhabi charter schools operate within a highly centralized regulatory and accountability framework. ADEK retains authority over curriculum expectations, assessment participation, inspection processes, and performance standards. All charter schools are subject to the same inspection regime as other public schools, and their performance is evaluated against the ADEK Inspection Framework. This framework assesses school quality across five performance standards: Teaching and Learning (PS1), Student Achievement (PS2), Leadership and Management (PS3), Behaviour and Wellbeing (PS4), and Overall

Effectiveness (PS5). Inspection judgements are publicly reported and function as the primary system-recognized indicators of school performance.

Inspection occupies a central role in Abu Dhabi’s accountability architecture. Inspection outcomes influence school improvement planning, leadership evaluation, and system-level decision-making, and they serve as a key mechanism through which ADEK monitors the effectiveness of charter school operators. Research on inspection and accountability systems suggests that such regimes can support improvement when they provide clear expectations and developmental feedback, but may also encourage compliance-oriented behaviour when schools prioritize inspection performance over sustained instructional change (Ehren et al., 2013; Schneider, 2017). In the Abu Dhabi context, the high visibility and perceived stakes of inspection judgements heighten their influence on school-level practices.

A distinctive feature of ADEK inspection reporting is the use of adapted and subject-specific labels within school inspection reports. For reporting purposes, inspection documents often disaggregate performance standards into components such as students’ achievement, learning skills, teaching quality, and curriculum modification, particularly at the subject and cycle levels. While these adaptations enhance clarity for school-level improvement planning, they do not alter the underlying conceptual structure of the ADEK Inspection Framework. At the system level, inspection outcomes are analytically anchored to the five official performance standards, which provide the basis for cross-school comparison and accountability.

The charter school policy context in Abu Dhabi also intersects with broader stakeholder expectations, particularly parental choice and satisfaction. Charter schools were promoted as a means of enhancing educational quality and offering families improved public education options. International evidence indicates that increased parental engagement and choice can support accountability but may also intensify pressure on school leaders, particularly in environments where inspection outcomes and public reputation are closely linked (Ladd & Fiske, 2001; Zimmer et al., 2009). Managing these pressures requires substantial leadership capacity, especially when leaders must balance stakeholder demands with consistent behaviour policies and instructional priorities.

From a data and evaluation perspective, the Abu Dhabi context presents additional constraints. Unlike jurisdictions where charter school performance is routinely evaluated using publicly accessible, longitudinal student achievement datasets, such data are not widely available in Abu Dhabi. As a result, inspection outcomes play a disproportionate role in shaping perceptions of school effectiveness and progress. While inspection judgements provide a comprehensive and system-recognized assessment of school quality, their use as evaluative proxies necessitates careful methodological treatment and triangulation with other data sources (AlKutich & Abukari, 2018).

Taken together, the policy context of charter schools in Abu Dhabi is characterized by centralized governance, operator-based management, rapid system expansion, and inspection-led accountability. These features distinguish the Abu Dhabi charter model from those examined in much of the international literature and underscore the importance of evaluating charter schools not solely in terms of aggregate achievement outcomes, but through an analysis of the leadership, organizational, and behavioural mechanisms through which charter governance operates. Understanding these dynamics is essential for assessing the extent to which charter schools can contribute to sustainable improvement in student achievement within highly regulated education systems.

### 3. Literature Review

This literature review synthesizes international research on charter schools and governance-based education reform, with particular attention to the mechanisms most relevant to inspection-led and centralized accountability systems. Rather than treating charter schools as a homogeneous sector, the review emphasizes five interrelated dimensions that have been shown to shape student achievement outcomes: variability in charter school effectiveness, instructional leadership capacity, organizational conditions for teaching and learning, behaviour management and school climate, and accountability and policy enactment. These dimensions inform the analytical focus and theoretical framework adopted in the present study.

#### 3.1 Charter Schools and Student Achievement: Evidence and Variability

A substantial body of empirical research has examined the impact of charter schools on student achievement, particularly in the United States where data availability has enabled large-scale quantitative analysis. Early studies using administrative data found that charter schools, on average, performed similarly to traditional public schools, but with wide variation in outcomes across schools and contexts (Hanushek et al., 2007; Zimmer et al., 2003). Subsequent multi-state analyses reinforced these findings, demonstrating that charter school effects are highly heterogeneous and that aggregate comparisons obscure substantial within-sector variation (Zimmer et al., 2009).

More refined quasi-experimental and longitudinal studies further underscored this variability. Research from Florida and other jurisdictions showed modest average effects accompanied by large dispersion, suggesting that some charter schools substantially outperform traditional public schools while others underperform (Sass, 2006; Booker et al., 2007). Meta-analyses and systematic reviews similarly concluded that charter schools cannot be evaluated as a uniform reform and that effectiveness depends on school-level implementation and contextual factors rather than governance status alone (Betts & Tang, 2011).

At the same time, a subset of charter schools has demonstrated consistently strong achievement outcomes. Lottery-based studies examining high-performing charter networks reported significant gains in standardized test scores and longer-term outcomes such as high school completion and college enrollment (Angrist et al., 2013; Angrist et al., 2016; Dobbie & Fryer, 2011). These findings shifted scholarly focus toward identifying the organizational and instructional practices that distinguish successful charter schools from less effective ones.

#### 3.2 Instructional Leadership as a Mediating Mechanism

Instructional leadership has emerged as one of the most consistently identified mediators of charter school effectiveness. Instructional leadership theory posits that school leaders influence student achievement indirectly by shaping teaching quality, professional learning, and school climate rather than through direct classroom instruction (Hallinger, 2011; Schneider, 2017). In charter school contexts, where leaders typically exercise greater autonomy over staffing, curriculum implementation, and instructional decision-making, leadership capacity plays a particularly central role (Wohlstetter et al., 2013).

Empirical studies provide strong support for this mechanism. Jacob and Lefgren (2008) demonstrated that principals' evaluations of teacher effectiveness are meaningfully associated with student achievement gains, underscoring the importance of leadership expertise in instructional matters. Research on high-performing charter schools consistently highlights strong instructional leadership characterized by clear expectations, frequent monitoring of teaching practice, and structured professional support (Angrist et al., 2013; Fryer, 2012). Conversely, studies of lower-performing charter schools point to leadership turnover, inconsistent expectations, and limited instructional coherence as key constraints on improvement (Sass & Zimmer, 2013).

In centralized accountability systems, instructional leadership assumes additional importance. Leaders must not only support instructional improvement but also interpret and respond to external inspection feedback. Where leadership capacity is weak, accountability pressures may result in compliance-oriented behaviour rather than meaningful pedagogical change (Schneider, 2017). This dynamic positions instructional leadership as a critical mediating mechanism linking charter governance to inspection-based performance outcomes.

#### 3.3 Organizational Capacity and Teacher Working Conditions

Organizational capacity theory emphasizes that sustained improvement in teaching and learning depends on the alignment of resources, structures, and routines that support instructional practice (Elmore, 2004; Schneider, 2017). Key elements of organizational capacity include protected time for teacher planning, access to meaningful professional development, collaborative routines, and instructional support

systems. Without these conditions, even well-designed reforms are unlikely to translate into improved classroom practice.

Research on charter schools highlights the importance of organizational capacity in explaining performance variation. Gill et al. (2001) noted that charter autonomy can increase workload and organizational complexity, particularly in rapidly expanding systems. Fryer (2014) found that improvements in student achievement associated with certain charter models were closely linked to intensive teacher support and professional development, rather than governance arrangements alone. In contrast, charter schools characterized by high workload and limited collaboration often struggle to sustain improvement.

In inspection-led accountability environments, organizational capacity is further constrained by the demands of compliance and documentation. Studies suggest that when inspection preparation competes with instructional planning and professional learning, schools may prioritize short-term performance indicators at the expense of deep instructional change (Ehren et al., 2013; AlKutich & Abukari, 2018). These findings underscore the relevance of organizational capacity as an enabling or constraining condition for charter school effectiveness.

#### **3.4 Behaviour Management, School Climate, and Instructional Time**

Behaviour management and school climate play a critical role in shaping the conditions under which teaching and learning occur. Research consistently demonstrates that effective behaviour systems protect instructional time, support teacher efficacy, and contribute to positive learning environments (Imberman, 2011). In contrast, persistent behaviour challenges reduce time-on-task and undermine the implementation of instructional strategies, particularly in schools serving diverse student populations.

Studies of high-performing charter schools frequently identify consistent behaviour expectations and strong leadership follow-through as distinguishing features (Dobbie & Fryer, 2011). However, evidence also indicates that behaviour systems are difficult to sustain in the absence of strong leadership and organizational support (Sass & Zimmer, 2013). In some contexts, increased parental pressure and accountability concerns may further weaken consistent enforcement of behaviour policies (Ladd & Fiske, 2001).

In inspection-led systems, behaviour and wellbeing are often assessed explicitly as part of school evaluation frameworks. Weaknesses in behaviour management can therefore affect inspection outcomes directly, through behaviour-related standards, and indirectly, by limiting teaching quality and student engagement. This dual role makes behaviour management a particularly salient mechanism for understanding inspection-linked indicators of school performance.

#### **3.5 Accountability, Inspection, and Compliance Dynamics**

Accountability mechanisms are central to charter school governance, typically operating through inspection, performance targets, and renewal decisions. While accountability is intended to incentivize improvement, research cautions that its effects depend on how schools interpret and respond to external evaluation pressures (Ehren et al., 2013; Schneider, 2017). In some cases, accountability supports reflective practice and strategic improvement; in others, it encourages performative compliance focused on documentation and surface-level change.

Research on school inspection systems provides mixed evidence regarding their impact on teaching and learning. Ehren et al. (2013) found that inspection can contribute to improvement when feedback is clear, credible, and aligned with professional support. In contrast, AlKutich and Abukari (2018) reported that inspection in centralized systems may have limited impact on classroom practice when schools prioritize meeting inspection requirements over addressing underlying pedagogical issues. These findings highlight the risk that high-stakes inspection may narrow school priorities and distort improvement efforts.

For charter schools operating within centralized accountability regimes, these dynamics are particularly pronounced. Autonomy may be constrained by regulatory expectations, while inspection outcomes carry significant weight as public indicators of quality. Understanding how accountability pressures interact with leadership capacity and organizational conditions is therefore essential for evaluating charter school effectiveness in such contexts.

#### **3.6 Policy Enactment and Street-Level Bureaucracy**

Policy enactment theory and street-level bureaucracy provide further insight into how charter and accountability reforms are implemented at the school level. Lipsky (1980) argued that frontline actors, including teachers and school leaders, interpret and adapt policy in response to contextual constraints such as limited time, workload, and ambiguity. As a result, policy outcomes often diverge from policy intent.

In education systems characterized by frequent policy updates or delayed guidance, enactment challenges are amplified. Teachers and leaders may develop pragmatic coping strategies that prioritize immediate accountability demands, such as inspection preparation, over sustained instructional improvement (Schneider, 2017). This contributes to policy–practice gaps, where formal policies exist but have limited impact on classroom behaviour and teaching quality.

For charter schools in Abu Dhabi, policy enactment dynamics are particularly relevant. While charter schools are granted operational autonomy, they remain subject to centralized regulation and inspection. Delays in guidance or ambiguity in expectations may increase implementation drift, reinforcing

compliance-oriented practices and limiting the effectiveness of reform initiatives.

### 3.7 Synthesis and Implications for the Present Study

Taken together, the literature indicates that charter school effectiveness cannot be understood solely through governance status or aggregate achievement comparisons. Instead, outcomes are shaped by a set of interrelated mechanisms, including instructional leadership capacity, organizational conditions, behaviour management systems, and the ways in which accountability and policy are enacted at the school level. These mechanisms are particularly salient in centralized, inspection-led systems, where external evaluation exerts strong influence on school priorities and practices.

This body of research informs the theoretical framework adopted in the present study, which conceptualizes charter governance as an indirect reform whose impact on student achievement is mediated by leadership, organizational capacity, behaviour, and accountability dynamics. By integrating inspection outcomes with stakeholder perspectives, the study responds directly to gaps in the literature and provides a contextually grounded approach to evaluating charter school reform in Abu Dhabi.

## 4. Theoretical Framework

This study is guided by an integrated theoretical framework that conceptualizes charter school governance as an indirect reform mechanism whose impact on student achievement is mediated by leadership capacity, organizational conditions, behaviour management systems, and policy enactment processes. Drawing on instructional leadership theory, organizational capacity theory, accountability and inspection theory, and policy enactment perspectives, the framework is designed to explain variation in school performance within a centralized, inspection-led education system. The framework aligns explicitly with the five official ADEK Inspection Framework performance standards: Teaching and Learning (PS1), Student Achievement (PS2), Leadership and Management (PS3), Behaviour and Wellbeing (PS4), and Overall Effectiveness (PS5).

Rather than treating charter status as a direct causal determinant of outcomes, the framework positions charter governance as an enabling structure that shapes school-level conditions. These conditions, in turn, influence inspection-based indicators of performance and student achievement. This approach reflects contemporary charter school research, which emphasizes mechanisms and capacity over governance labels (Sass & Zimmer, 2013; Schneider, 2017).

### 4.1 Instructional Leadership Theory and Leadership Capacity (PS3)

Instructional leadership theory provides a foundational lens for understanding how charter governance influences school performance. The theory posits that school leaders affect

student achievement indirectly by shaping instructional quality, professional learning, and school climate rather than through direct classroom instruction (Hallinger, 2011; Schneider, 2017). Effective instructional leaders establish clear expectations for teaching and learning, monitor classroom practice, provide feedback, and organize professional development aligned with instructional goals.

In charter school contexts, leadership capacity assumes heightened importance due to increased autonomy over staffing, instructional decisions, and internal organization (Wohlstetter et al., 2013). Where leadership capacity is strong, autonomy can be leveraged to build coherent instructional models and responsive improvement strategies. Where leadership capacity is weak, autonomy may lead to fragmentation, inconsistent expectations, and uneven implementation.

Within the ADEK Inspection Framework, leadership capacity is most directly reflected in **Leadership and Management (PS3)**. PS3 captures leaders' ability to set direction, manage resources, support teaching quality, and respond to accountability expectations. In the present framework, PS3 functions as a central mediating construct that shapes how charter schools respond to inspection feedback and enact improvement priorities. Leadership capacity is therefore hypothesized to influence outcomes in other performance standards, particularly Teaching and Learning (PS1) and Behaviour and Wellbeing (PS4).

### 4.2 Instructional Leadership and Teaching Quality (PS1)

Teaching and Learning (PS1) represents the core instructional processes through which student achievement is produced. Instructional leadership theory posits that leaders influence PS1 outcomes by establishing pedagogical expectations, supporting instructional consistency, and facilitating professional learning (Hallinger, 2011). Empirical research consistently demonstrates that strong instructional leadership is associated with higher-quality teaching and improved student outcomes (Jacob & Lefgren, 2008; Angrist et al., 2013).

In inspection-led systems, PS1 judgements reflect both observed classroom practice and schools' capacity to articulate and evidence instructional intent. The framework therefore treats PS1 as an outcome that is sensitive to leadership capacity (PS3) and organizational conditions, as well as to accountability pressures. Charter autonomy is expected to influence PS1 indirectly by enabling leaders to design instructional approaches suited to their school context, provided that sufficient leadership and organizational capacity exists.

### 4.3 Organizational Capacity and Professional Conditions (PS1 and PS2)

Organizational capacity theory emphasizes that effective teaching and learning depend on the availability and

alignment of resources, structures, and routines that support instructional practice (Elmore, 2004; Schneider, 2017). Key elements of organizational capacity include protected time for teacher planning, access to meaningful professional development, collaborative routines, and instructional support systems.

In the present framework, organizational capacity is conceptualized as an enabling condition that shapes both Teaching and Learning (PS1) and Student Achievement (PS2). Where teachers have adequate planning time and professional support, instructional strategies are more likely to be implemented with fidelity, leading to improved learning outcomes. Conversely, when organizational capacity is weak, instructional quality may suffer even in the presence of strong leadership or well-designed reform initiatives.

In charter schools undergoing rapid expansion, organizational capacity may develop unevenly across schools, contributing to variation in PS1 and PS2 outcomes (Fryer, 2014; Gill et al., 2001). In inspection-led contexts, organizational capacity is further constrained by the demands of documentation and compliance, reinforcing the importance of examining how professional conditions interact with accountability pressures.

#### 4.4 Behaviour Management and School Climate (PS4)

Behaviour management and school climate are critical determinants of instructional effectiveness and student learning. Research demonstrates that consistent behaviour systems protect instructional time, support teacher efficacy, and create conditions conducive to learning (Imberman, 2011; Dobbie & Fryer, 2011). Weak or inconsistently enforced behaviour policies, by contrast, undermine teaching quality and reduce time-on-task.

Within the ADEK Inspection Framework, these dynamics are captured in **Behaviour and Wellbeing (PS4)**. PS4 reflects the extent to which schools establish clear expectations for behaviour, ensure student wellbeing, and maintain orderly learning environments. In the present framework, PS4 is theorized to function both as an outcome of leadership capacity (PS3) and as a mediating condition influencing Teaching and Learning (PS1) and Student Achievement (PS2).

Charter schools are often expected to leverage autonomy to implement coherent behaviour systems. However, international research suggests that behaviour management is particularly vulnerable to leadership inconsistency and stakeholder pressure, especially in accountability-driven environments (Sass & Zimmer, 2013; Ladd & Fiske, 2001). As such, PS4 is hypothesized to be a critical bottleneck through which charter school performance is constrained.

#### 4.5 Accountability, Inspection, and Performance Signalling (PS5)

Accountability theory, particularly as articulated within New Public Management frameworks, emphasizes the use of

external evaluation and performance monitoring to drive improvement (Lubienski, 2009). In Abu Dhabi, inspection outcomes aligned with ADEK performance standards function as the primary public signals of school quality and effectiveness.

**Overall Effectiveness (PS5)** represents a synthetic judgement that integrates performance across PS1–PS4. In the present framework, PS5 is treated not as an independent construct, but as an emergent outcome reflecting the combined effects of leadership capacity, organizational conditions, behaviour management, and accountability responses. This conceptualization aligns with research suggesting that composite accountability measures often capture schools' capacity to manage multiple demands rather than any single dimension of quality (Schneider, 2017).

Inspection pressures may influence PS5 outcomes by shaping school priorities and resource allocation. Where leadership capacity and organizational conditions are strong, accountability may support coherent improvement. Where capacity is weak, inspection pressures may incentivize compliance-oriented behaviour, limiting the depth and sustainability of improvement efforts (Ehren et al., 2013; AlKutich & Abukari, 2018).

#### 4.6 Policy Enactment and Moderating Conditions

Policy enactment theory and street-level bureaucracy provide a cross-cutting lens for understanding how charter governance and accountability reforms are implemented in practice (Lipsky, 1980). Teachers and school leaders interpret and adapt policy in response to contextual constraints such as workload, time pressure, and ambiguity. These enactment processes moderate the relationship between governance structures and observed outcomes.

In the present framework, policy enactment is conceptualized as a moderating condition influencing all performance standards. Delays in guidance, frequent policy changes, or unclear expectations may weaken the translation of reform initiatives into classroom practice, contributing to gaps between policy intent and inspection outcomes. These dynamics are expected to be particularly salient in charter schools operating under centralized regulation, where autonomy is bounded by inspection requirements.

#### 4.7 Integrated Conceptual Model

Integrating these perspectives, the theoretical framework proposes that charter school impact in Abu Dhabi operates through a set of interrelated mechanisms:

- **Leadership and Management (PS3)** as a central mediating capacity shaping school responses to autonomy and accountability;
- **Teaching and Learning (PS1)** as the primary instructional process influenced by leadership and organizational capacity;

- **Student Achievement (PS2)** as an outcome of instructional quality and learning conditions;
- **Behaviour and Wellbeing (PS4)** as both a mediating condition and a constraint on instructional effectiveness;
- **Overall Effectiveness (PS5)** as a composite indicator reflecting schools' capacity to align leadership, instruction, behaviour, and accountability.

This integrated model provides the analytical foundation for the study's research questions, hypotheses, and mixed-methods design. By explicitly linking theoretical constructs to ADEK performance standards, the framework ensures conceptual coherence between theory, measurement, and analysis, and supports a rigorous examination of charter school reform in a centralized, inspection-led education system.

## 5. Research Questions and Hypotheses

Guided by the integrated theoretical framework outlined in Section 5, this study investigates the impact of charter schools on student achievement in Abu Dhabi by examining the mechanisms through which charter governance operates within a centralized, inspection-led accountability system. Rather than assessing charter school effectiveness as a binary outcome, the study focuses on variation in inspection-based performance indicators and the organizational and leadership conditions that shape these outcomes. Three research questions and a set of theory-driven hypotheses structure the empirical analysis.

### 5.1 Research Questions

#### RQ1.

How do charter schools in Abu Dhabi perform across the ADEK Inspection Framework performance standards—Teaching and Learning (PS1), Student Achievement (PS2), Leadership and Management (PS3), Behaviour and Wellbeing (PS4), and Overall Effectiveness (PS5)—and how does this performance vary across schools and over time?

This question situates student achievement within the inspection-led accountability system that governs charter schools in Abu Dhabi. Consistent with prior charter school research emphasizing heterogeneity in outcomes, the focus is on patterns and variation rather than aggregate sector-level effects (Hanushek et al., 2007; Zimmer et al., 2009).

#### RQ2.

What relationships exist between teacher and school leader perceptions of instructional leadership capacity, organizational conditions, behaviour management systems, policy enactment, and stakeholder pressure, and inspection outcomes aligned with PS1–PS4?

This question examines the mediating mechanisms identified in the literature as central to charter school effectiveness, including leadership capacity (PS3), teaching quality (PS1), learning outcomes (PS2), and behaviour and wellbeing (PS4). It reflects the study's emphasis on understanding how internal school conditions interact with inspection-based accountability (Schneider, 2017; Wohlstetter et al., 2013).

#### RQ3.

How do qualitative accounts from teachers and school leaders explain observed patterns in inspection outcomes and quantitative relationships across PS1–PS5?

This question recognizes that inspection ratings and survey measures alone cannot fully capture how policies are enacted at the school and classroom levels. Qualitative inquiry is used to provide explanatory depth, particularly in relation to leadership decision-making, behaviour management, and responses to inspection pressure (Lipsky, 1980; Ehren et al., 2013).

### 5.2 Hypotheses

Drawing on the theoretical framework and prior empirical evidence, the following hypotheses guide the quantitative component of the study. All hypotheses are framed to reflect the indirect and mediated nature of charter school effects in centralized, inspection-led systems.

**H1. Instructional leadership hypothesis**  
Perceived instructional leadership capacity is positively associated with inspection outcomes related to **Teaching and Learning (PS1)** and **Leadership and Management (PS3)**.

This hypothesis reflects extensive evidence linking leadership quality to instructional coherence and school effectiveness (Jacob & Lefgren, 2008; Angrist et al., 2013).

**H2. Organizational capacity hypothesis**  
Perceived adequacy of professional conditions, including planning time and access to professional development, is positively associated with inspection outcomes related to **Teaching and Learning (PS1)** and **Student Achievement (PS2)**.

This hypothesis is grounded in organizational capacity theory and empirical research linking teacher working conditions to sustained improvement (Elmore, 2004; Fryer, 2014).

**H3. Behaviour management hypothesis**  
Perceived effectiveness of school-wide behaviour management systems is positively associated with inspection outcomes related to **Behaviour and Wellbeing (PS4)**.

This hypothesis reflects research demonstrating that consistent behaviour systems protect instructional time and support learning conditions (Imberman, 2011; Dobbie & Fryer, 2011).

**H4. Policy enactment hypothesis**  
Perceived gaps between policy expectations and classroom

practice are negatively associated with inspection outcomes related to **Teaching and Learning (PS1)** and **Behaviour and Wellbeing (PS4)**.

This hypothesis is informed by policy enactment and street-level bureaucracy theory, which suggests that ambiguity and delayed guidance undermine implementation quality (Lipsky, 1980; Schneider, 2017).

**H5. Stakeholder pressure hypothesis (exploratory)**  
Higher perceived parental and stakeholder pressure is associated with weaker **Behaviour and Wellbeing (PS4)** outcomes in schools with lower instructional leadership capacity.

This hypothesis reflects evidence that stakeholder pressure can distort school priorities and weaken consistent behaviour enforcement when leadership capacity is insufficient (Ladd & Fiske, 2001; Zimmer et al., 2009).

Together, these research questions and hypotheses operationalize the study's theoretical framework and provide a coherent structure for examining how charter governance influences inspection-based indicators of student achievement and school effectiveness in Abu Dhabi.

## 6. Methodology

### 6.1 Research Design

This study adopts a **convergent mixed-methods research design**, integrating quantitative and qualitative data to examine how charter schools in Abu Dhabi influence student achievement through leadership, organizational, behavioural, and accountability-related mechanisms. A mixed-methods approach is appropriate given the complexity of charter school reform and the constraints associated with evaluating school performance in centralized education systems where publicly accessible longitudinal student-level achievement data are limited (Creswell & Plano Clark, 2018; Zimmer et al., 2009).

In the convergent design, quantitative and qualitative strands are collected and analysed independently but during the same phase of the research process. Findings are subsequently integrated at the interpretation stage to identify convergence, complementarity, and divergence across data sources. This approach enables the study to move beyond descriptive reporting and to develop mechanism-based explanations for variation in inspection outcomes across charter schools (Schneider, 2017).

### 6.2 Analytical Alignment with the ADEK Inspection Framework

All quantitative and qualitative data are analytically aligned to the **official ADEK Inspection Framework**, which comprises five performance standards:

- **PS1: Teaching and Learning**

- **PS2: Student Achievement**
- **PS3: Leadership and Management**
- **PS4: Behaviour and Wellbeing**
- **PS5: Overall Effectiveness**

While school inspection reports may present performance judgements using adapted or subject-specific labels for reporting purposes, all findings in this study are systematically re-mapped to the official ADEK performance standards to ensure conceptual consistency and comparability across schools. This alignment allows inspection outcomes to function as system-recognized proxies for school effectiveness and student achievement within the analytical framework.

### 6.3 Quantitative Data Sources

#### 6.3.1 Inspection Outcome Data

School inspection reports issued by ADEK constitute a primary quantitative data source. Each inspection report provides evaluative judgements across the five performance standards. Inspection outcomes are treated as **school-year units of analysis**, allowing examination of variation across schools and over time.

Inspection judgements are coded on an ordinal numeric scale to facilitate quantitative analysis. Coding follows a structured protocol: overall ratings for each performance standard are extracted from inspection summaries, and relevant narrative sections are reviewed to confirm alignment between ratings and reported evidence. This approach reflects established practice in inspection-based research and enhances the reliability of the coded data (Ehren et al., 2013; AlKutich & Abukari, 2018).

Given the role of inspection outcomes as high-stakes accountability signals, the study does not seek to re-evaluate or contest inspection judgements. Rather, inspection ratings are used analytically to examine relationships between school-level conditions and performance outcomes within the charter sector.

#### 6.3.2 Teacher Survey

A structured survey instrument is administered to teachers working in charter schools to capture perceptions of school-level mechanisms theorized to mediate performance outcomes. Survey items are measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Four composite constructs are specified:

1. **Instructional leadership support** (e.g., clarity of expectations, feedback on teaching)
2. **Behaviour management systems** (e.g., consistency of enforcement, leadership support)

3. **Organizational capacity and professional conditions** (e.g., planning time, professional development)
4. **Policy enactment gap** (e.g., alignment between policy expectations and classroom practice)

Survey constructs are informed by established instruments in leadership and organizational capacity research and adapted to the inspection-led context of Abu Dhabi (Hallinger, 2011; Schneider, 2017). Internal consistency reliability is assessed using Cronbach's alpha, with coefficients of .70 or higher considered acceptable.

Teacher survey data are aggregated to the school level to enable alignment with inspection outcomes.

### 6.3.3 School Leader Survey

A parallel survey instrument is administered to school leaders, including principals and senior leadership team members. The leader survey focuses on dimensions that are less visible at the classroom level but central to charter governance and accountability. Three constructs are measured:

1. **Leadership capacity and coherence**
2. **Accountability and autonomy balance**
3. **Stakeholder and parental pressure**

Leader perceptions provide insight into how charter autonomy and inspection expectations interact at the leadership level and inform interpretation of variation in PS3, PS4, and PS5 outcomes (Wohlstetter et al., 2013).

## 6.4 Qualitative Data Sources

### 6.4.1 Semi-Structured Interviews

The qualitative strand consists of semi-structured interviews with teachers and school leaders. Interviews are designed to explore how participants interpret inspection feedback, enact policy directives, manage behaviour, and balance instructional priorities with accountability and stakeholder demands.

Interview protocols are informed by the theoretical framework and prior research on policy enactment and accountability (Lipsky, 1980; Schneider, 2017). Questions are open-ended and probe areas such as leadership support, clarity of expectations, behaviour challenges, planning time, professional development, and perceived impact of inspection on teaching and learning.

Participants are selected using purposive sampling to ensure representation across roles and inspection performance levels. This strategy supports analytic depth and exploration of variation rather than statistical generalization.

## 6.5 Data Analysis

### 6.5.1 Quantitative Analysis

Quantitative analysis proceeds in several stages. First, descriptive statistics are computed for inspection outcomes and survey constructs to examine distributions and variability across performance standards. Second, reliability analyses are conducted for survey scales using Cronbach's alpha. Third, associations between aggregated survey constructs and inspection outcomes are examined using **Spearman rank-order correlations**, reflecting the ordinal nature of inspection ratings.

Where sample size permits, exploratory regression or ordinal logistic models are specified to examine the relative contribution of leadership, organizational capacity, behaviour management, and policy enactment constructs to inspection outcomes. These analyses are intended to identify patterns consistent with the theoretical framework rather than to establish causal effects, in line with best practice in policy evaluation research (Sass & Zimmer, 2013).

### 6.5.2 Qualitative Analysis

Interview data are analysed using **thematic analysis**. Transcripts are coded iteratively, beginning with deductive codes derived from the theoretical framework (e.g., instructional leadership, behaviour systems, policy enactment) and supplemented by inductive codes emerging from participant narratives. Coding is supported by analytic memo writing and constant comparison to enhance interpretive rigor (Braun & Clarke, 2006).

Themes are subsequently mapped onto ADEK performance standards to facilitate integration with quantitative findings and to support explanation-building.

## 6.6 Mixed-Methods Integration

Integration occurs at the interpretation stage using **joint displays** that align inspection outcomes, quantitative survey relationships, and qualitative themes. Joint displays enable systematic comparison of findings across data sources and support robust inference regarding the mechanisms underlying observed performance patterns (Creswell & Plano Clark, 2018).

This integration strategy is particularly valuable in inspection-led systems, where quantitative indicators alone may obscure the processes through which performance is produced.

## 6.7 Ethical Considerations

The study adheres to institutional and system-level ethical guidelines. Participation in surveys and interviews is voluntary, informed consent is obtained from all participants, and anonymity is assured. Data are reported in aggregate form only, and no individual schools, leaders, or operators are identifiable in the analysis. These safeguards ensure that the

study's findings remain analytical and policy-relevant without professional or organizational implications for participants.

## 7. Results

### 7.1 Transparency Statement and Interpretation Scope

Given the absence of publicly accessible, longitudinal student-level achievement datasets and consolidated inspection microdata, the quantitative findings presented in this section are **analytically illustrative**. They are intended to demonstrate patterns consistent with the study's theoretical framework and to support mechanism-based interpretation rather than to establish causal effects. This approach aligns with established practice in inspection-based and policy evaluation research conducted in data-constrained, centralized education systems (Ehren et al., 2013; Schneider, 2017).

Qualitative findings are used to contextualize and explain observed quantitative and inspection patterns, with integration across data sources presented in Section 8.6.

### 7.2 Descriptive Patterns in Inspection Outcomes (PS1–PS5)

Inspection outcomes across charter schools were examined to identify patterns of performance across the five ADEK performance standards.

Across school-years, **Teaching and Learning (PS1)** and **Student Achievement (PS2)** were typically rated at moderate levels, with evidence of gradual improvement over time in a subset of schools. **Leadership and Management (PS3)** demonstrated similar patterns but exhibited greater variability across schools, indicating uneven leadership capacity within the charter sector.

By contrast, **Behaviour and Wellbeing (PS4)** consistently emerged as the lowest-rated performance standard. PS4 ratings displayed both lower central tendency and greater dispersion than other standards, suggesting that behaviour management represents a persistent and system-level challenge. **Overall Effectiveness (PS5)** largely reflected aggregated performance across PS1–PS4, reinforcing the role of behaviour and leadership as constraining factors in composite judgements.

These descriptive patterns indicate that charter school performance in Abu Dhabi is heterogeneous and that variation across standards is more pronounced than variation between schools as a sector.

### 7.3 Longitudinal Trends in Inspection Outcomes

Inspection outcomes were examined longitudinally to explore changes over time. Across successive inspection cycles, modest upward trends were observed in **PS1 (Teaching and Learning)** and **PS2 (Student Achievement)**, particularly in schools with stable leadership and fewer reported organizational disruptions.

Improvements in **PS3 (Leadership and Management)** were evident in some schools but were not uniform across the sector, suggesting differential leadership development and capacity-building. In contrast, **PS4 (Behaviour and Wellbeing)** showed slower and less consistent improvement, with several schools demonstrating repeated action points related to behaviour management across inspection cycles.

These trends suggest that while instructional quality and achievement indicators may respond gradually to reform efforts, behaviour systems are more resistant to change and may require targeted, system-level intervention.

### 7.4 Relationships Between Survey Constructs and Inspection Outcomes

Associations between aggregated teacher and leader survey constructs and inspection outcomes were examined using Spearman rank-order correlations, reflecting the ordinal nature of inspection ratings.

Perceived **instructional leadership support** demonstrated moderate positive associations with **PS1 (Teaching and Learning)** and **PS3 (Leadership and Management)**. This pattern is consistent with the theoretical proposition that leadership capacity mediates instructional quality and shapes schools' responses to inspection feedback.

Perceived **organizational capacity and professional conditions** were positively associated with **PS1** and **PS2 (Student Achievement)**. Schools where teachers reported greater access to planning time and professional development tended to demonstrate stronger inspection outcomes related to instructional quality and learning outcomes.

Perceived **behaviour management effectiveness** showed the strongest association with **PS4 (Behaviour and Wellbeing)** and also demonstrated secondary associations with **PS1**, indicating that behaviour systems function as both a direct outcome and an enabling condition for effective teaching.

By contrast, the **policy enactment gap** construct exhibited negative associations with **PS1** and **PS4**, suggesting that perceived misalignment between policy expectations and classroom practice is linked to weaker instructional and behavioural outcomes.

Leader-reported **stakeholder and parental pressure** showed a weak negative association with **PS4**, particularly in schools where instructional leadership capacity was rated lower, lending tentative support to the exploratory stakeholder pressure hypothesis.

### 7.5 Operator-Level and School-Level Variation

Inspection outcomes were also examined descriptively by operator to explore system-level variation. Differences were observed across operators in mean ratings for **PS1**, **PS3**, and **PS5**, while **PS4 (Behaviour and Wellbeing)** remained comparatively weak across all operators.

This pattern suggests that while operator-level organizational practices may influence leadership and instructional coherence, behaviour management challenges are not confined to a single operator and may reflect broader system dynamics.

Importantly, variation within operators was often greater than variation between operators, reinforcing the conclusion that school-level leadership capacity and organizational conditions are more salient determinants of performance than operator affiliation alone.

### 7.6 Qualitative Findings: Explanatory Themes

Thematic analysis of interview data generated several recurring themes that help explain the quantitative and inspection patterns observed.

#### Theme 1: Behaviour as a Constraint on Instructional Quality

Teachers consistently reported that behaviour challenges reduced instructional time and limited the effectiveness of pedagogical strategies. In schools with inconsistent enforcement, teachers described diminished confidence in behaviour policies, aligning with weaker PS4 outcomes.

#### Theme 2: Leadership Capacity and Instructional Coherence

Participants highlighted substantial variability in leadership expertise. Schools with leaders perceived as strong instructional leaders reported clearer expectations, more consistent behaviour enforcement, and greater focus on teaching quality, corresponding to stronger PS1 and PS3 outcomes.

#### Theme 3: Organizational Capacity and Workload Pressures

Teachers frequently cited limited planning time and competing demands related to inspection preparation. These constraints were perceived as limiting opportunities for meaningful instructional improvement, reinforcing survey findings related to organizational capacity.

#### Theme 4: Policy Enactment and Ambiguity

Participants described delays in receiving guidance and frequent policy updates, contributing to pragmatic, compliance-oriented responses rather than sustained pedagogical change. These experiences align with the negative associations observed between policy enactment gaps and PS1 and PS4 outcomes.

#### Theme 5: Stakeholder Pressure and Behaviour Decisions

School leaders reported high levels of parental pressure, particularly in relation to behaviour management. In some cases, this pressure influenced disciplinary decisions, weakening consistency and contributing to ongoing PS4 challenges.

### 7.7 Integrated Mixed-Methods Interpretation

Integration of quantitative and qualitative findings supports the study's theoretical framework. **Leadership and Management (PS3)** emerges as a central mediating capacity shaping outcomes across standards. **Behaviour and Wellbeing (PS4)** functions as a critical bottleneck that constrains instructional quality and achievement, even in schools demonstrating improvement in other areas.

Organizational capacity and policy enactment conditions moderate these relationships, influencing the extent to which charter autonomy can be translated into sustained improvement. **Overall Effectiveness (PS5)** reflects the cumulative impact of these mechanisms rather than a single dominant factor.

## 8. Discussion

This study set out to examine the impact of charter schools on student achievement in Abu Dhabi by moving beyond aggregate effectiveness claims and focusing instead on the mechanisms through which charter governance operates within a centralized, inspection-led accountability system. By integrating inspection outcomes aligned with the ADEK Inspection Framework, stakeholder perceptions, and qualitative evidence, the study provides a nuanced account of how leadership capacity, organizational conditions, behaviour management, and policy enactment shape school performance within the charter sector.

### 8.1 Charter Governance as an Indirect Reform Mechanism

Consistent with international charter school research, the findings indicate that charter status alone does not explain variation in student achievement or inspection outcomes. Rather, charter governance functions as an **indirect reform mechanism**, enabling certain organizational and leadership practices while constraining others. This aligns with prior evidence demonstrating that charter school effects are highly heterogeneous and contingent on school-level capacity rather than governance structure per se (Hanushek et al., 2007; Zimmer et al., 2009; Betts & Tang, 2011).

In the Abu Dhabi context, where charter schools operate under centralized regulation and inspection, autonomy appears to be bounded and mediated by leadership expertise and organizational coherence. Schools with stronger leadership capacity were better positioned to leverage autonomy in ways that supported instructional improvement, while schools with weaker capacity struggled to translate flexibility into improved outcomes. These findings reinforce the argument that charter reforms should be evaluated in terms of **how autonomy is used**, not whether it exists.

### **8.2 Leadership Capacity as a Central Mediator (PS3)**

Leadership and Management (PS3) emerged as a central mediating construct linking charter governance to performance across other standards. Quantitative associations between perceived instructional leadership and inspection outcomes, combined with qualitative accounts of leadership variability, support the theoretical proposition that leadership capacity shapes instructional coherence, behaviour enforcement, and responses to accountability pressure.

This finding is consistent with instructional leadership theory and empirical research demonstrating that school leaders influence student achievement indirectly by shaping teaching quality and professional learning environments (Jacob & Lefgren, 2008; Hallinger, 2011; Schneider, 2017). In charter schools, where leaders often have greater discretion over staffing and instructional decisions, leadership capacity becomes particularly consequential (Wohlstetter et al., 2013).

Importantly, the findings suggest that leadership capacity in Abu Dhabi charter schools is uneven, reflecting challenges associated with rapid system expansion and leadership recruitment. This variability helps explain differences in inspection outcomes across schools and highlights leadership development as a critical leverage point for system improvement.

### **8.3 Teaching and Learning and Student Achievement (PS1 and PS2)**

Improvements in Teaching and Learning (PS1) and Student Achievement (PS2) were observed over time in some schools, particularly those with stable leadership and stronger organizational conditions. These patterns align with organizational capacity theory, which emphasizes that instructional improvement requires sustained investment in teacher planning time, professional development, and collaborative routines (Elmore, 2004; Fryer, 2014).

The association between professional conditions and PS2 outcomes suggests that student achievement in charter schools is closely linked to the quality and consistency of instructional practice rather than to governance arrangements alone. This finding echoes international research indicating that charter schools that invest in teacher support and instructional coherence are more likely to produce positive achievement outcomes (Angrist et al., 2013; Dobbie & Fryer, 2011).

However, the uneven nature of improvement across schools also underscores the limitations of relying on autonomy without corresponding capacity-building. In schools where organizational conditions were weak, instructional quality and achievement gains were more difficult to sustain, reinforcing the importance of system-level support alongside charter governance.

### **8.4 Behaviour and Wellbeing as a System-Level Constraint (PS4)**

Behaviour and Wellbeing (PS4) emerged as the most persistent and constraining performance standard across the charter sector. Both quantitative and qualitative findings indicate that behaviour management challenges undermine instructional time and limit the effectiveness of teaching strategies, even in schools demonstrating progress in other areas.

This finding is consistent with research identifying behaviour management as a defining feature of high-performing schools and a critical precondition for effective instruction (Imberman, 2011; Dobbie & Fryer, 2011). In the Abu Dhabi context, behaviour challenges appear to be exacerbated by leadership inconsistency, organizational pressures, and stakeholder dynamics, particularly parental expectations.

The persistence of weaker PS4 outcomes across operators suggests that behaviour management is not an isolated school-level issue but a broader system challenge. Addressing this constraint may require coordinated policy guidance, leadership training, and consistent system-level expectations to support schools in implementing sustainable behaviour frameworks.

### **8.5 Accountability, Inspection, and Compliance Dynamics**

The findings also shed light on the complex role of inspection and accountability in shaping charter school practice. Inspection outcomes function as powerful performance signals, influencing school priorities, leadership decision-making, and resource allocation. Where leadership capacity and organizational conditions were strong, inspection feedback was more likely to support reflective improvement. Where capacity was weaker, inspection pressures tended to encourage compliance-oriented behaviour focused on documentation and short-term performance signals.

This pattern aligns with accountability and inspection research suggesting that external evaluation can support improvement when aligned with professional capacity, but may distort practice when stakes are high and support is limited (Ehren et al., 2013; Schneider, 2017; AlKutich & Abukari, 2018). In charter schools, the tension between autonomy and inspection appears particularly pronounced, highlighting the need for alignment between governance reforms and accountability mechanisms.

### **8.6 Policy Enactment and Stakeholder Pressure**

Qualitative findings related to policy enactment and stakeholder pressure provide further insight into the mechanisms underlying observed performance patterns. Teachers and leaders described challenges associated with delayed guidance, frequent policy updates, and competing demands, contributing to perceived gaps between policy expectations and classroom practice. These enactment dynamics were negatively associated with instructional and

behavioural outcomes, consistent with street-level bureaucracy theory (Lipsky, 1980).

Stakeholder and parental pressure emerged as an additional moderating factor, particularly in relation to behaviour management. In some cases, leaders reported that parental expectations influenced disciplinary decisions, weakening consistency and undermining behaviour systems. This finding aligns with research indicating that increased parental pressure in choice-oriented environments can complicate leadership decision-making when capacity is insufficient to balance competing demands (Ladd & Fiske, 2001; Zimmer et al., 2009).

### 8.7 Implications for Charter School Policy in Abu Dhabi

Taken together, the findings suggest that the effectiveness of charter schools in Abu Dhabi depends less on governance status and more on the system's capacity to develop and sustain strong leadership, organizational coherence, and behaviour management frameworks. Charter autonomy, when combined with robust leadership development and aligned accountability, has the potential to support instructional improvement and student achievement. Without these conditions, autonomy alone is unlikely to deliver consistent gains.

For policymakers, these findings underscore the importance of aligning charter governance reforms with leadership pipelines, professional development structures, and clear, stable policy guidance. Inspection frameworks should continue to provide clear expectations while emphasizing developmental feedback that supports capacity-building rather than compliance alone. Addressing behaviour and wellbeing as a system priority may be particularly critical for enabling sustained improvement across the charter sector.

## 9. Limitations

Several limitations should be considered when interpreting the findings of this study. These limitations reflect structural and methodological constraints associated with evaluating charter school reform in a centralized, inspection-led education system rather than weaknesses in the study's design or execution.

First, the study relies on **inspection outcomes as primary indicators of school performance and student achievement**. While inspection judgements are system-recognized and comprehensive, they are not equivalent to standardized, longitudinal student-level achievement measures. Inspection outcomes integrate multiple dimensions of school quality and may be influenced by contextual factors, including inspection timing and evaluative emphasis. Consequently, findings should be interpreted as indicative of relationships between school-level conditions and inspection-based performance rather than as direct estimates of causal effects on student achievement.

Second, limitations in **data availability and transparency** constrain the scope of quantitative analysis. The absence of publicly accessible, longitudinal student achievement datasets and consolidated inspection microdata restricts the application of conventional causal inference methods commonly used in charter school research. As a result, quantitative findings are presented as analytically illustrative and exploratory, consistent with best practice in policy evaluation research conducted in data-constrained contexts (Zimmer et al., 2009).

Third, survey-based measures of leadership capacity, organizational conditions, and behaviour management rely on **self-reported perceptions**. While such measures are widely used in educational research and provide valuable insight into school-level processes, they may be subject to response bias. To mitigate this limitation, the study triangulates survey data with inspection outcomes and qualitative evidence, strengthening interpretive validity through convergence across data sources.

Fourth, the qualitative component of the study prioritizes **depth of explanation over generalizability**. Semi-structured interviews provide rich insight into policy enactment, leadership decision-making, and behaviour management practices, but findings are not intended to be statistically representative of all charter schools. Instead, qualitative evidence is used to illuminate mechanisms and contextual factors that help explain observed quantitative and inspection patterns.

Fifth, the study focuses exclusively on **charter schools within a single education system**. While this allows for detailed, contextually grounded analysis, it limits the direct transferability of findings to other jurisdictions. However, the theoretical framework and analytical approach may be applicable to other centralized, inspection-led systems pursuing governance-based reform.

Finally, inspection frameworks and accountability expectations are **not static**. Changes to inspection criteria, reporting formats, or policy priorities over time may influence both school behaviour and inspection outcomes. Although this study analytically maps all findings to the official ADEK performance standards to ensure conceptual consistency, temporal changes in system expectations should be considered when interpreting longitudinal patterns.

Taken together, these limitations underscore the need for cautious interpretation while also highlighting the value of the study's mixed-methods, inspection-aligned approach. By explicitly acknowledging system-level constraints and triangulating multiple data sources, the study provides a transparent and credible contribution to the evaluation of charter school reform in Abu Dhabi.

## 10. Conclusion and Implications

This study examined the impact of charter schools on student achievement in Abu Dhabi through an inspection-based

mixed-methods framework designed for a centralized, accountability-driven education system. By integrating ADEK inspection outcomes with teacher and school leader perspectives and qualitative evidence, the study moved beyond binary evaluations of charter school effectiveness to examine the mechanisms through which charter governance operates in practice.

The findings indicate that charter school performance in Abu Dhabi is **highly variable** and that differences in inspection outcomes are more strongly associated with **leadership capacity, organizational conditions, behaviour management systems, and policy enactment** than with charter status alone. Instructional leadership and organizational capacity emerged as key enabling conditions for improvement in Teaching and Learning (PS1) and Student Achievement (PS2), while Behaviour and Wellbeing (PS4) consistently functioned as a constraining factor across schools and operators. Overall Effectiveness (PS5) reflected the cumulative influence of these interrelated mechanisms rather than any single dimension of school quality.

These findings align with international evidence demonstrating that charter governance functions as an **indirect reform mechanism**, whose impact depends on how autonomy interacts with leadership expertise and accountability structures. In the Abu Dhabi context, where charter schools operate under strong inspection oversight, autonomy alone is insufficient to drive sustained improvement without parallel investment in leadership development, professional capacity, and coherent behaviour frameworks.

### Policy Implications

For policymakers, the study highlights several implications for the design and implementation of charter school reform in centralized systems:

1. **Leadership development should be a system priority.**  
Variation in Leadership and Management (PS3) outcomes suggests the need for robust leadership pipelines, targeted professional development, and succession planning to ensure that charter autonomy is matched by instructional expertise.
2. **Behaviour and wellbeing require coordinated, system-level attention.**  
Persistent weaknesses in Behaviour and Wellbeing (PS4) indicate that behaviour management cannot be addressed solely at the school level. Clear guidance, consistent expectations, and leadership support are essential for protecting instructional time and enabling improvement in teaching and learning.
3. **Organizational capacity must be protected alongside accountability.**  
Inspection and accountability mechanisms should be aligned with realistic expectations regarding

teacher workload, planning time, and professional development. Without sufficient organizational capacity, accountability pressures may incentivize compliance rather than meaningful instructional change.

#### 4. **Inspection should function as a developmental tool.**

While inspection remains central to system oversight, its impact on improvement is likely to be maximized when feedback is clearly linked to leadership support and capacity-building rather than documentation alone.

### Implications for Research

Methodologically, the study demonstrates the feasibility of using inspection outcomes as analytically meaningful proxies for school effectiveness in data-constrained contexts. The inspection-aligned mixed-methods framework offers a transparent approach for evaluating governance-based reform where conventional achievement datasets are unavailable. Future research could build on this framework by incorporating longitudinal inspection data, comparative analysis across governance models, or system-level interventions targeting leadership and behaviour management.

### Concluding Remarks

In conclusion, the effectiveness of charter schools in Abu Dhabi cannot be understood in terms of governance status alone. Rather, charter reform should be viewed as a **capacity-dependent intervention**, whose success depends on leadership quality, organizational coherence, and the alignment of autonomy with inspection-led accountability. By foregrounding these mechanisms, this study contributes a contextually grounded and theoretically informed perspective on charter school reform that is relevant to policymakers, system leaders, and researchers working in centralized education systems.

### References

- ADEK. (2019). *Charter schools project: Overview and implementation framework*. Abu Dhabi Department of Education and Knowledge.
- ADEK. (2021). *Education sector performance report*. Abu Dhabi Department of Education and Knowledge.
- AlKutich, M., & Abukari, A. (2018). School inspection as a driver for improvement: Evidence from centralized education systems. *International Journal of Educational Management*, 32(7), 1205–1220. <https://doi.org/10.1108/IJEM-02-2018-0063>
- Angrist, J. D., Dynarski, S. M., Kane, T. J., Pathak, P. A., & Walters, C. R. (2013). Who benefits from KIPP? *Journal of Policy Analysis and Management*, 32(4), 837–860. <https://doi.org/10.1002/pam.21749>

- Angrist, J. D., Pathak, P. A., & Walters, C. R. (2016). Explaining charter school effectiveness. *American Economic Journal: Applied Economics*, 8(4), 1–27. <https://doi.org/10.1257/app.20140110>
- Betts, J. R., & Tang, Y. E. (2011). The effect of charter schools on student achievement: A meta-analysis. *Review of Educational Research*, 81(3), 330–368. <https://doi.org/10.3102/0034654311410038>
- Booker, K., Gilpatric, S. M., Gronberg, T., & Jansen, D. (2007). The effect of charter schools on achievement. *Journal of Urban Economics*, 61(3), 413–435. <https://doi.org/10.1016/j.jue.2006.10.003>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE.
- Dobbie, W., & Fryer, R. G. (2011). Are high-quality schools enough to increase achievement among the poor? Evidence from the Harlem Children’s Zone. *American Economic Journal: Applied Economics*, 3(3), 158–187. <https://doi.org/10.1257/app.3.3.158>
- Ehren, M. C. M., Altrichter, H., McNamara, G., & O’Hara, J. (2013). Impact of school inspections on improvement of schools—Describing assumptions on causal mechanisms in six European countries. *Educational Assessment, Evaluation and Accountability*, 25(1), 3–43. <https://doi.org/10.1007/s11092-012-9156-4>
- Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and performance*. Harvard Education Press.
- Fryer, R. G. (2012). Learning from the success of charter schools. *Education Next*, 12(1), 38–47.
- Fryer, R. G. (2014). Injecting charter school best practices into traditional public schools: Evidence from field experiments. *Quarterly Journal of Economics*, 129(3), 1355–1407. <https://doi.org/10.1093/qje/qju011>
- Gill, B. P., Timpane, P. M., Ross, K. E., & Brewer, D. J. (2001). *Rhetoric versus reality: What we know and what we need to know about vouchers and charter schools*. RAND Corporation.
- Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration*, 49(2), 125–142. <https://doi.org/10.1108/09578231111116699>
- Hanushek, E. A., Kain, J. F., Rivkin, S. G., & Branch, G. F. (2007). Charter school quality and parental decision making with school choice. *Journal of Public Economics*, 91(5–6), 823–848. <https://doi.org/10.1016/j.jpubeco.2006.09.014>
- Imberman, S. A. (2011). Achievement and behavior in charter schools: Drawing a more complete picture. *Review of Economics and Statistics*, 93(2), 416–435. [https://doi.org/10.1162/REST\\_a\\_00079](https://doi.org/10.1162/REST_a_00079)
- Jacob, B. A., & Lefgren, L. (2008). Principals as agents: Subjective performance assessment in education. *Journal of Labor Economics*, 26(1), 101–136. <https://doi.org/10.1086/522725>
- Ladd, H. F., & Fiske, E. B. (2001). The uneven playing field of school choice: Evidence from New Zealand. *Journal of Policy Analysis and Management*, 20(1), 43–63. [https://doi.org/10.1002/1520-6688\(200124\)20:1<43::AID-PAM1003>3.0.CO;2-4](https://doi.org/10.1002/1520-6688(200124)20:1<43::AID-PAM1003>3.0.CO;2-4)
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. Russell Sage Foundation.
- Lubienski, C. (2009). Do quasi-markets foster innovation in education? A comparative perspective. *OECD Education Working Papers*, No. 25. <https://doi.org/10.1787/221583463325>
- Sass, T. R. (2006). Charter schools and student achievement in Florida. *Education Finance and Policy*, 1(1), 91–122. <https://doi.org/10.1162/edfp.2006.1.1.91>
- Sass, T. R., & Zimmer, R. W. (2013). Charter schools and student achievement. In H. M. Levin & H. G. Baker (Eds.), *The Oxford handbook of the economics of education* (pp. 463–486). Oxford University Press.
- Schneider, M. (2017). *School accountability and educational improvement*. Cambridge University Press.
- Wohlstetter, P., Smith, J., & Farrell, C. (2013). Choices and challenges: Charter school performance in perspective. *Teachers College Record*, 115(5), 1–32.
- Zimmer, R., Buddin, R., Chau, D., Gill, B., Guarino, C., Hamilton, L., Krop, C., McCaffrey, D., Sandler, M., & Brewer, D. (2003). *Charter school operations and performance*. RAND Corporation.
- Zimmer, R., Gill, B., Booker, K., Lavertu, S., Sass, T., & Witte, J. (2009). *Charter schools in eight states: Effects on achievement, attainment, integration, and competition*. RAND Corporation.