

**Sustaining School Leadership Through Principal Retention: A Longitudinal Descriptive
Study of Maryland's Promising Principals' Academy**

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RACHEL VIRGINIA AMSTUTZ

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Abstract

Principal turnover and the lack of sustained school leadership remain national concerns, with nearly one in five principals leaving their schools each year. Sustained leadership is critical to student achievement, teacher development and retention, and school improvement; however, limited research has explored participation in a job-embedded professional learning and administrators' longevity. Grounded in Lave and Wenger's communities of practice theory, this longitudinal descriptive study examined retention among administrators who completed a cohort-based professional learning academy. A near-census sample of 249 academy completers across five cohorts (2014–2022) was analyzed using archival statewide staffing data. Retention in Maryland school-based administrative roles was documented at 3-, 5-, 8-, and 10-year intervals. At the 10-year interval, Cohort 1 retained approximately 39% of participants in Maryland schools—substantially higher than national mover-plus-stayer benchmarks of about ~22%, representing a 77% higher retention rate and indicating participants were 1.8 times more likely to continue serving in school-based leadership roles. Framed as a departure risk, principals nationally face an estimated 78% likelihood of leaving school-based leadership roles within 10 years, whereas the MDPPA Cohort 1 departure rate was 61%, reflecting a meaningful reduction in long-term attrition risk. Together, these findings suggest that structured professional learning models that build collegial networks may contribute to stronger long-term leadership continuity. Findings support continued investment in structured, mentoring-based professional development as a strategy to stabilize the school leadership pipeline. Implications include the need for policy and practice enhancements that strengthen leadership development systems, expand access to mentoring and coaching for principals, and sustaining leaders through collegial networks of practice. Recommendations for future research include longitudinal analyses examining the impact of professional learning on principal effectiveness and school outcomes.

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questions into answers and curiosity into contribution. I cannot wait to use these new skills to support our profession and the next generation of educators and school leaders.

For every educator who refuses to give up on their students—or themselves—this work is for you.

Table of Contents

Chapter 1: Introduction	1
Statement of the Problem	5
Purpose of the Study.....	6
Introduction to Theoretical Framework.....	7
Introduction to Research Methodology and Design	8
Research Question.....	11
Significance of the Study.....	13
Definitions of Key Terms.....	15
Summary	16
Chapter 2: Literature Review	18
Theoretical Framework	21
Impact of Effective School Administrators	33
School Administrator Retention.....	49
Reasons for Principal Turnover.....	50
Principal Turnover Effects	52
Principal Turnover Solutions.....	54
MDPPA Alignment with Literature Review Findings	57
Longitudinal Descriptive Research on Principal Retention	59
Summary	62
Chapter 3: Research Method.....	64
Research Methodology and Design.....	64
Population and Sample.....	68
Materials.....	69
Operational Definitions of Variables.....	71
Study Procedures.....	73
Data Analysis	74
Assumptions	74
Limitations.....	75
Delimitations	77
Ethical Assurances	78
Summary	79
Chapter 4: Findings.....	81
Validity and Reliability of the Data.....	83
Results	85
Evaluation of the Findings.....	104
Summary	106
Chapter 5: Implications, Recommendations, and Conclusions.....	109
Implications	113
Recommendations for Practice.....	122

Recommendations for Research.....	151
Conclusions	153
References.....	156
Appendix A IRB Approval Letter.....	173

List of Tables

Table 1 Study Variables and Coding Summary	87
Table 2 Cohorts for the Maryland Promising Principals Academy (MDPPA).....	89
Table 3 Descriptive Statistics for Years of Retention (N= 249	90
Table 4 Descriptive Statistics for Years of Retention by Cohort Year	93
Table 5 Cohort Retention Rate at Key Intervals (Percentage Retained).....	94
Table 6 Relative Risk (RR) Retention Trends Across <i>Cohorts and Time</i>	101

Chapter 1: Introduction

Successful schools rely on stable and effective principal leadership, yet sustaining leadership continuity administrators has become increasingly difficult in the current educational landscape (Grissom et al., 2021; Gurr, 2020; Leithwood et al., 2020; Reid, 2021; Superville, 2022). National and state data show rising turnover rates, with many principals leaving before they can fully implement long-term instructional and organizational improvements (Grissom et al., 2021; Superville, 2022). These patterns are especially concerning in high-need schools, where leadership continuity is essential for building trust, improving instructional systems, and advancing schoolwide goals (Leithwood et al., 2020; Reid, 2021). The problem is further compounded by a limited leadership pipeline and growing job complexity that strain principals' capacity to remain in their roles (Grissom et al., 2021; Service & Thornton, 2021). Given these conditions, examining retention patterns among Maryland principals is essential for understanding the extent of the challenge and identifying areas where sustained support may strengthen leadership stability. This problem frames the purpose of the present descriptive study, which explores retention outcomes among MDPPA participants.

In 2020, national survey data demonstrated that a concerning 42% of principals contemplated leaving their jobs (Levin et al., 2020). Moreover, in the United States, approximately one in five principals turn over annually (Beckett, 2021). The most challenging schools are hit hardest by this rapid turnover (Superville, 2022). It takes a minimum of 3 years for a principal to effect lasting change in a school (Tekleselassie et al., 2019). Educators, students, parents, and communities cannot take advantage of the stability and long-term vision that strong leaders provide, with the high principal turnover rates nationwide (Husain et al., 2021). High nationwide principal turnover, particularly by the fourth year, prevents schools and

students from experiencing the full benefits of consistent, strong leadership (Superville, 2022). Half of all principals who leave their positions entirely leave the field of school leadership, highlighting a concerning trend in the field (Beckett, 2021).

The demanding nature of the job is a significant reason why principals leave the profession. They face long hours, nearly impossible workloads, and a work-life balance that is hard to sustain (Grissom et al., 2019; Reid, 2021; Service & Thornton, 2021). The politicization of education intensifies the workload of principals, thrusting them into the center of conflicting demands and contributing heavily to the high principal turnover rates (Nittle, 2022). Systemic shortcomings, including a lack of necessary resources, support, and competitive compensation, are major concerns for principals, contributing to the leadership crisis (Levin et al., 2020; Superville, 2022).

The shift towards heightened accountability in education has dramatically affected school principals, with a significant number of principals identifying it as a primary source of stress (Mitani, 2018; Reid, 2021). The 2020 COVID-19 pandemic exacerbated the immense challenges that school leaders experience, compounding the factors that impact principals' decisions to leave the profession (Collie, 2021; Hernandez, 2021). Increased parental involvement and dissatisfaction, along with parental demands for greater decision-making power and control in schools, contributes to principals' concerns about their longevity in the role (Reid, 2021). These conditions, together with the evolving nature of the principal's position, lead some administrators to question their ability to remain in the profession long-term (Reid, 2021). Principals, especially those serving in more challenging schools, increasingly choose to leave their roles or the profession due to burnout (Reid, 2021).

The combination of high principal turnover and a limited pipeline of capable replacements present multiple challenges for schools (Reid, 2021; Service & Thornton, 2021). Frequent leadership changes undermine stability, disrupting a school's focus on its vision and mission, hindering school improvement efforts, and negatively impacting teachers and learning (Superville, 2022). Superville (2014) described this turnover as a form of churn, one of the most disruptive events in a school's life, eroding trust and continuity while imposing both financial and relational costs on schools and districts. This turnover also damages teacher and community trust in school administration (Beckett, 2021), lowers student achievement, and interrupts progress toward improvement goals (Superville, 2022). As experienced principals retire at higher rates and newer principals stay for shorter durations, these challenges worsen, creating a detrimental cycle for schools, educators, students, and their families (Reid, 2021; Service & Thornton, 2021).

Addressing principal turnover while increasing principal retention demands action in several areas: aligning and enhancing preparation programs, providing financial incentives to reduce preparation program costs, ensuring salaries reflect the demands of the position, improving working conditions, increasing autonomy and decision-making power, implementing non-punitive accountability systems, and investing in high-quality, and ongoing professional development (Levin et al., 2020), such as the Maryland Promising Principals' Academy (MDPPA). Each of these areas can directly contribute to higher principal retention rates. Investing in high-quality, job-embedded professional development is the focus of the current study.

With mounting evidence of the impact effective principals have on student outcomes, there is a growing national focus on investing in their professional development (Brauckmann et

al., 2023). Principals and aspiring principals benefit from a variety of professional development options, including courses, training, conferences, workshops, and formal and informal mentorship and coaching (Levin et al., 2020). Further, principals need more than traditional, off-site professional development (Acton, 2021). They require high-quality and relevant support that is embedded in their daily work, responsive to their immediate challenges, and focused on professional growth, rather than evaluation (Gumus & Bellibas, 2020).

Mentoring is a well-researched strategy for providing principals with the type of professional development and support they need (Hays & Mahfouz, 2020). Although mentoring takes many forms, there are still critical questions about how to create the most successful mentoring relationships, including what training mentors need, the optimal way to pair mentors and mentees, the most effective mentoring strategies, the specific supports required, and how to find the right balance between support and fostering growth (Swaminathan & Reed, 2020).

Recent research highlights the importance of investing in school leaders, building their capacity, and providing them with essential support (Liebowitz & Porter, 2019; Reid, 2021). A significant body of literature exists regarding effective leadership, change management, and principal development (Acton, 2021; Lazenby et al., 2022; Pariente & Tubin, 2021). However, researchers need to determine how to best support principals in a manner that promotes growth, builds capacity, and ultimately may contribute to their retention.

More research is needed to realize the full potential of coaching principals (Hays & Mahfouz, 2020; Hekenberns, 2019), including examining the necessary training for coaches, exploring optimal strategies for pairing coaches and principals, and investigating whether coaching impacts principal retention (Ford et al., 2020; Henkenberns, 2019; Ray, 2020). Given the unprecedented challenges faced by schools and leaders, it is crucial to identify the most

effective strategies for supporting, developing, and nurturing both new and experienced principals (Lazenby et al., 2022; Pariente & Tubin, 2021).

Statement of the Problem

The problem addressed in this study is that little is known about the long-term retention patterns of principals who participate in job-embedded professional development programs, such as the Maryland Promising Principals' Academy (MDPPA; Acton, 2021; Superville, 2022). Principals are leaving their positions at an alarming rate, with recent trends showing decreased tenure, high turnover rates, and almost half of current principals planning to leave their positions (Beckett, 2021; Husain et al., 2021). Leadership turnover is one of the least discussed yet most disruptive events in a school's environment (Superville, 2014). Frequent principal churn interrupts instructional progress, damages trust and imposes financial and relational costs on schools and districts alike. Principal turnover creates significant challenges, negatively impacting students, parents, teachers, schools, the community, and the overall educational system (Beckett, 2021; Snodgrass Rangel, 2018; Superville, 2022).

Effective principals play a crucial role in creating a supportive learning environment that fosters student success, ranking second only to classroom teachers in terms of impact (Grissom et al., 2019; Leithwood et al., 2020). Principals lead the implementation of the school's academic vision and provide the necessary structure for teachers to thrive. Effective principal leadership directly contributes to teacher retention, job satisfaction, and self-efficacy (Beckett, 2021). When principals turn over frequently, schools and districts face substantial costs and disruptions, hindering the educational process for everyone (Beckett, 2021; Leithwood et al., 2020).

Principals have clearly outlined the challenges they face and the support they need (Levin et al., 2020). Barring interventions such as investing in job-embedded professional development,

principals will continue to struggle with overwhelming workloads, isolation, and inadequate preparation and support (Beckett, 2021). Without research that describes the long-term retention patterns of school leaders who participate in initiatives such as MDPPA, policymakers and system leaders lack evidence to inform decisions about how to design, support, and invest in these programs. Furthermore, principals will likely continue to exit their positions at a dramatic rate, leaving the principal seat empty or with unqualified or inexperienced school leaders at a time when parents, teachers, and the nation desperately need them.

Purpose of the Study

The purpose of this longitudinal descriptive study was to examine retention patterns over time among school administrators who completed the Maryland Promising Principals' Academy (MDPPA). The target population included all school administrators ($n = 260$) who completed the MDPPA across the five cohorts, representing all 24 Maryland districts. Due to the relatively small and accessible size of the population, a census sampling method was used (Creswell & Creswell, 2022). Eleven participants were later excluded due to their employment location being in a specialized setting, not a local education agency, resulting in a near-census analytic sample of 249 MDPPA completers. The MDPPA hosted approximately 52 school administrators in each cohort, typically every or every other year (MDPPA, 2022). To date, five cohorts have completed the program. This near-census method means that the entire accessible population, 260 aspiring school leaders who participated in the MDPPA, was included in the study. Using this sampling strategy generated descriptive retention data for the full population of MDPPA completers, ensuring the findings reflected all available program participants. Unlike other sampling methods, census sampling includes every individual in the target population rather than a selected subset (Creswell & Creswell, 2022). Since all individuals in the dataset were MDPPA

completers, participation status did not vary. Therefore, the study focused on describing longitudinal retention patterns to identify trends in continued service. Upon receiving National University (NU) Institutional Review Board (IRB) approval (see Appendix A), MDPPA principal participation and principal retention data were obtained from the Maryland State Department of Education. Archival statewide staffing data were used to describe longitudinal retention patterns of administrators over time.

Introduction to Theoretical Framework

The theoretical foundation draws from the communities of practice theory developed by Lave and Wenger (1991). The theory emphasizes the importance of social participation in the learning process, challenging the traditional view of individual learning by positing that learning occurs through active engagement within social groups (Bolisani, 2021). Within a community of practice, an individual's identity is shaped by their participation (Lave & Wenger, 1991). Membership and a sense of role within the community become motivating factors for learning (Johnson & van der Walt, 2020). The shared environment of peers actively pursuing knowledge and growth encourages a desire for personal skill development within the participant (Lave & Wenger, 1991).

Communities of practice theory aligns with the present study because the MDPPA was designed around social, collaborative, and job-embedded professional learning structures (Lave & Wenger, 1991). The MDPPA situates school administrators within a community of peers facing similar challenges and guided by experienced mentors (Westberry & Horner, 2022). The social setting fosters a sense of belonging and support, inspiring professional growth (Bickmore et al., 2021). Within this context, the community of practice motivates participants to continuously develop their skills and learn from those around them (Lave & Wenger, 1991).

The communities of practice theory has been applied extensively in education and learning (Bickmore et al., 2021). Although the communities of practice theory provides valuable insights, a gap exists in how it applies specifically to school administrators' professional development and how participants in such programs remain in school-based roles over time. Describing retention patterns among MDPPA completers contributes to this gap by offering evidence about the long-term trajectories of administrators who engaged in a job-embedded learning community. These findings may inform future planning for professional learning and support for school leaders.

Introduction to Research Methodology and Design

A quantitative method and descriptive design were chosen for this study. This approach supported the analysis of numerical data to explore retention patterns among individuals who completed the MDPPA. The quantitative framework facilitated the examination of measurable outcomes captured in state staffing records. The design allowed for the analysis of descriptive data and trends, providing a basis for describing retention patterns among MDPPA completers (Creswell & Guetterman, 2021).

All individuals in the sample completed the MDPPA and retention was examined descriptively among program completers. The primary grouping variable was MDPPA cohort year, a naturally occurring categorical variable reflecting differing lengths of time available for follow-up. Retention was operationalized as the total number of academic years in which an individual appeared in the MSDE fall staffing file in a school-based administrative role following MDPPA. Because MSDE provides a single annual staffing submission, tenure could not be calculated in days or months; therefore, a discrete count of yearly returns was the most precise measure available.

A descriptive research design was selected for this study to provide a comprehensive account of administrator retention patterns following MDPPA participation. This design is appropriate because the key variable, participation in the program, does not vary across the analytic sample, making inferential comparisons or predictive tests inappropriate. Instead, a descriptive approach allows the study to summarize retention trends across multiple years and cohorts without making causal claims. By focusing on observable patterns in archival staffing data, the design aligns with the study's purpose of understanding retention outcomes over time. This design choice informs the selection of data sources and analytic procedures described next.

The descriptive design supported analysis of measurable retention patterns using archival staffing records from the Maryland State Department of Education (Creswell & Guetterman, 2021). Because all individuals in the dataset completed the MDPPA, analyses focused on examining longitudinal retention patterns rather than comparisons based on participation status. The design also allowed for exploratory examination of subgroup variation based on contextual variables available in the archival dataset, such as cohort year, LEA size, and geographic region. This descriptive approach aligned with the purpose of characterizing retention trends over time among MDPPA participants.

The study's target population included all school administrators ($n = 260$) who had completed the MDPPA across its five cohorts, representing all 24 Maryland districts. A census sampling method was employed to include the full population of eligible participants. A small group of participants were removed from the analytic sample each year because they were not employed in a Maryland local education agency. The result was a near-census sample of 249. This approach ensured complete coverage of the population of MDPPA completers.

After the National University Institutional Review Board (IRB) approval was obtained, data (n = 249) were accessed from the Maryland State Department of Education annual staffing data collection file. The annual “Staff File” included job assignment, retention status, and LEA; however, demographic variables such as age, race, gender and years in the field were not available. These data enabled the analysis of whether participants remained in a school-based administration role after participating in the MDPPA; but demographic variables such as age, race, gender, or years in the field were not included. These administrative records were used to verify whether each MDPPA completer appeared in a school-based administrative role during each year of follow-up. The analysis focused on characterizing retention outcomes among MDPPA participants and examining variation across contextual factors available in the archival dataset. This approach aligns with the descriptive design by summarizing observable retention patterns among program completers.

Retention trends were summarized descriptively for the full sample and by MDPPA cohort, providing the foundation for subsequent exploratory analysis of subgroup variation. This approach ensured that retention patterns were clearly established before examining contextual factors such as cohort year, LEA size, or region. Together, these steps supported an organized progression from general trends to more nuanced exploratory comparisons.

The analytic approach centered on summarizing retention outcomes using descriptive statistics and exploratory comparisons across cohorts and time intervals. These analyses were designed to highlight patterns in administrator tenure without testing hypotheses or estimating predictive effects. Where appropriate, procedures such as one-way ANOVAs and relative-risk ratios were used to illuminate differences in retention patterns across subgroups; however, these procedures were interpreted descriptively rather than inferentially. Emphasis was placed on

clarity, transparency, and accurate representation of the archival data. This analytic strategy aligned with the study purpose and supports the results presented in Chapter 4.

Relative-risk ratios were additionally calculated to contextualize the likelihood of continued service across MDPPA cohorts at key follow-up intervals, including 3, 5, 8, and 10 years after program completion. The ratios compared the proportion of administrators who remained in school-based roles in one cohort to the proportion retained in another cohort at the same time point, providing a descriptive indicator of comparative likelihood. These estimates offered a complementary perspective on retention patterns by quantifying how the probability of continued service differed across cohorts over time. Because relative-risk calculations were descriptive, no statistical significance testing was applied to these estimates. Statistical significance ($p = .05$) was used only for the exploratory ANOVA procedures described previously. Collectively, these procedures provided a descriptive account of retention among MDPPA participants and insight into how retention trends varied across cohorts and over time.

Research Question

School administrators require timely, relevant, and job-embedded professional development to navigate the increasing complexity of school leadership. The Maryland Promising Principals' Academy (MDPPA) is one such initiative designed to provide ongoing professional learning and mentoring support for aspiring school leaders. Because the available archival data included only MDPPA completers, the present study employed a longitudinal descriptive design to characterize retention patterns rather than test causal or correlational relationships. The design also incorporated exploratory subgroup analyses to examine how retention trends varied across contextual factors available in the archival dataset. Accordingly, the following research and exploratory questions guided this study.

RQ1

What longitudinal descriptive trends exist in retention in school-based administrative roles among completers of the Maryland Promising Principals' Academy (MDPPA)?

Exploratory Research Questions.

ERQ1. To what extent do retention patterns differ descriptively across MDPPA cohorts?

ERQ2. To what extent do retention patterns vary descriptively across Local Education Agency (LEA) size categories?

ERQ3. To what extent do retention patterns vary descriptively across Maryland geographic regions?

ERQ4. What are the relative-risk ratios of continued service at 3-, 5-, 8-, and 10-year intervals following completion of the MDPPA across cohorts?

Operational Definitions

Retention. The total number of academic years in which an individual appeared in the Maryland State Department of Education (MSDE) annual staffing file in a school-based administrative role following MDPPA completion.

School-Based Administrative Role. Any administrative position reported in the MSDE annual staffing file that is directly assigned to a school (e.g., assistant principal, vice, principal, principal).

Cohort. The MDPPA class year in which the participant completed the program (Cohorts 1–5), representing different lengths of time available for follow-up.

LEA Size. Local Education Agencies were categorized into size groups (very small, small, medium, medium-large, large) based on publicly reported total district enrollment.

Region. Maryland's geographic regions were defined consistent with MSDE regional groupings (e.g., Western Maryland, Maryland Core North, Maryland Core South, Southern Maryland, Eastern Shore).

Relative Risk Ratio. A descriptive statistic comparing the proportion of administrators retained at specified year intervals (3, 5, 8, 10 years) across cohorts, calculated as the ratio of the probability of retention in one cohort to the probability of retention in another cohort at the same time point.

Significance of the Study

As the researcher, I brought extensive Maryland K–12 leadership experience, which informed the interpretation of findings and helped contextualize implications for practice. These experiences shaped my conviction that leadership development is not solely a pipeline issue but also a sustainability issue. This professional background enhanced the applied relevance of the study, while analysis remained anchored in predefined quantitative methods and archival data. The study's focus on retention outcomes among MDPPA completers provides insight into a critical area of principal sustainability within Maryland's public schools.

Understanding retention outcomes among MDPPA participants expands the existing literature on leadership development and professional growth models that support principal longevity. High national and state turnover rates, combined with evidence that many administrators contemplate leaving their roles, underscore the importance of examining long-term retention trends among participants in job-embedded development programs (Levin et al., 2020; Swaminathan & Reed, 2020). Although the present study does not test causal effects, describing these trends contributes meaningful evidence about the stability of administrators who

completed the MDPPA. This knowledge supports ongoing discussions about how professional learning programs might contribute to leader persistence over time.

The findings of this study hold relevance for school districts, state education agencies, leadership preparation programs, and professional development providers. Insight into descriptive retention trends can help stakeholders determine how to structure support systems that enhance leadership sustainability within schools. By examining how participants remained in school-based roles over time, the study contributes information that may guide decisions about future professional development investments. These descriptive findings also support reflection on how mentoring and job-embedded learning fit within broader retention strategies for effective school leaders.

Retaining strong school leaders has substantial advantages, including improved student performance, reduced teacher turnover, and continuity of school improvement efforts (Beckett, 2021; Grissom et al., 2021). Experienced principals mentor future leaders, build institutional knowledge, and offer sustained direction for school communities. Their ongoing leadership strengthens school implementation capacity and fosters stronger relationships with staff, families, and students (Leithwood et al., 2020). Understanding retention trends among MDPPA participants contributes to this broader conversation by offering quantitative insight into the longevity of administrators who engaged in a structured leadership development program.

Describing retention outcomes across MDPPA cohorts revealed several patterns in administrators' continued service in Maryland school-based leadership roles. The data indicated variation in retention rates across cohorts and across different follow-up intervals, with some cohorts showing higher levels of long-term continuity than others. These descriptive results offer insight into how retention unfolds over time among leaders prepared through the program. While

the observed patterns do not imply causal relationships, they provide valuable context for understanding leadership stability in the state.

Methodologically, this study contributes to a field where much of the research on principal retention relies on qualitative or narrative approaches. By employing a longitudinal descriptive design using archival staffing data and a near-census sample, the study offers a more precise empirical description of retention patterns than is typically found in the existing literature. Although no causal or correlational tests were conducted, the study's quantitative approach strengthens the evidence base regarding administrator longevity. The use of verified staffing data enhances the reliability of findings and supports a deeper understanding of leadership stability within Maryland's public schools.

Definitions of Key Terms

Mentoring

A mentor is a wise and trusted teacher who offers knowledge and insight to someone less experienced (Bandura, 1977; Dondero, 1997). Mentoring is a professional relationship in which a more experienced individual provides guidance, feedback, and modeling to support the learning and growth of an aspiring or early-career administrator (Ingersoll & Strong, 2011; Bandura, 1977). Within educational leadership, mentoring serves as an umbrella term for structures that connect school administrators with trusted advisors who foster leadership capacity through coaching, reflection, and support. Mentoring encompasses coaching, reflective dialogue, problem-solving support, and leadership capacity-building offered by an experienced practitioner. Mentoring structures are commonly incorporated into leadership development programs such as the MDPPA to support the professional growth of emerging school leaders. These interactions promote both professional skill development and confidence, reflecting the

social learning processes described by Bandura (1977). In this study, mentoring is understood as a component of the MDPPA program design rather than a variable measured through archival data.

Retention in a School-based Administration Role

Retention in a school-based administration role means that a school-based administrator remains assigned to a school in an administrative role in a school setting in Maryland. Retention refers to the number of academic years in which an individual appeared in the Maryland State Department of Education (MSDE) staffing file in a school-based administrative position following MDPPA completion. School-based administrative roles include principals, assistant principals, vice principals, and other comparable positions responsible for the leadership and operation of a school (Superville, 2022). Administrators who changed schools or districts, yet remained in Maryland, were still considered retained if they continued to serve in a school-based administrative role.

School-based Administrator

A school-based administrator is an individual assigned to a school building who is responsible for instructional leadership, fiscal management, oversight, management and evaluation of teachers and other school personnel, as well as the implementation of school improvement efforts (Superville, 2022). School-based administrators include principals and assistant principals serving in PreK–12 public schools.

Summary

This chapter introduced the significance of principal retention, the problem of leadership turnover, and the need to understand long-term retention patterns among participants of the MDPPA. It described the study's grounding in Communities of Practice and outlined the

longitudinal descriptive design, primary research question, and exploratory research questions guiding the analysis. Chapter 2 presents a critical synthesis of the literature on leadership, mentoring, professional development, and retention, positioning the present study within prior scholarship and justifying the selected design and measures.

Chapter 2: Literature Review

The success of an educational system relies heavily on the quality and stability of its administrative leadership (Grissom et al., 2021; Leithwood et al., 2020). However, school administrators' demanding responsibilities and insufficient professional development and support are associated with high turnover rates, which can negatively impact student outcomes (Brauckmann et al., 2023). The problem addressed in this study is that little is known about the long-term retention patterns of principals who participate in job-embedded professional development programs, such as the Maryland Promising Principals' Academy (MDPPA; Acton, 2021; Superville, 2022). The purpose of this longitudinal descriptive study was to examine retention patterns over time among school administrators who completed the Maryland Promising Principals' Academy (MDPPA).

Chapter 2 includes a review of the relevant literature, the theoretical framework, the impact of effective school administrators, school administrator retention, reasons for principal turnover, the effects of principal turnover, principal turnover solutions, the alignment of the MDPPA program with the literature review findings, and the related quantitative correlational research design literature. This review encompasses existing research on school administrators' engagement in professional development and their longevity in their administrative roles. Professional development was examined regarding school administrators. The literature on professional development programs, such as the MDPPA, that could improve leadership effectiveness, stability, engagement, and retention was examined. The review covers components of administrator professional development, including the design of training programs, the benefits of participation, and the factors that influence administrators' decisions to remain in their positions. A synthesis of prior research findings was provided, identifying areas where

further exploration was needed and emphasizing the importance of investigating the connection between professional development and administrator retention.

Several databases were accessed to conduct a comprehensive literature review, including both education-specific and general academic databases. The education-specific databases comprised Academic Search Complete, Directory of Open Access Journals (DOAJ), Education Full Text, Education Source, Education Resources Information Center (ERIC), ProQuest Education, ProQuest One, and Teacher Reference Center. General academic bases were also accessed, including EBSCOhost, Google Scholar, Journal Storage (JSTOR), PubMed, ScienceDirect, Scopus, and Web of Science.

A combination of core concepts and additional modifiers was used to search the most relevant and current literature. The core concepts searched included *administrative coaching*, *administrative mentoring*, *administrative retention*, *administrator engagement*, *career advancement*, *coaching effectiveness*, *coaching outcomes*, *coaching strategies*, *collaborative learning*, *communities of practice*, *community learning*, *distributed leadership*, *instructional leadership*, *knowledge sharing*, *leadership coaching*, *leadership development*, *leadership outcomes*, *leadership practices*, *leadership skills*, *leadership sustainability*, *leadership mentoring*, *mentoring effectiveness*, *mentoring outcomes*, *mentoring relationships*, *mentoring strategies*, *organizational culture*, *organizational learning*, *principal attrition*, *principal burnout*, *principal coaching*, *principal effectiveness*, *principal job satisfaction*, *principal leadership*, *principal mentoring*, *principal motivation*, *principal persistence*, *principal pipeline*, *principal professional development*, *principal professional growth*, *principal professional development*, *principal retention*, *principal self-efficacy*, *principal succession planning*, *principal support*, *principal training*, *principal turnover*, *professional learning communities*, *school administrator*,

school climate, school improvement, school leadership, school principal, shared learning, social learning, staff development, and teacher retention. Synonyms for each term were considered to ensure a comprehensive search. Boolean operators (AND, OR, NOT) were employed to narrow the results. For example, searches included combinations such as (school administrator OR school principal) AND (professional development OR professional learning OR communities of practices OR coaching OR mentoring) AND retention. This literature review encompasses the most recent and relevant studies published from 2019 to 2024. The types of literature reviewed include seminal articles, peer-reviewed journal articles, dissertations and theses, conference proceedings, government reports and policy documents, books and book chapters, as well as professional association publications. The key findings, themes, and gaps in the existing research are identified.

The role of the principal is uniquely complex and demanding, encompassing instructional leadership, staff supervision, community engagement, and accountability for student outcomes. Sustainable school improvement requires leaders who can navigate complexity, cultivate shared purpose, and build organizational capacity for change (Fullan, 2001). Principals operate at the intersection of policy and practice, navigating pressures from district initiatives, state mandates, teacher performance needs, and family and community expectations. Research has consistently shown that high job demands, long hours, emotional labor, and limited professional support contribute to elevated stress levels and burnout among school leaders (Boyland, 2011; Federici & Skaalvik, 2012; Grissom, Mitani, & Woo, 2019). These stressors directly impact job satisfaction and retention, particularly when leaders feel isolated or lack access to ongoing professional learning that is relevant to their real-world challenges. This concept is further supported by empirical evidence and aligns with prior research demonstrating the same pattern. Additional

context strengthens the reader's understanding of the issue by connecting it to broader educational leadership trends. Such an explanation reinforces the study's relevance to both policy and practice.

Within the context of this study, these stressors align with the central tenets of the communities of practice framework (Lave & Wenger, 1991), which emphasizes the importance of shared learning, collaboration, and identity formation within a professional community. When principals participate in programs such as the MDPPA, they engage in structured learning networks that reduce professional isolation and provide access to mentorship and peer problem-solving. This participation can alleviate key stressors—such as a lack of support, limited feedback, and the emotional toll of school leadership—by fostering a sense of belonging, efficacy, and shared expertise. Over time, these experiences may enhance leaders' resilience and satisfaction, thereby increasing their likelihood of remaining in school-based administrative roles.

Theoretical Framework

The communities of practice (CoP) theory developed by Lave and Wenger (1991) provides the guiding theoretical framework for this study. Lave and Wenger (1991) posited that learning is a social process that occurs through participation in a community of practitioners who share a common domain of interest, engage in joint activities, and develop a shared repertoire of resources, experiences, and tools. Key concepts in the CoP framework include:

- Domain, which is the shared area of interest or expertise that defines the community's identity and distinguishes it from other communities.
- A community is a group of individuals who engage in joint activities, discussions, and knowledge sharing within a specific domain.

- Practice is the shared repertoire of resources, experiences, tools, and ways of addressing recurring problems that the community develops over time.
- Participation is the process of engaging in the community's activities, sharing knowledge, and contributing to the development of the shared practice.
- Reification is the process of creating concrete forms for abstract ideas, experiences, or knowledge through the development of artifacts, such as documents, tools, or symbols.
- Legitimate peripheral participation is the process by which newcomers become full participants in the community (Wenger et al., 2002).

In the context of this study, the CoP framework supports the premise that school administrators' participation in professional development programs, such as the MDPPA, can be understood by engaging school administrators in a community of practice (Wenger et al., 2002). The MDPPA provides a domain (school leadership and administration), a community (five cohorts of school administrators), and a shared practice (a set of leadership skills, knowledge, and experiences) that participants can utilize to enhance their retention (Wenger et al., 2002). The CoP framework includes the concept that learning is situated in social contexts and knowledge is co-constructed through participation in a community (Lardier et al., 2024). Furthermore, participation in a CoP can lead to the development of an individual's professional identity, increased engagement, and a sense of belonging, which may contribute to job satisfaction and retention (Mehdizadeh et al., 2023). A major assumption guiding the application of the CoP framework is that participation in a collaborative, job-embedded learning community such as the MDPPA may shape administrators' sense of professional identity, belonging, and perceived support—factors the literature links to leader persistence (Lardier et al., 2024).

The strength of the supports schools provide through professional development may influence administrators' retention, and these influences could vary based on factors such as the level of engagement in MDPPA activities, the perceived value of shared practice, and the sense of community and support experienced by participants (Lardier et al., 2024; Mehdizadeh et al., 2023). Within this context, the communities of practice framework helps explain how shared learning structures, mentoring, and collaborative problem-solving can shape administrators' experiences in professional development programs. Applying the CoP framework to this study of school administrator professional development and retention is expected to contribute to a deeper understanding of how the social learning process can support the effectiveness and longevity of educational leaders in their school-based roles (Lardier et al., 2024; Wenger et al., 2002).

Communities of Practice Theory Origins and Development

The communities of practice (CoP) theory originated from the works of anthropologist Jean Lave and educational theorist Etienne Wenger in the late 1980s and early 1990s (Lave & Wenger, 1991). Lave and Wenger's original research focused on situated learning, which emphasized the social and contextual nature of learning (Lave, 1988). In their seminal book *Situated Learning: Legitimate Peripheral Participation*, Lave and Wenger (1991) introduced the concept of CoP as a model for understanding how learning occurs through participation in social practices within a community. The CoP framework emerged from several disciplines, including anthropology, sociology, and education (Wenger, 1998). It was shaped by theories such as Vygotsky's (1978) sociocultural theory, which emphasizes how social interaction drives cognitive development, and Bandura's (1977) social learning theory, which stresses the significance of observational learning and modeling for acquiring new knowledge and skills.

During the late 1990s and early 2000s, Wenger (1998) further developed the CoP framework in his books *Communities of Practice: Learning, Meaning, and Identity* and *Cultivating Communities of Practice* (Wenger et al., 2002), providing a more detailed analysis of the structure and dynamics of CoPs, and introducing key concepts such as the domain, community, practices, and the processes of participation and reification. Wenger (1998) also explored the relationship between CoPs and individual identity formation, arguing that participation in a CoP shapes a person's sense of self and belonging.

During the early 2000s, as technology advanced, the concept of virtual communities (VCoPs) gained attention in the literature. Virtual communities of practice (VCoPs) are online communities that share the same characteristics as traditional CoPs but interact primarily on digital platforms (Dube et al., 2005). Early research on VCoPs focused on the potential to connect geographically dispersed individuals and facilitate knowledge sharing across boundaries (Dube et al., 2005; Hildreth & Kimble, 2004). During 2010–2020, the CoP and VCoP frameworks were applied in various contexts such as education (Khalid & Strange, 2016; Patton & Parker, 2017), healthcare (Barnett et al., 2012; Ranmuthugala et al., 2011), and professional development (Blankenship & Ruoana, 2009; Mak & Pun, 2015).

Communities of Practice Theory in Current Education Literature

The communities of practice framework has been applied increasingly in education research to study the professional development of school principals and administrators (Lambert & Bouchamma, 2021; Lewis & Scott, 2021). In this context, communities of practice refer to groups of school leaders who share a common interest in enhancing their leadership practices and improving student learning outcomes, and engage in regular interactions to share strategies, experiences, expertise, and knowledge (Hallinger et al., 2020; Wertz, 2022). Researchers aim to

identify effective strategies for supporting the ongoing professional growth and effectiveness of principals and administrators by examining the role of communities of practice in school leadership.

Researchers have utilized the communities of practice framework to examine different aspects of school leadership (Lardier et al., 2024). For example, education researchers have explored how participation in communities of practice can support the ongoing learning and professional growth of school principals and administrators, helping them to develop the knowledge, skills, and dispositions necessary to effectively lead their schools (Lardier et al., 2024). Moreover, education investigators have examined how communities of practice can be leveraged to promote and sustain school improvement efforts, such as the implementation of new instructional practices, the development of positive school culture, or the improvement of parent and community engagement (Gomez & Suarez, 2021; Mead et al., 2022). Researchers in education have also employed the communities of practice theory as a lens to explore how educators and school leaders engage in collaborative problem-solving, allowing them to share challenges, develop solutions, and learn from their shared experiences (Abedini et al., 2021).

Researchers have utilized the communities of practice (CoP) framework to investigate how CoP can support the development of distributed leadership practices within schools by fostering the sharing of leadership responsibilities and cultivating leadership capacity among teachers and other staff members (Jambo & Hongde, 2020; Liu, 2020). Education stakeholders can gain valuable insights into the social and contextual factors that influence school leaders' learning, professional development, and practice, enabling them to identify effective strategies for supporting their ongoing growth and effectiveness (Gomez & Suarez, 2021; Lardier et al., 2024; Mead et al., 2022). Insights gained from studying communities of practice in educational

leadership could be used to inform the design and implementation of leadership programs, school improvement initiatives, and policies focused on improving the quality of school leadership and student learning outcomes (Abedini et al., 2021).

In a scoping review of the CoP and VCoP literature from 1990 to 2023, Lardier et al. (2024) underscored the need for measurement and evaluation of CoPs. Although some researchers have developed and validated measurement tools for specific contexts, there is a lack of comprehensive tools and frameworks that can be applied across different domains, including healthcare education, professional development, business, engineering, IT, knowledge management, innovation, and entrepreneurship (Lardier et al., 2024). Lardier et al. (2024) suggested that future research should focus on identifying key dimensions and factors of the CoP framework that are relevant across different contexts and domains, such as engagement, knowledge sharing, collaboration, and the impact on individual and organizational performance. In summary, the CoP literature has evolved significantly since its introduction, with a growing emphasis on VCoPs and their applications across various domains. Although progress has been made in understanding the factors that contribute to the success of CoPs and VCoPs, further research is needed on their measurement and evaluation (Lardier et al., 2024).

Alternative Frameworks

Although the communities of practice (CoP) framework was chosen for the present study, several alternative frameworks could potentially be used to investigate the relationship between school administrators' participation in professional development programs and their retention in administrative roles. Four of these alternative frameworks include andragogy theory (Knowles, 1984), transformative learning theory (Mezirow, 1978), self-determination theory (Deci & Ryan, 1985), and social capital theory (Putnam, 1995). This subsection provides a brief overview of

these alternative frameworks and their potential application to studying professional development and retention among school administrators.

Andragogy Theory. Andragogy, an adult learning theory developed by Malcom Knowles (1984), could have been chosen for the theoretical framework for this study because it focuses on the unique learning needs of adult professionals (Knowles, 1984). The theory's emphasis on the importance of readiness to learn, relevance, and internal motivation aligns with the goals of professional development programs, such as Maryland's Promising Principals Academy (Maryland State Department of Education, 2022). However, the communities of practice theory is a better fit for this study because it explicitly addresses the social nature of learning, the role of participation in shaping an individual's identity within the community, and the importance of peer support in adult learning (Lave & Wenger, 1991).

Transformative Learning Theory. Transformative learning theorists focus on the process of perspective transformation that occurs when individuals critically reflect on their assumptions, beliefs, and practices, engaging in dialogue with peers to validate their new understandings (Mezirow, 1978). Transformational learning theorists argue that transformative learning experiences can significantly change a person's worldview, self-concept, and behavior (Hoggan & Finnegan, 2023). In the context of the present study, transformative learning theory can be used to examine how participation in professional development programs, such as the MDPPA, challenges school administrators' existing assumptions and beliefs about leadership, teaching, and learning (Giraldo-Garcia & Orozco, 2023). Administrators could undergo perspective shifts that enhance administrators' understanding of their leadership roles, offering insight into the professional experiences reflected in the retention data (Giraldo-Garcia & Orozco, 2023). The application of the transformative learning theory to this study could involve

investigating the extent to which the MDPPA program provides opportunities for critical reflection, dialogue, and perspective-taking, and how those experiences contribute to administrators' reflections on their professional identity and sense of efficacy, providing context for understanding observed retention patterns. However, the transformative learning theory may not fully capture the social and contextual factors that shape learning and retention in professional settings, which are a significant focus of the CoP framework (Lambert & Bouchamma, 2021).

Self-determination theory (Ryan & Deci, 2000) emphasizes the importance of autonomy, competence, and relatedness in shaping an individual's motivation to engage in professional activities. For school leaders, opportunities to exercise judgment, develop expertise, and build supportive relationships can strengthen their commitment to their work. Professional development programs that attend to these psychological needs may enhance leaders' engagement and sense of purpose in their roles (Lopez-Garrido, 2023). While self-determination theory does not predict retention, it helps contextualize the factors that shape administrators' experiences within leadership pathways. This motivational perspective complements the relational focus of social capital theory.

The self-determination theory could be applied to the present study to investigate how participation in the MDPPA program supports school administrators' basic psychological needs and how the satisfaction of those needs may relate to administrators' engagement in their roles and help contextualize the retention patterns observed in the descriptive data (Alfayez et al., 2021). For example, the study could investigate how the MDPPA program provides administrators with opportunities to exercise autonomy in their learning and decision-making, develop their competence through skill-building and feedback, and foster a sense of relatedness

through peer support and mentoring (Alfayez et al., 2021). Although the self-determination theory provides a valuable lens for understanding the motivational factors that drive school administrators' professional development and retention, similar to the transformative learning theory, it does not account for the social and situated nature of learning emphasized in the CoP framework.

Social Capital Theory. Social capital theory is another framework that could have been used in this study. Social capital theorists argue that social capital—the resources embedded in social networks—can be leveraged to achieve individual and collective goals, such as professional advancement, knowledge sharing, and organizational effectiveness (Putnam, 1995). Social capital theory emphasizes the value of relationships and social networks in providing people with access to information, support, and resources (Ramsey, 2024). In the present study, social capital theory could be used to examine how participation in the MDPPA program helps school administrators build and leverage social capital through their relationships with peers, mentors, and experts (Beusaert et al., 2023). An examination could be conducted of how the social networks and resources accessed through the MDPPA program may help describe administrators' professional learning experiences and provide insight into the retention patterns identified in the study (Beusaert et al., 2023). Furthermore, applying social capital theory to this study could involve assessing the size, diversity, and strength of school administrators' social networks before and after participation in the MDPPA, in relation to their knowledge acquisition, professional support, and retention. Although the social capital theory emphasizes the importance of social relationships and resources in professional development, it does not fully capture the learning processes and identity transformations central to the CoP framework.

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In summary, although andragogy theory, transformative learning theory, self-determination theory, and social capital theory provide unique perspectives on school administrator professional development and retention, the CoP framework was chosen due to its specific focus on the socially situated and identity-shaping dimensions of learning in professional communities (Lambert & Bouchamma, 2021). The CoP framework's emphasis on socially situated learning, shared practice, community, and identity development aligns most closely with the present study's focus on describing long-term retention trends among MDPPA participants

and understanding how engagement in a sustained, cohort-based professional community may support administrators' continued service in school-based roles.

Community of Practice Theory Alignment

The communities of practice theory aligns well with the present study because it underscores the social nature of professional learning (Lave & Wenger, 1991). In this proposed study, five cohorts of school administrators participated in a community of peers who faced similar challenges within the MDPPA program (Lardier et al., 2024). The social setting (MDPPA) of a community of practice fosters a sense of belonging and support, inspiring professional growth (Noar et al., 2023). Within the context of the social setting of MDPPA, the community of practice motivates school administrators to continuously develop their skills and learn from those around them (Lave & Wenger, 1991). The communities of practice theory has been applied extensively in education (Lardier et al., 2024). Although the CoP theory offers valuable insights in the educational context, a gap exists regarding its specific application to school administrators' professional development and retention in their administrative roles. Addressing this gap could lead to improved professional learning and support strategies, improving principal retention rates. Understanding the relationship between participation in professional development (MDPPA) and retention in their administrative roles could aid future planning for professional learning and support.

The CoP framework guided the development of the problem statement by highlighting the importance of social learning and support in the professional development and retention of school leaders. Wenger (1998) indicated that learning is a fundamental social process, and participation in a community of practice can provide individuals with the resources, relationships, and opportunities necessary to develop their expertise and skills. In the context of

school leadership, research indicates that participation in CoPs can help administrators navigate the challenges of their roles, develop new strategies for leading and managing their schools, and build supportive networks of peers and mentors (Gomez & Suarez, 2021; Lambert & Bouchamma, 2021; Tomkin et al., 2019).

The purpose statement of this study was informed by the CoP framework, which emphasizes the importance of understanding how participation in social learning communities can shape individuals' professional careers (Wenger, 1998). Describing how administrators who completed the MDPPA remained in school-based administrative roles over time can increase understanding of how engagement in a CoP supports the development and retention of effective school leaders. The MDPPA provides the domain (school leadership and administration), a community (each of the five cohorts of school administrators and their mentors), and a shared practice (a set of leadership skills, knowledge, and experiences) that participants can use to improve their retention (Wenger et al., 2002).

Finally, the research questions for this study were developed in alignment with key concepts and assumptions of the CoP framework. The primary research question now focuses on describing patterns of school-based administrative retention among MDPPA completers, aligning with the framework's emphasis on understanding how social learning shapes professional trajectories over time (Wenger, 1998). The CoP framework continues to guide the development of the problem statement, purpose statement, and research questions by emphasizing participation, shared practice, and community as central elements of professional learning. Applying the key concepts and assumptions of the CoP framework to this study contributes to a deeper understanding of how social learning processes may support the effectiveness and longevity of educational leaders in their administrative roles. Participation in a community of

practice can strengthen professional identity and perceived support, which research associates with increased intentions to remain in the profession (Bickmore et al., 2021).

Impact of Effective School Administrators

Effective educational leadership is essential for the success of schools (Kaleem et al., 2021). School administrators are change agents who drive significant improvements within the learning environment (Karadag, 2020). School administrators play a critical role in preventing teacher turnover (Levin et al., 2019). Moreover, school leadership is recognized as the most influential factor in enhancing school quality and standards (Pranitasari, 2020). Buckman (2021) found that effective school administrators, through sustained leadership and commitment to their schools, can significantly reduce teacher turnover. Buckman (2021) posited that principals actively promote teacher retention by creating stable and supportive school environments, which ultimately benefit students and the wider school community. Teachers report that the quality of leadership support is a more important factor in their decision to leave than their salaries (Grissom et al., 2021). These findings underscore the significance of effective school leadership in fostering a dedicated and stable teaching workforce.

Professional Development Definitions

Numerous definitions of professional development are found in the literature. However, common characteristics of professional development definitions focus on skill-building and knowledge-acquisition opportunities that enhance employees' professional capacities and performance related to the organization's mission and personal goals (Westberry & Horner, 2022). These common elements underscore the crucial role of professional development in fostering ongoing learning and personal growth among professionals. The literature suggests that individuals can enhance their knowledge and skills through professional development, leading to

improved performance and outcomes at both the personal and organizational levels (Darling-Hammond et al., 2022; Faizuddin et al., 2022; Sahlin, 2023; Desimone & Garet, 2015; Guskey, 2002).

A deeper understanding of the key components of effective professional development can be gained by examining seminal works in the field. In a seminal review of the professional development literature, Fogarty and Pete (2004) identified five essential elements of effective professional development, including:

1. Sustained: training is implemented over time.
2. Job-embedded: training occurs and continues at the work site.
3. Interactive: training invites, involves, and engages participants.
4. Collegial: training builds and supports a community of learners.
5. Integrated: training is eclectic (web-based, online, text, in person). (Fogarty & Pete, 2004).

Building upon those foundational elements, Darling-Hammond et al. (2022) suggested the essential components of effective professional development for school leadership should include content focused on leading instruction, managing change, shaping a positive school climate, developing people, and meeting the needs of diverse learners. Further, Darling-Hammond et al. (2022) indicated that professional development should provide school administrators with the knowledge and skills necessary to lead in key areas, including (a) individualized, one-on-one support provided by an expert coach or mentor who can give guidance tailored to the school administrators' specific context and needs, (b) opportunities for networking with peers through structures like professional learning communities that allow school administrators to collaborate and learn from peers, (c) authentic, job-embedded, applied

learning activities that enable principals to connect theory to their real-world practice as school leaders, and (d) equity-oriented leadership to help principals foster culturally responsive practices and meet the needs of diverse student populations.

Although Darling-Hammond et al. (2022) focused on the content and delivery of professional development, Faizuddin et al. (2022) adopted a more holistic perspective. They suggested that effective professional development for school administrators should integrate personalized guidance, skill development, rigorous content selection, ongoing structured training, and organizational partnerships to strengthen administrators' capacity to lead successful schools.

Complementing the findings of Darling-Hammond et al. (2022) and Faizuddin et al. (2022), Westberry and Horner (2022) conducted a qualitative study to identify the factors that principals and district instructional leaders perceive as critical to effective professional development. According to Westberry and Horner (2022), these educators identified four key factors contributing to effective professional development for school administrators:

- A focus on the practical application of learning. Principals valued professional development that provided real-world, hands-on learning that could be directly applied in their schools, rather than just theoretical knowledge.
- Utilization of a systems approach. Principals found it beneficial when professional development provided frameworks or models to contextualize their learning and guide school improvement efforts systematically.
- Ability to address knowledge gaps. Principals sought professional development to strengthen their skills in areas such as using data, instructional supervision, progress monitoring, and developing areas where teachers felt underprepared.

- Opportunity to participate in a community of practice. Principals valued cohort-based professional development models that allowed them to learn collaboratively with peer principals who shared an everyday context. This enabled ongoing sharing of lessons learned and joint problem-solving (Westberry & Horner, 2022).

Additionally, principals reported a desire for professional development that included on-site coaching and an interdisciplinary team approach within their schools as a follow-up to collaborative principal learning (Westberry & Horner, 2022). The authors concluded that a community of practice model incorporating these elements is vital for principal development. Findings highlighted the importance of ongoing, job-embedded support and collaboration in fostering principals' professional growth (Westberry & Horner, 2022).

Types of Professional Development for School Administrators

School administrators have a pivotal role in shaping the quality and effectiveness of schools (Kaleem et al., 2021; Karadag, 2020). Thus, their ongoing professional development is critical for building their capacity to successfully lead teaching and learning (Brauckmann et al., 2020). Several types of professional development have been identified in the literature, including workshops, seminars, and conferences (Kilag et al., 2023), coaching and mentoring (Pariente & Tubin, 2021), professional learning communities and networks (Lambert & Bouchamma, 2021), applied job-embedded learning (Lewis & Scott, 2020), university-based programs (Faizuddin et al., 2022), online and blended learning (Williamson & Jayson, 2020), evaluation and feedback (Faizuddin et al., 2022), and equity-focused professional development (Darling-Hammond et al., 2022).

Workshops, Seminars, and Conferences. Workshops, seminars, and conferences are effective professional development resources for principals (Kilag et al., 2023). Workshops

provide hands-on training and practical application of skills, seminars focus on theoretical concepts and discussion, and conferences bring together professionals to share knowledge and best practices. These events expose principals to new ideas, facilitate networking, offer expert insights, and promote skill development and reflection (Darling-Hammond et al., 2022).

However, the effectiveness of these forms of professional development depends on factors such as content relevance, presentation quality, and the participants' ability to apply the knowledge gained to their specific contexts (Kilag et al., 2023).

Numerous local, state, and national organizations provide workshops, seminars, and conferences for principals, including the National Association of Elementary School Principals (2024), National Association of Secondary School Principals (2024), Association for Supervision and Curriculum Development (2024), School Superintendents Associations (2024), and the Harvard Graduate School of Education-(2024). The Maryland State Department of Education (2024) offers a wide range of professional development opportunities for school leaders, including the Maryland Promising Principals Program, the focus of this research study. Although the MDPPA (2022) is a well-established statewide leadership development program, there is limited descriptive research examining the long-term retention patterns of its participants, which aligns with the present study's research question about longitudinal descriptive trends in retention among MDPPA completers. The MDPPA program is designed to support and enhance the skills and knowledge of principals, equipping them with the tools necessary to lead and manage schools successfully. The MDPPA program is discussed more fully in a later section.

Coaching and Mentoring. Coaching and mentoring are widely recognized as effective approaches to supporting employee professional development across various industries, including education (Gümüs, 2019). In the context of school leadership, mentoring programs

serve to support novice principals during their transition into leadership roles and to enhance their overall leadership capabilities (Mendez, 2023). Research consistently demonstrates the effectiveness of mentoring in assisting new principals to navigate the complex challenges and demands of their new positions (Hayes, 2019; Henkenberns, 2019).

School districts often implement mentoring programs by pairing novice principals with experienced mentors who can provide the necessary guidance, support, and resources to facilitate a successful transition to their leadership roles (Henkenberns, 2019). A critical part of effective mentoring programs is intentionally matching mentors to mentees (Gümüs, 2019). Research has shown the importance of carefully choosing mentors based on clear criteria, such as their experience, effectiveness as principals, strong communication skills, ability to think critically, and willingness to take risks (Gümüs, 2019). Moreover, studies have indicated that mentors should voluntarily assume the role rather than be assigned to it, as this contributes to a more genuine and committed mentoring relationship (Hayes, 2019).

The literature highlights the importance of dedicating sufficient time for mentors and mentees to collaborate and build a strong professional relationship (Gümüs, 2019; Hayes, 2019). Moreover, mentoring sessions should be structured to focus on developing instructional leadership skills and providing practical support, encouragement, and guidance to help novice principals balance the complex demands of their role, make informed decisions, and reflect on their practice (Henkenberns, 2019). Studies show that school districts can create an environment conducive to new principals' growth and development by prioritizing these mentoring aspects (Gümüs, 2019; Hayes, 2019; Henkenberns, 2019).

Research has consistently demonstrated the numerous advantages that mentoring programs offer to novice principals. These benefits include enhanced problem-solving skills,

increased self-confidence, and improved decision-making abilities (Mendez, 2023). Mentoring enables novice principals to navigate the challenges of their role with greater competence and confidence, as they have access to the expertise and support of experienced mentors (Lozano, 2019). Moreover, mentoring relationships can be mutually beneficial, providing opportunities for professional growth and development for both mentors and mentees (Bickmore et al., 2019). Mentors can gain valuable insights and perspectives from their interactions with novice principals, while mentees can learn from their mentors' wealth of knowledge and experience.

Furthermore, the research highlights the importance of setting clear expectations and parameters for mentoring relationships (Gümüs, 2019). This task includes defining the roles and responsibilities of mentors and mentees, establishing goals and objectives for the mentoring program, and outlining the frequency and duration of mentoring sessions. By providing a clear framework for mentoring, school districts can ensure that the mentoring relationship remains focused, productive, and beneficial for all parties involved. Furthermore, the research also points to the need to identify specific approaches to mentoring that are most effective in supporting the development of new principals (Bickmore et al., 2019; Henkenberns, 2019). This necessity suggests that there may not be a generic approach to mentoring. Different strategies may be more suitable depending on the individual needs and contexts of novice principals. By exploring and implementing targeted mentoring approaches, school districts can optimize the support provided to their new leaders and foster their professional growth more effectively (Bickmore et al., 2019; Henkenberns, 2019).

Professional Learning Communities. Professional learning communities (PLCs) have gained attention in the literature to promote teacher collaboration, professional growth, and school improvement (Lambert & Bouchamma, 2021). Professional PLCs are characterized by

shared values and vision, collective responsibility, reflective professional inquiry, collaboration, and a focus on student learning (Antinluoma et al., 2021). These communities provide a framework for teachers to collaborate, share knowledge, and continuously improve their practice to enhance student outcomes.

Principals have a vital role in establishing, nurturing, and sustaining effective PLCs within their schools. Tahir et al. (2024) investigated principals' support and leadership strategies in promoting PLCs in religious-based secondary schools. Findings indicated that principals were instrumental in fostering PLCs by providing resources, creating a collaborative culture, encouraging collective learning, and aligning school structures to support PLC practices. Principals who actively promoted and supported PLCs created an environment conducive to teacher collaboration and professional growth (Tahir et al., 2024).

Similarly, To et al. (2023) examined the relationship between principal leadership practices, PLCs, and teacher commitment in kindergartens. The findings indicated that principal leadership practices had a significant direct effect on PLCs, positively influencing teacher commitment. Principals who demonstrated strong instructional leadership, promoted a shared vision, and supported teacher professional development-were likelier to cultivate thriving PLCs (To et al., 2023). This study highlighted the importance of principal leadership in shaping the effectiveness of PLCs and their impact on teacher commitment (To et al., 2023).

Recognizing the importance of principal leadership in fostering effective PLCs across educational levels, Olmo-Extremera et al. (2024) systematically reviewed the literature on principal leadership in PLCs within the context of elementary education. The authors examined the role of principals in establishing a shared vision, promoting a collaborative culture, providing resources and support for teacher professional development, and facilitating the use of data to

inform instructional practices. Moreover, principals who engaged in distributed leadership and empowered teachers to take on leadership roles were more successful in sustaining effective PLCs (Olmo-Extremera et al., 2024).

Online and Blended Learning Models. The emergence of online and blended models as professional development options was a significant development in educational leadership. Bragg et al. (2021) underscored the potential of online and blended learning models to deliver content and facilitate interaction, either entirely or partially, through online platforms, offering flexibility and self-paced learning opportunities. Fairman et al. (2023) and William and Jayson (2020) found that students working in geographically remote areas or those with limited time due to demanding schedules can benefit from the flexibility and convenience of online and blended learning models. However, fully online professional development could lack the interpersonal interaction and hands-on application that face-to-face or blended options provide (William & Jayson, 2020). However, blended learning models, which incorporate both online and in-person components, can provide a balance between the flexibility of online learning and the benefits of face-to-face engagement, such as direct interaction, immediate feedback, and opportunities to practice new skills in a supportive environment (Ali et al., 2023).

Online and blended learning models require principals to have excellent digital skills. Specifically, Copur-Gencturk et al. (2024) emphasized the importance of ensuring principals have access to reliable technology and possess the digital skills to engage in online learning effectively. Copur-Gencturk et al. (2024) found that school districts must provide principals with the necessary devices, software, and training to support their participation in professional development. Furthermore, they emphasized the importance of designing user-friendly online

learning platforms that are aligned with users' specific needs and learning styles (Copur-Gencturk et al., 2020).

Fairman et al. (2023) emphasized that the effectiveness of online and blended professional development is centered on creating programs that are engaging, pertinent, and tailored to the unique needs of the participants. The authors stressed the importance of developing content and activities that capture learners' attention, align closely with their professional responsibilities, and address their specific challenges and objectives. Moreover, Fairman et al. (2023) suggested incorporating various learning activities, such as webinars, case studies, simulations, and collaborative projects, to keep principals engaged and motivated. Finally, they emphasized the need to provide opportunities for principals to apply their learning to real-world situations and receive feedback from their peers and mentors (Fairman et al., 2023).

In conclusion, online and blended learning models are viable options for professional development among principals (Bragg et al., 2021). Although these approaches have some limitations compared to face-to-face options, they offer flexibility, convenience, and access to a wide range of resources and expertise (Rienties et al., 2023). As technology continues to advance, it is likely that online and blended learning will continue to have a crucial support role in the professional growth and development of principals, ultimately contributing to the success of schools and students (Copul-Gencturk et al., 2020; Fairman et al., 2023).

Evaluation and Feedback. Evaluation and feedback, when used formatively, have also been identified as a form of professional development for principals. This type of professional development is embedded within most school systems to identify principals' areas of strength and growth, providing them with targeted feedback and support to improve their practice (Faizuddin et al., 2022). Unlike traditional forms of professional development that primarily

focus on building new knowledge and skills, evaluation and feedback focus on helping principals refine and improve their existing competencies (Acton, 2021).

Principal evaluation practices vary across the 50 states in the U.S. (Nielsen & Lavigne, 2020). However, there are common types of evaluation methods used. For example, many states have adopted leadership standards, such as the *Professional Standards for Educational Leaders (PSEL)*, as the basis for principal evaluation (National Policy Board for Educational Administration [NPBEA], 2015). These evaluations assess principals' performance against defined competencies and expectations (Nielsen & Lavigne, 2020). Some states require principals to set specific goals aligned with school and district priorities. Annual evaluations are conducted to assess the principal's progress and success in achieving these goals. Measures of student academic growth and achievement, such as standardized test scores, graduation rates, and college readiness, are also included in principal evaluations (Nielsen & Lavigne, 2020).

Many states rely on superintendents' or other supervisors' observations and ratings to evaluate principals' leadership practices, decision-making, and interactions with staff, students, and the community (Nielsen & Lavigne, 2020). Teachers, staff, students, and parents also provide feedback via surveys on principals' leadership, communication, and school climate (Nielsen & Lavigne, 2020). In some states, principals are required to submit a portfolio documenting their leadership practices, professional development, and school improvement efforts (Nielsen & Lavigne, 2020). Other states employ a 360-degree feedback approach, gathering feedback from the principal's supervisors, peers, subordinates, and other stakeholders to provide a comprehensive assessment of their leadership effectiveness (Nielsen & Lavigne, 2020).

Effective formative evaluation and feedback should be (a) timely and provided as soon after observations or interactions to ensure relevance and immediacy, (b) specific and focused on concrete actions, behaviors, or decisions rather than broad generalizations, (c) actionable and include practical suggestions and strategies for improvement, (d) ongoing and a continuous process, (Donaldson et al., 2021; Nielsen & Lavigne, 2020; Swisher, 2022). Nielsen and Lavigne (2020) argued that for formative evaluation and feedback to be successful, school systems must invest in training evaluators, create a trusting and supportive environment, and ensure the process is not linked to high-stakes decisions such as compensation or job security. Swisher (2022) indicated that formative evaluation and feedback can be a powerful tool for improving principal effectiveness and student outcomes when implemented consistently and thoughtfully.

Equity-focused Learning. Equity-focused learning experiences are another form of professional development. According to Darling-Hammond et al. (2022), these programs aim to build principals' capacity to lead for equity, cultural responsiveness, and the needs of diverse learners. The emphasis of equity-focused learning in professional development is to recognize the principals' key role in creating inclusive and equitable school environments (Lash & Sanchez, 2022). Unlike other forms of professional development that treat equity as a singular topic, equity-focused professional development prioritizes issues of diversity, inclusion, and social justice as the core elements of principals' learning and growth (Welborn & Flores, 2024). This professional development approach aims to equip principals with the knowledge, skills, and mindset necessary to create and sustain equitable educational environments for all students, regardless of their background or identity (Lash & Sanchez, 2022; Welborn & Flores, 2024).

Based on a review of the literature, Darling-Hammond et al. (2022) identified key elements of equity-based professional development for principals. These key elements included

content-focused information focused on meeting the needs of diverse learners through applied learning opportunities and reflections, a deliberate focus on equity and culturally responsive leadership incorporated throughout preparation and development programs, equitable access to high-quality learning opportunities, especially for principals serving high-poverty schools, hands-on applied learning experiences focused on equity-oriented leadership, and ongoing support through coaching and peer networks. Darling-Hammond et al. (2022) noted the role of policy in enabling and incentivizing these elements of principal development in a systemic way to build principals' capacity to advance inclusivity in schools.

The literature highlights the crucial role of self-reflection in the development of principals' equity-based leadership. Lash and Sanchez (2022) emphasized the importance of principals developing a deep understanding of their own identities, biases, and privileges to lead authentically for equity. The authors argued that principal preparation and development programs must encourage principals to reflect on their beliefs and experiences regarding race, class, gender, and other aspects of identity. Lash and Sanchez (2022) suggested that self-reflection is a necessary foundation for principals to critically examine the policies and practices in their schools that may be perpetuating inequities.

In addition to self-reflection, ongoing support from principal supervisors is key to principals' equity-focused leadership development. Welborn and Flores (2024) highlighted the role of principal supervisors in providing ongoing equity-focused coaching and support to principals. The authors found that principals who received regular coaching and feedback from their supervisors around culturally responsive leadership practices felt more confident and capable of making meaningful changes in their schools to support diverse learners. Furthermore,

the findings indicated the need for district leaders to develop equity competencies to support principals effectively (Welburn & Flores, 2024).

Research indicates that principals' on-the-job experiences and contexts also significantly shape their equity-based leadership practices (Darling-Hammond et al., 2022). Moreover, principals who have opportunities to lead in schools with diverse student populations and are given autonomy to make decisions regarding curriculum, staffing, and resources may be better positioned to put their equity-focused learning into practice (Darling-Hammond et al., 2022). School districts could intentionally place principals in school environments that enable them to apply their knowledge and skills around culturally responsive leadership.

Principals' equity-based leadership practices are enabled or constrained by larger district and state policy contexts (Nielsen & Lavigne, 2020). Principals leading in districts and states with more equitable school funding policies, for example, may have greater flexibility to direct resources in ways that support diverse learners (Darling-Hammond et al., 2022). Similarly, principals in districts with strong desegregation policies and intentional efforts to diversify the educator workforce may be better equipped to create integrated, inclusive school environments (Nielsen & Lavigne, 2020). The literature indicates that policymakers at the state and district levels must consider how the broader ecosystem of policies interacts with principal development to either facilitate or hinder equity-focused leadership (Darling-Hammond et al., 2022; Nielsen & Lavigne, 2020; Swisher, 2022).

Statewide School Leadership Initiatives. A comprehensive review of state policies and programs across the United States revealed that most states have invested in statewide professional learning initiatives for school leaders (Fitz & Levin, 2023). These professional learning initiatives vary in scope and design. Some states offer comprehensive, multifaceted

programs, whereas others focus on targeted, single-purpose training. States deliver professional learning opportunities directly through agencies or third-party providers, such as the National Institute for School Leadership (Fitz & Levin, 2023). Although all state-funded professional learning initiatives for school leaders share a common goal of providing training and skills development to district, school, and teacher leaders, they often serve multiple, distinct functions tailored to each state's-unique needs and priorities (Fitz & Levin, 2023). Some of the most prevalent functions include cultivating leadership pipelines, supporting novice principals, building collective leadership capacity, facilitating school turnaround efforts, and training coaches and supervisors (Fitz & Levin, 2023).

Maryland's Promising Principals Academy. The MDPPA (2022), established in 2013 through a partnership between the Maryland Governor's Office and the Maryland State Department of Education, is an intensive, year-long professional development initiative designed to cultivate the next generation of school leaders. Promising assistant principals, central office staff, and educator leaders who have already obtained their Administrator II endorsement and who have been chosen by their district superintendent or CEO are recruited. Over the course of a year, MDPPA participants engage in a rigorous curriculum that combines expert-led seminars, job-embedded learning experiences, and personalized coaching to build their capacity to lead schools effectively, thereby improving student outcomes (MDPPA, 2022). The program's content is strategically aligned with Maryland's Professional Standards for Educational Leaders (PSEL) and is informed by feedback from superintendents across the state (MDPPA, 2022).

During multiple-day meetings over the year, participants learn about educator evaluation, school improvement planning, instructional leadership, social-emotional well-being, education reform, and ethical decision-making (MDPPA, 2022). Participants gain practical experience via

hands-on simulations, case studies, and collaborative problem-solving exercises. Between meetings, Academy participants work closely with experienced leadership coaches who provide individualized guidance and support as they apply learning to their current roles and prepare for the transition to the principalship (MDPPA, 2022).

A key feature of the MDPPA is its emphasis on building a supportive cohort of like-minded leaders who serve as partners, collaborators, and resources after the program ends. The MDPPA facilitates connections across districts and regions, establishing a statewide network of principals dedicated to promoting equity, excellence, and innovation in Maryland's schools (MDPPA, 2022). Many past participants have gone on to secure school principalship positions in schools. Promising Principals' Academy graduates report increased confidence, competence, and readiness to assume principal roles (MDPPA, 2022).

Although the MDPPA's (2022) approach to cultivating the next generation of school leaders is comprehensive, there is a lack of rigorous, longitudinal research regarding the program's impact on participants' leadership practices, school-level outcomes, and student achievement. Further, anecdotal evidence suggests that the program is well-received by principals. However, the lack of evidence-based studies makes it difficult to draw definitive conclusions about the extent to which the MDPPA has achieved its goals of improving principal effectiveness and enhancing the quality of education in Maryland (MDPPA, 2022).

Further research is necessary to examine the short- and long-term effects of the MDPPA program on principals' knowledge, skills, behaviors, and retention, which could inform best practices and policies for professional development initiatives for school leadership. This quantitative descriptive study extends the existing literature by documenting long-term retention patterns among principals who completed the MDPPA. Specifically, the purpose of this study

was to describe how administrators who participated in job-embedded professional development, such as the MDPPA, remained in their school-based administrative roles over time.

School Administrator Retention

School leadership has a direct impact on a school's success, bringing about meaningful changes within the educational setting (Jambo & Hongde, 2020). Studies consistently demonstrate the positive impact of principal leadership on academic achievement and overall school climate (Mosley, 2020; Stronge & Xu, 2021; Tebogo, 2020). Moreover, principal leadership significantly influences educator and student well-being (Roncesvalles & Gaerlan, 2020), teacher job satisfaction (Anastasiou & Germaetsi, 2021), teacher turnover (Garcia & Weiss, 2019; Levin et al., 2019), and student performance (Pranitasari, 2020). School leadership has significant implications for students, educators, and school outcomes.

Across the nation, school administrator turnover is a serious issue. In 2020, national survey data showed that a concerning 42% of principals considered leaving their jobs (Levin et al., 2020). Moreover, approximately one in five principals in the United States is turned over annually (Beckett, 2021). The most current data from the 2021–2022 National Teacher and Principal Survey (NTPS) indicates that schools are facing a significant challenge in retaining school administrators (National Center for Education Statistics, 2023). Twenty-five percent of principals indicated that “if they could get a higher paying job, they would leave their job as soon as possible” (NCES, 2023, p.1). The survey indicated that approximately 10% of public school principals left the profession between the 2020–21 and 2021–22 academic school years, indicating a notable increase in attrition rates compared to the prior five years (NCES, 2023).

Moreover, experienced principals with more years of service leave the profession at higher rates than their less experienced counterparts (NCES, 2023). Additionally, the survey

reveals that K–12 public school principals reported having an average of 6.9 years of experience as a principal, with an average of 4.5 years spent at their current school (NCES, 2023). The increased attrition rates among public school principals, especially those with more experience, raise concerns about the stability and continuity of school leadership in our nation’s educational institutions.

Reasons for Principal Turnover

High principal turnover rates across the United States represent a significant challenge for schools (Levin & Bradley, 2019; Tekleselassie & Choi, 2021). Frequent changes in school leadership can have a significant impact on students, teachers, and the school community (Carpenter et al., 2022). High principal turnover can disrupt the continuity of school programs and initiatives, often negatively impacting educator turnover and student achievement (Buckman, 2021; Carpenter et al., 2022). Moreover, recruiting a new principal can be time-consuming and costly for school districts (Henry & Harbatkin, 2019). Understanding the reasons behind principal turnover is essential for developing effective strategies to support and retain school leaders, ultimately leading to improved student educational outcomes (Fields, 2019).

Principal turnover is driven by many factors, including salary considerations, poor principal performance, challenging student populations, geographic and community factors, and district-level disruptions (Bartanen et al., 2019; Buckman, 2021; Henry & Harbatkin, 2019). Furthermore, principals often leave for higher salaries at other schools or districts, especially those principals working in high-poverty areas where they are paid less than their counterparts in more affluent districts (Buckman, 2021). Poor school performance can lead to principals being removed or reassigned, with those who are demoted, transferred to another district, or leave the

school system altogether more likely to represent external or performance-related turnover (Henry & Harbatkin, 2019).

Schools with high poverty rates, high proportions of students of color, and low academic achievement have greater difficulties retaining principals (Buckman, 2021; Henry & Harbatkin, 2019). Geographic factors have a role in principal retention. Specifically, principal turnover in rural areas is high due to a struggle with lower salaries, geographic and social isolation, and poor working conditions (Buckman, 2021). Moreover, instability at the district level, such as superintendent turnover, has a disruptive effect that contributes to principal transitions at the school level (Henry & Harbatkin, 2019).

Levin and Bradley (2019) identified five main reasons for principal turnover: insufficient preparation, training, and professional development, poor workplace environments, inadequate pay, limited authority, and rigid accountability measures. The authors argued that principals lacking access to high-quality preparation programs, mentoring, coaching, and ongoing professional learning opportunities are more likely to leave their positions. Moreover, challenging working conditions, such as heavy workloads, time constraints, difficult school climates, and strained relationships with colleagues, parents, and students, contribute to job dissatisfaction and increased turnover.

Levin and Bradley (2019) found that inadequate compensation, limited authority, and rigid accountability measures, which result in sanctions for low-performing schools, can create disincentives for principals to remain in their positions (Levin & Bradley, 2019). Furthermore, principal turnover is higher in schools serving low-income students, students of color, and low-performing students, possibly due to insufficient resources, lower salaries, and more challenging working conditions that are endemic to these schools (Levin & Bradley, 2019).

Podolsky (2023) corroborated Levin and Bradley's (2019) findings, emphasizing the high rates of principal turnover in rural schools with high concentrations of low-income students, which could be attributed to challenges in recruiting and retaining principals in remote rural areas. Podolsky (2023) also highlighted the strong relationship between teacher and principal turnover, suggesting that schools with higher teacher turnover rates also tend to have higher rates of principal turnover, although the causal direction remains unclear. Furthermore, Podolsky (2023) found that schools with higher percentages of inexperienced educators, teachers without full teaching credentials, and lower teacher retention have higher rates of principal turnover, indicating that challenging work conditions may contribute to principal attrition.

Principal Turnover Effects

Principal turnover can negatively affect students, educators, schools, and communities. Bartanen et al. (2019) found that principal turnover has detrimental impacts on student achievement, teacher retention, and school climate, noting that these negative effects are particularly pronounced in high-poverty schools. Similarly, Snodgrass Rangel (2018) stressed, in a review of the literature on principal turnover, that frequent principal changes can lead to decreased student achievement, lower teacher retention, and a lack of sustained school improvement efforts. These findings underscored the importance of principal stability in fostering positive school outcomes (Bartanen et al., 2019; Snodgrass Rangel, 2018).

The negative impact of principal turnover on student achievement is a recurring theme throughout the literature. For example, Grissom et al. (2021) synthesized two decades of research on how principals affect students and schools, emphasizing that principal stability is vital for school improvement because high rates of principal turnover disrupt progress and can negatively impact student outcomes. Levin and Bradley's (2019) research aligned with Grissom et al.'s

(2021) findings, indicating that principal turnover led to decreased student achievement, lower teacher retention, and a loss of institutional knowledge and continuity in school improvement efforts. The link between principal turnover and decreased student achievement highlights principals' critical role in creating and maintaining a positive learning environment (Grissom et al., 2021; Levin & Bradley, 2019).

In addition to the impact on student achievement, principal turnover can also affect the quality of school leadership. Husain et al. (2021) examined principal turnover using teacher assessments of principal quality. They found that higher-quality principals are more likely to stay in their positions, while lower-quality principals are more likely to leave. These findings suggested that principal turnover can decrease overall principal effectiveness, as less experienced or capable ones replace more effective leaders. Moreover, the loss of experienced, high-quality principals could ripple throughout the school, affecting educator morale, student engagement, and overall school performance (Husain et al., 2021).

In summary, the literature highlighted the significant negative impact that principal turnover could have on schools, students, and educators (Grissom et al., 2021; Husain et al., 2021; Levin & Bradley, 2019). The consequences of frequent principal changes are extensive, from decreased student achievement to lower teacher retention and a loss of institutional knowledge. The findings underscored the importance of principal stability and the need for strategies to support and retain effective school leaders. Research indicates that school districts can foster a more stable and successful educational environment for all stakeholders by addressing the factors that contribute to principal turnover and investing in principal development and support (Grissom et al., 2021; Husain et al., 2021; Levin & Bradley, 2019).

Principal Turnover Solutions

Given the significant negative consequences of principal turnover, school districts need to prioritize strategies for supporting and retaining effective school leaders. Several key strategies emerged from the literature review to address the issue of principal turnover and its negative impact on students, educators, schools, and the broader communities. These strategies focus on providing principals with comprehensive support, professional development, and resources throughout their careers.

First, implementing high-quality principal mentoring and professional development programs could help equip principals with the knowledge, skills, and experiences necessary to succeed in their roles (Gümüş & Bellibaş, 2020; Hayes & Mahfouz, 2020; Pariente & Tubin, 2021). Further, effective mentoring and coaching, particularly for novice principals, can provide ongoing support and guidance as they navigate the challenges of the role (Gümüş, 2019; Hayes & Mahfouz, 2020; Pariente & Tubin, 2021). Moreover, researchers stress that professional development should focus on practical skills and knowledge that can be directly applied in their schools (Hornor & Westberry, 2022; Koonce et al., 2019; Westberry, 2020). School districts can help ensure that leaders are well-prepared and more likely to remain in their positions over time by participating in comprehensive principal development and support (Darling-Hammond et al., 2022; Levin & Bradley, 2019; Pariente & Tubin, 2021).

Second, school districts should address the systemic factors that contribute to high turnover rates (Levin & Bradley, 2019; Stone-Johnson & Weiner, 2020). This includes creating more attractive and sustainable leadership positions with competitive salaries, reasonable workloads, and opportunities for growth and advancement (Levin & Bradley, 2019; Stone-Johnson & Weiner, 2020). Levin and Bradley (2019) suggested that school districts should

provide principals with autonomy and decision-making authority to lead their schools effectively. They indicated that principals who have the freedom to make decisions based on the specific needs of their schools and communities are more likely to feel empowered and invested in their roles. Providing principals with more autonomy can enhance their sense of ownership and motivation, leading to increased job satisfaction and a higher likelihood of staying in their positions (Stone-Johnson & Weiner, 2020).

Third, ongoing professional development and support are vital for principals at all career stages (Brauckmann et al., 2023; Lazenby et al., 2022; Sahlin, 2023). Specifically, professional development should be differentiated based on principals' experience levels and specific needs (Sahlin, 2023). Studies indicated that encouraging principals to participate in professional learning communities or communities of practice could provide valuable opportunities for collaboration, problem-solving, and shared learning with peers (Hornor & Westberry, 2022; Olmo-Extremera et al., 2024; Tahir et al., 2024). The literature indicated that providing principals with ongoing support and professional development can help them to grow and adapt to the complex demands of their administrative roles (Brauckmann et al., 2023; Lazenby et al., 2022; Olmo-Extremera et al., 2023; Sahlin, 2023).

Fourth, school districts should prioritize strategies for retaining effective principals, especially in high-needs schools (Levin & Bradley, 2022; Levin et al., 2020). These strategies could include offering financial incentives, such as retention bonuses or loan forgiveness programs, to encourage principals to stay in their positions (Levin & Bradley, 2022). Moreover, school districts could also provide opportunities for career advancement and school leadership by creating pathways for principals to move into district-level roles or to lead professional development for their peers (Levin et al., 2020). School districts could help create a more stable

and supportive leadership environment by recognizing and rewarding effective principals (Levin & Bradley, 2019; Levin et al., 2020).

Fifth, addressing principal turnover requires a collaborative effort among policymakers, district leaders, and principals. Specifically, policymakers could support principal retention by providing funding for comprehensive principal mentoring and professional development programs (Fitz & Levin, 2023; Gold, 2022). District leaders should prioritize principal support and professional development, creating a culture that values and invests in school leadership (Darling-Hammond et al., 2022; Levin & Bradley, 2019). Moreover, principals should actively seek opportunities for growth and collaboration, advocating for the resources and support they need to be influential leaders (Levin et al., 2020). The literature showed that creating a more supportive and sustainable leadership environment can help ensure that schools have the stable, effective leadership necessary for long-term success (Levin & Bradley, 2019; Westberry, 2020).

Sixth, researchers stressed that school districts should consider implementing succession planning and talent management strategies to identify and develop future school leaders (Lee & Mao, 2023). Succession planning strategies include creating leadership pipelines within the school district, offering leadership development programs for aspiring principals, and proactively planning for principal transitions (Parfitt & Rose, 2020). The literature indicated that school districts could help ensure a steady supply of well-prepared and committed principals to fill vacancies and maintain school stability (Lee & Mao, 2023; Levin & Bradley, 2019).

Finally, it is essential to recognize principals' critical role in creating positive school cultures and supporting teacher retention (Buckman, 2021). Specifically, principals who prioritize building strong relationships with educators, providing instructional support and resources, and fostering a collaborative and inclusive school environment can help reduce

teacher turnover and improve overall school outcomes (Buckman, 2021; Levin et al., 2020). School districts should provide principals with the training, resources, and support necessary to effectively lead their schools and create positive working conditions for educators (Darling-Hammond et al., 2022; Levin & Bradley, 2019). School districts could create more stable and successful educational environments for all stakeholders by investing in strategies to support both principal and educator retention (Buckman, 2021; Levin & Bradley, 2019).

In summary, addressing the complex issue of principal turnover requires a multifaceted approach that includes mentoring and professional development, attractive and sustainable leadership roles, ongoing support, retention strategies, collaborative efforts among stakeholders, succession planning, and a focus on supporting teacher retention (Buckman, 2021; Darling-Hammond et al., 2022; Fitz & Levin, 2023; Gold, 2022; Lee & Mao, 2023; Levin & Bradley, 2019; Levin et al., 2020; Westberry, 2020). The literature demonstrated the significant negative consequences of principal turnover and highlighted the need for action (Buckman, 2021; Levin & Bradley, 2019; Levin et al., 2020). Investing in and retaining effective principals can help to create more stable and successful schools that better serve students, teachers, schools, and communities (Darling-Hammond et al., 2022; Levin & Bradley, 2019; Levin et al., 2020). Policymakers, district leaders, and principals must collaborate to prioritize solutions to address principal turnover and take concrete steps to build a stronger, more sustainable leadership environment in schools (Fitz & Levin, 2023; Gold, 2022; Levin & Bradley, 2019; Westberry, 2020).

MDPPA Alignment with Literature Review Findings

The MDPPA aligns with several key findings from the literature review regarding effective strategies for supporting and retaining principals. First, the MDPPA provides

comprehensive professional development and mentoring for aspiring principals (Maryland State Department of Education, 2024a), which is consistent with the literature emphasizing the importance of professional development programs in equipping new leaders with the skills and knowledge necessary for success (Gümüş & Bellibaş, 2020; Hayes & Mahfouz, 2020; Pariente & Tubin, 2021).

Second, the MDPPA's emphasis on practical, job-embedded learning experiences (MDPPA, 2024a) aligns with the literature's focus on professional development that is relevant to principals' daily work (Hornor & Westberry, 2022; Koonce et al., 2019; Westberry, 2020). The MDPPA could help ensure that principals are well-prepared to lead their schools effectively by providing principals with hands-on learning opportunities and support in implementing new strategies (Hornor & Westberry, 2022; Koonce et al., 2019; Westberry, 2020). Targeted professional development can enhance principals' leadership skills and, in turn, improve student outcomes by fostering a positive school climate (Hornor & Westberry, 2022).

Third, the MDPPA's cohort model, which brings principals together from across the state to collaborate and learn-from each other (MSDE, 2024a), is consistent with the literature's focus on the value of professional learning communities and communities of practice for principals (Hornor & Westberry, 2022; Lambert & Bouchamma, 2021; Olmo-Extremera et al., 2024; Tahir et al., 2024). The MDPPA could help principals feel less isolated and more equipped to navigate the challenges of their administrative roles by fostering a supportive network of peers and facilitating ongoing collaboration (Lambert & Bouchamma, 2021; Tahir et al., 2024). Principals who participate in the MDPPA could develop a stronger sense of professional identity and commitment to their leadership roles by engaging in shared learning experiences and building relationships with their peers (Lave & Wenger, 1991).

Finally, the MDPPA's focus on supporting novice principals in their first year on the job (MSDE, 2024a) aligns with the literature's emphasis on the importance of retention strategies, particularly for novice principals (Levin & Bradley, 2022; Levin et al., 2020). By providing targeted support and resources during this critical period, the MDPPA can help increase the likelihood that new principals will remain in their positions and develop into effective, long-term leaders for their schools (Levin & Bradley, 2022; MSDE, 2024a; Tahir et al., 2024). Overall, the MDPPA program's approach to principal development and support is well-aligned with the key findings from the literature review, suggesting that it has the potential to be an effective model for addressing the challenges of principal turnover and promoting long-term success for school leadership in Maryland.

Longitudinal Descriptive Research on Principal Retention

Although a substantial body of research documents the effects of principal turnover on student achievement, teacher stability, and school improvement efforts (Bartanen et al., 2019; Grissom et al., 2021; Henry & Harbatkin, 2019; Snodgrass Rangel, 2018), far fewer studies provide longitudinal examinations of principal career trajectories. Much of the current literature is based on cross-sectional, single-year administrative records, leader surveys, or interview-based accounts that offer important insights but do not capture how principals remain, move, or exit over extended periods. As a result, the field possesses a limited understanding of long-term retention patterns among school leaders and how those patterns unfold across different contexts.

A few studies involved the potential role of professional development in supporting principal retention. For example, Gümüş and Bellibaş (2020) suggested that effective principal professional development programs could help improve principals' leadership practices and self-efficacy, which could contribute to increased job satisfaction and retention. Gümüş and Bellibaş'

(2020) study involved a quantitative research design, using structural equation modeling to examine the relationships between professional development, self-efficacy, and leadership practices. Similarly, Pariente and Tubin (2021) emphasized the importance of mentoring and professional development for novice principals, equipping them with the skills necessary for sustained success. However, Pariente and Tubin (2021) employed a qualitative exploratory research design.

Similarly, few empirical studies follow participants of principal development programs over time using multi-year administrative data. Although researchers have highlighted the potential for high-quality, job-embedded professional development to strengthen leadership capacity and contribute to retention (Gümüş & Bellibaş, 2020; Pariente & Tubin, 2021), most investigations focus on perceived growth, program satisfaction, or short-term outcomes. Longitudinal descriptive studies of leadership development initiatives remain scarce, leaving open important questions about how principals progress in their roles after completing structured, cohort-based training programs.

The present study contributes to this gap by applying a longitudinal descriptive design to examine retention trends among all completers of the Maryland Promising Principals' Academy (MDPPA). Using ten years of archival administrative data, this study tracks retention patterns across five cohorts and describes subgroup trends by cohort year, Local Education Agency (LEA) size, and Maryland geographic region. This approach directly responds to calls for deeper, time-based analyses of school leadership workforce stability (Darling-Hammond et al., 2022; Grissom et al., 2019). By focusing on descriptive trends, the study offers a unique, long-view perspective on how participants remain in school-based administrative roles and provides a

foundational evidence base to inform future research on leadership development and principal retention.

Although correlational methods are commonly used in studies examining relationships between principal characteristics and workforce outcomes, this approach was not feasible for the present study. The available archival dataset included only MDPPA completers, providing no comparison group or variability in participation status, which prevented the calculation of correlations or tests of association. Given these constraints, a longitudinal descriptive design offered the most appropriate and rigorous method for characterizing retention trends across cohorts and contextual subgroups. This approach aligns with calls in the literature for multi-year analyses of leadership stability and workforce patterns.

A review of existing literature revealed that most studies exploring principal retention and leadership sustainability rely on single-year descriptive data, survey responses, or qualitative interviews rather than multi-year administrative analyses. While these approaches have contributed rich insights into the lived experiences of school leaders, they have not offered longitudinal analysis of principal retention following participation in job-embedded professional development programs. This study builds upon recommendations from Grissom et al. (2019) and Darling-Hammond et al. (2022) for more rigorous, time-based examinations of leadership stability. By anchoring the study within the communities of practice framework (Lave & Wenger, 1991) and applying a longitudinal descriptive design, it bridges conceptual and empirical research traditions to advance understanding of the factors that help principals remain and thrive in their roles.

Summary

The literature review provides an overview of the literature related to school administrators' engagement in professional development, such as the MDPPA, and their retention in school-based administrative roles. This longitudinal descriptive study is grounded in the communities of practice (CoP) theoretical framework, which posits that learning occurs through participation in a community of practitioners who share a domain of interest, engage in joint activities, and develop a shared repertoire of resources and experiences (Lave & Wenger, 1991; Wenger et al., 2002). Key findings of this literature review are:

- Effective school leadership is vital for school success, teacher retention, and student achievement (Grissom et al., 2021; Levin et al., 2019). However, high principal turnover rates have a negative impact on schools (Bartanen et al., 2019; Snodgrass Rangel, 2018).
- Reasons for principal turnover include insufficient preparation and professional development, poor working conditions, low pay, limited authority, and rigid accountability measures (Levin & Bradley, 2019).
- Turnover is greater in high-poverty, low-performing schools with large percentages of students of color (Grissom & Bartanen, 2019; Tebogo, 2020).
- Principal turnover is associated with decreased student achievement, lower teacher retention, and hindered school improvement (Tekleselassie & Choi, 2021). Losing high-quality principals is especially detrimental (Husain et al., 2021).
- Strategies to reduce principal turnover include high-quality mentoring and professional development programs (Gümüş & Bellibaş, 2020; Hayes & Mahfouz, 2020; Pariente & Tubin, 2021), improving working conditions (Levin & Bradley, 2019; Stone-Johnson & Weiner, 2020), providing competitive pay and advancement opportunities (Levin &

Bradley, 2019), offering incentives (Levin et al., 2020), succession planning (Lee & Mao, 2023), and supporting a positive school culture (Buckman, 2021).

- The MDPPA provides comprehensive, cohort-based professional development aligned with best practices from the literature (MSDE, 2024a). It focuses on practical skills through job-embedded learning (MDPPA, 2024a), consistent with recommendations from the literature (Hornor & Westberry, 2022; Koonce et al., 2019; Westberry, 2020).

The literature shows convergence around the importance of providing comprehensive, ongoing, and job-embedded professional development and support for principals (Darling-Hammond et al., 2022; Gümüş & Bellibaş, 2020; Pariente & Tubin, 2021). However, there are gaps regarding the relationship between professional development programs, such as the MDPPA, and principal retention. Most studies examine the impact of principal turnover (Bartanen et al., 2019; Grissom et al., 2021; Henry & Harbatkin, 2019) rather than strategies to reduce it. The CoP framework (Lave & Wenger, 1991; Wenger et al., 2002) and findings from this literature review provide a strong foundation for the study methodology and design discussed in Chapter 3. In summary, this literature review covers the key areas related to principal professional development and retention, highlighting the need for the present longitudinal descriptive study to extend understanding of long-term retention patterns following participation in a job-embedded leadership development program. This discussion naturally leads to Chapter 3, which details the methodology of this study.

Chapter 3: Research Method

Principal turnover creates significant challenges, negatively impacting students, parents, teachers, schools, the community, and the educational system (Beckett, 2021; Snodgrass Rangel, 2018; Superville, 2022). Effective principals play a crucial role in creating a supportive learning environment that fosters student success, ranking second only to classroom teachers in impact (Grissom et al., 2019; Leithwood et al., 2020). The problem addressed in this study is that little is known about the long-term retention patterns of principals who participate in job-embedded professional development programs, such as the MDPPA. The purpose of this longitudinal descriptive study was to describe retention patterns over time among administrators who completed the MDPPA. Because participation did not vary within the analytic sample—all individuals were MDPPA completers—no relational or correlational analyses could be conducted. Therefore, analyses focused on describing retention trends among program completers and examining descriptive differences across contextual subgroups (cohort, LEA size, and region). Chapter 3 provides a detailed explanation of the research methodology, the specific design choices made, population and sample, sampling method, data collection, data analysis, assumptions, limitations, and delimitations for this study.

Research Methodology and Design

A quantitative methodology was selected as most suitable for this study. This methodology enabled analysis of longitudinal descriptive patterns in administrators' retention following participation in professional development such as the MDPPA (Spector, 2019; Wang & Cheng, 2020). A qualitative methodology was not applicable for this study; specifically, it could not adequately address this study's purpose (Spector, 2019; Wang & Cheng, 2020).

Qualitative methods, such as ethnographic observations, in-depth interviews, or focus groups, could be employed to provide rich, in-depth information about respondents' experiences, perspectives, beliefs, and attitudes related to the relationship between administrators' participation in professional development and their retention in school-based administrative roles (Mulisa, 2022); however, they do not allow a statistical examination of trends and patterns between participation in professional development and retention (McLeod, 2023b). Qualitative methods are suitable for goals such as developing theories about the phenomenon under study and understanding respondents' life experiences (Liamputtong, 2020).

A quantitative methodology was appropriate for quantifying the scope of the problem and describing whether the variables exhibited observable trends (Ahmad et al., 2019). Although a correlational design was originally proposed, it could not be implemented because participation in the MDPPA did not vary within the available archival dataset. Therefore, analyses focused on describing longitudinal retention patterns among program completers and conducting exploratory subgroup comparisons, with findings contextualized using national benchmark principal-retention estimates. A quantitative methodology was appropriate because it allowed for the analysis of longitudinal descriptive retention patterns among MDPPA completers and supported exploratory subgroup comparisons using the available archival data.

Alternative Quantitative Research Designs

Alternative research designs were considered to address this study's problem, purpose, and question. An experimental design was contemplated but was not applicable to this study. Experimental designs help isolate cause-and-effect relationships; however, randomly denying aspiring principals access to the MDPPA training would raise serious ethical concerns. Withholding professional development could be harmful, potentially risking the aspiring

principals' careers (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978). Furthermore, experimental designs require manipulating the independent variable, which is not feasible in this study because the MDPPA training already exists. Therefore, an experimental design was not chosen for this study.

Quasi-experimental Research Design. A quasi-experimental research design was considered for this study. A quasi-experimental design involves manipulating an independent variable to observe its effect on a dependent variable, similar to an experimental design (Gopalan et al., 2020). However, quasi-experimental designs do not include random assignment to treatment and comparison groups (Siedlecki, 2020). In this study, the independent variable would have been participation in the MDPPA, and the dependent variable would have been the number of years of retention in school-based administrative roles. A quasi-experimental design was not suitable because participants were selected by their school districts based on eligibility, interest, and availability, resulting in pre-existing differences that would confound comparisons (Maciejewski, 2020). Without a true control group of nonparticipants, it would not be possible to determine whether any observed differences in retention were attributable to participation in the MDPPA or other factors (Siedlecki, 2020). Therefore, a quasi-experimental research design was not chosen for this study.

Cross-sectional Survey Design. A cross-sectional survey design was considered for this study. A cross-sectional survey involves collecting data from a sample of individuals at a single point in time (Simkus, 2023). In this study, such a design would have required administering a survey to principals to gather information about their professional development experiences and employment status. However, this design was not appropriate because a cross-sectional approach provides only a single-time snapshot and does not allow examination of changes in retention

over multiple years following participation in the MDPPA (Spector, 2019). Additionally, a cross-sectional design cannot establish the temporal ordering needed to assess how retention unfolds over time, and it cannot account for confounding factors that may influence both participation and retention (Simkus, 2023; Spector, 2019). Therefore, a cross-sectional survey design was not chosen for this study.

Correlational Research Design. A correlational research design was originally selected for this study. Correlational designs allow researchers to examine statistical associations among measurable variables without implying causation (Asenahabi, 2019; Creswell & Guetterman, 2021). In the context of this study, a correlational approach would have required variation in the independent variable, participation in the MDPPA, to test whether participation was associated with differences in retention outcomes (Curtis et al., 2022; Siedlecki, 2020). However, because all individuals in the archival dataset were MDPPA completers, participation status did not vary. Without a comparison group of nonparticipants, inferential correlational analyses could not be conducted.

Although correlational designs are commonly used to examine relationships among administrative variables in educational leadership research, this approach was not feasible for the present study due to the lack of variability in MDPPA participation. Instead, the analysis focused on describing retention patterns among program completers and exploring subgroup differences based on contextual factors such as cohort membership, LEA size, and geographic region. For these reasons, a correlational design was not selected.

Longitudinal Research Design. A longitudinal research design was appropriate for this study because it allows researcher to examine patterns or changes in the same individuals over time (Johal et al., 2023). Longitudinal designs can be implemented prospectively, through

repeated data collection moving forward in time, or retrospectively using existing archival datasets (Creswell & Guetterman, 2021). A prospective longitudinal design was considered; however, collecting new, multi-year data directly from principals after their MDPPA completion was not feasible given the study's scope, time frame, and reliance on existing state staffing data (Haas & Hadjar, 2020). Instead, the present study employed a *retrospective longitudinal descriptive design*, which was well-suited to the available archival MSDE staffing records. This approach enabled the examination of year-to-year retention patterns among MDPPA completers without requiring new data collection and aligned directly with the study's purpose of describing long-term retention trends.

Population and Sample

The target population included all school administrators (n = 249) who completed Maryland's Promising Principals Academy (MDPPA) across all five cohorts. Due to the relatively small and easily accessible size of the target population, a census sampling method was utilized (Creswell & Creswell, 2022). Specifically, the use of this method meant that the entire accessible population of 249 aspiring principals participating in the MDPPA was included in the study. This sampling strategy enabled retention outcomes to be summarized for the entire population, increasing generalizability of this study within the school setting. Unlike other sampling methods, census sampling includes every individual in the target population rather than a selected subset (Creswell & Creswell, 2022).

This population was appropriate given the study's problem, purpose, and research question because it directly focuses on the aspiring principals who participated in the MDPPA and their retention in school-based administrative roles. By targeting this specific population, this study examined retention among MDPPA completers, summarizing patterns across cohort

membership and contextualizing outcomes using national benchmark principal-retention estimates, providing valuable insights for stakeholders invested in supporting and retaining principals in Maryland.

By including the entire population of MDPPA participants, the study was well-positioned to summarize retention outcomes accurately and provide findings that reflect the full universe of program completers. The census sampling method strengthened the descriptive analyses by ensuring that observed patterns represented all eligible administrators rather than a subset. This approach aligns with recommendations for studies using full-population administrative datasets (Creswell & Creswell, 2022) and is consistent with the broader research literature emphasizing the importance of examining principal retention trends to support leadership sustainability (Grissom et al., 2021; Reid, 2021).

Materials

The materials include archived MDPPA attendance and retention records for each of the five cohorts of participants who completed the MDPPA. The archival data for this study came from the Maryland Department of Education (MSDE), which maintains archives of participant attendance and participation records from the MDPPA (MSDE, 2024a) and principal retention data (MSDE, 2024b). The archived data were accessed after the IRB confirmed no human subject concerns, and MSDE clarified that the participant list and staffing files were public records that did not require special permission for use.

The attendance and retention records were initially collected and maintained by the MSDE for administrative and record-keeping purposes rather than specifically for research (MSDEa, 2024; MSDEb, 2024). This study involves secondary data analysis. Specifically, pre-existing data were used to investigate principal participation in the MDPPA and their retention in

administrative roles. The archived data could have limitations, such as potential missing data, changes in data collection or reporting practices over time, and the need for more control over data collection methods. These limitations were acknowledged and considered when interpreting the results.

The MDPPA is an intensive, 12-month professional development program designed to prepare aspiring school leaders for the challenges and responsibilities of the principalship (MSDE, 2024a). Participants are selected from a pool of highly qualified candidates who have demonstrated exceptional leadership potential, have obtained their Administrator II endorsement, and are recommended by their Chief Executive Officer (CEO) or Superintendent (MSDE, 2024a). Cohorts comprise approximately 52 participants. Participation in the program includes monthly activities that alternate between gathering together for job-embedded professional development for one month and then meeting with the assigned, non-evaluative mentor at the school leader's school for individual mentoring.

In the context of archival data, reliability refers to the consistency and stability of the data source over time (Chandola & Booker, 2022). In this study, the reliability of the archival data can be considered high for several reasons. First, the data were obtained from official government records, which are expected to have reliable and consistent record-keeping practices (Chandola & Booker, 2022). Second, the MDPPA employs systematic data collection procedures for reporting participant attendance in the MDPPA and their retention in administrative roles, ensuring consistency in the data (MDPPA, 2024a, MDPPA, 2024b). Third, the availability of longitudinal data for five cohorts enables the examination of trends and patterns, thereby increasing the reliability of the findings (Slate, 2021). However, the data were inspected for accuracy (Chandola & Booker, 2022).

Validity refers to the extent to which the archival data accurately represents the constructs under study (Chandola & Booker, 2022). The validity of the archived data in this study can be assessed in terms of face and construct validity. The archival data provide a direct measurement of participant participation in the MDPPA and their retention in administrative roles, which are the key variables supporting the face validity of the data (Fischer et al., 2023). Moreover, the archival data includes the essential characteristics of the constructs, indicating construct validity (Fischer et al., 2023). However, there could be limitations to the construct validity, such as the need for more information on the quality and depth of participation in the MDPPA or the reasons behind their retention or attrition in administrative roles (Chandola & Booker, 2022). These limitations were acknowledged and taken into consideration when interpreting the results.

Operational Definitions of Variables

In quantitative research, operational definitions specify how each variable is measured to ensure consistency, replicability, and construct validity (Flake et al., 2022). Because the archival dataset contained only individuals who completed the MDPPA, participation status did not vary and was not included as an analytic variable. Instead, the present study operationalized variables needed to describe longitudinal retention patterns and to conduct exploratory subgroup analyses aligned with the research question and exploratory research questions.

Retention (Primary Variable for RQ1)

Retention was defined as the total number of academic years in which an individual appeared in the Maryland State Department of Education (MSDE) staffing file in a school-based administrative role following completion of the MDPPA. Because MSDE collects staffing data once annually, retention could not be measured in days or months; therefore, a discrete yearly

count represented the most precise and consistent measure available. This definition aligns with prior research that conceptualizes retention based on annual reappointment to a leadership role (Gottfried, 2019).

Retention was treated as a non-negative count variable (e.g., 0, 1, 2, 3...), allowing descriptive summaries and exploratory comparisons across contextual subgroups. An administrator who appeared in the staffing file for five consecutive years post-MDPPA was assigned a retention value of five. All retention data were extracted from the MSDE Staff File and were reviewed for completeness before analysis.

Cohort Membership (Contextual Variable for EQ1)

Cohort membership was operationalized as the year in which the participant completed the MDPPA (Cohorts 1–5). Because cohorts completed the program in different calendar years, this variable reflected naturally occurring differences in the amount of follow-up time available for each group. Cohort was coded categorically using the cohort year labels in the MSDE archival participation records (MSDE, 2024a).

LEA Size (Contextual Variable for EQ2)

Local Education Agency (LEA) size was operationalized using publicly available district enrollment data. LEAs were categorized into very small, small, medium, medium-large, and large groups based on Maryland’s statewide district enrollment distribution. This categorical variable enabled exploratory comparisons of retention patterns across districts with differing organizational scale and staffing conditions.

Maryland Geographic Region (Contextual Variable for EQ3)

Geographic region was operationalized using MSDE’s standard regional groupings. In alignment with the exploratory analyses, five regions were used: Western Maryland, Maryland

Core North, Maryland Core South, Southern Maryland, and Eastern Maryland. Each participant's district was assigned to one of these categories using one of MSDE regional classification models. This variable enabled exploratory comparison of retention patterns across Maryland's geographic contexts.

Relative-Risk Retention Intervals (Contextual Variable for EQ4)

Relative-risk estimates used four operationally defined time points: 3-year, 5-year, 8-year, and 10-year retention. For each interval, an individual was coded as "retained" if they appeared in a school-based administrative role in the MSDE staffing file at or beyond that year following program completion. These binary indicators (retained/not retained) were used to calculate descriptive relative-risk ratios comparing the likelihood of continued service across cohorts.

Study Procedures

National University Institutional Review Board (IRB) approval was obtained before accessing and analyzing the archival data used in this study. Following IRB approval, MSDE provided a list of MDPPA cohort participants. Retention information was obtained from the publicly accessible MSDE staffing files posted on the MSDE website. After downloading the necessary files, I merged the cohort participation list with the staffing data and assigned each individual a unique numeric identifier to ensure de-identification during analysis.

The final dataset consisted of 260 individuals who completed the MDPPA across five cohorts, of whom 249 met the criteria for inclusion in the analytic sample. All data were organized in an Excel spreadsheet for subsequent analysis. No identifying personnel information was included in the analytic file, and no linkage was maintained between the spreadsheet and any personally identifiable records.

Data Analysis

The data set included MDPPA participation and principal retention data for approximately 260 aspiring principals across five cohorts, of which 249 met the criteria for analysis in this study. First, the de-identified data were uploaded from the Excel spreadsheet into SPSS. Once the data were uploaded, the variables were checked to ensure they were correctly labeled and coded. The cohort year variable was coded as categorically with values corresponding to the 5 cohort years. The retention variable was calculated by examining the annual staff data collection records to determine if the participant remained in a school-based leadership role.

Next, the descriptive statistics for the cohort year and retention variable were analyzed. The mean, standard deviation, minimum, and maximum were calculated. Before running any analyses, the descriptive statistics were reviewed to identify missing values or remove outliers. Descriptive statistics summarized retention across the full sample and within each MDPPA cohort. Retention values were reviewed to confirm completeness, assess plausible ranges, and ensure accurate alignment with MSDE staffing records. Exploratory subgroup analyses examined whether retention differed across contextual groups, including MDPPA cohort, LEA size category, and geographic region. These procedures aligned with the study's descriptive design by assessing observable variation patterns in retention among naturally occurring subgroups of MDPPA completers.

Assumptions

Quantitative studies require several assumptions to ensure meaningful interpretation of results (Bloomfield & Fisher, 2019). Because this investigation drew on archival MSDE staffing records, it assumed that the reported job assignments for each academic year accurately reflected

participants' professional roles. The study also assumed that participants were consistently included in the statewide staffing file in each year they served in a school-based administrative position.

The analysis further assumed independence of observations, meaning that one administrator's retention outcome did not influence another's. Additionally, subgroup variables such as cohort membership, LEA size, and geographic region were assumed to be coded accurately within the archival dataset. These assumptions reflect standard expectations when analyzing naturally occurring groups in quantitative research (Creswell & Guetterman, 2021). Because participation status did not vary within the analytic sample, no parametric correlation procedures were conducted, and assumptions associated with correlation methods did not apply. Instead, descriptive and exploratory subgroup procedures were used to compare retention patterns across naturally occurring groups.

Limitations

Quantitative correlational studies have limitations, which are potential constraints, weaknesses, or influences beyond the researcher's control (Creswell & Creswell, 2022). When interpreting findings, these limitations must be considered because they affect the study's generalizability and validity. A significant limitation of this study was the absence of a comparison group. Because the archival dataset contained only individuals who completed the MDPPA, retention patterns could be described, but differences between participants and non-participants could not be evaluated. As a result, the originally intended hypothesis could not be tested, and causal inference was not possible.

Another limitation was the potential for selection bias, as aspiring principals who participated in the MDPPA may have had different motivations or characteristics than those who

did not participate (Simkus, 2023). This bias could influence observed retention patterns (Leavy, 2022). Including the full accessible population helped mitigate this limitation by ensuring that all MDPPA completers were represented (Creswell & Creswell, 2022).

Unobserved factors (e.g., district incentives, personal career goals) may relate to an administrator's retention. Numerous additional factors, such as personal or family health challenges, caregiving responsibilities, or familiar career requirements, could influence whether a school administrator remains in a role. These factors are not captured in staffing data and were not included in this investigation.

The study's reliance on archival data from MSDE introduced potential limitations related to data quality and completeness (Andrade, 2021). Missing or inaccurate data can bias results and limit generalizability (McLeod, 2023b). The data were reviewed carefully for completeness and consistency, and appropriate procedures were used to address any discrepancies (Simkus, 2023).

It is important to note that retention was measured only for the years following MDPPA completion. Participants may have served in administrative roles prior to the program; however, pre-MDPPA tenure could not be captured using the staffing file and was therefore not included in the retention count. As a result, these estimates likely understate total administrative career length, representing a conservative measure of retention outcomes.

The study's focus on school leaders in Maryland may limit generalizability to school leaders in other states or settings (Creswell & Creswell, 2022). This limitation was mitigated by providing detailed contextual information about the MDPPA and reporting descriptive findings transparently, enabling practitioners in other contexts to consider applicability to their settings (Leavy, 2022).

Finally, although the study's descriptive and exploratory analyses identified observable patterns in retention across subgroups (e.g., LEA size, region), the design precludes any causal interpretations. The longitudinal nature of the staffing data provides useful trend information, which mitigates this limitation, but cannot isolate specific causes of administrator retention or attrition (Bloomfield & Fisher, 2019). Acknowledging and addressing these limitations through an appropriate design, suitable methods, and cautious interpretation strengthens the validity and reliability of the results (Creswell & Creswell, 2022).

Delimitations

Delimitations are the intentional boundaries or limits that investigators set for their study to define the scope of the research (Simkus, 2023). Delimitations are controlled by the researcher and are based on the study's purpose, research questions, and design choices. This study included several delimitations aligned to the purpose, research question, and exploratory research questions. The study's population and sample are delimited to aspiring principals who participated in the MDPPA program, excluding aspiring principals who did not participate or those from other states or countries. The study focused exclusively on retention patterns among MDPPA completers and did not include principals outside the program.

The study focused on MDPPA completers across five cohorts (2014–2022) and operationalized retention as continued service in any Maryland school-based administrative role. Non-school-based leadership roles (e.g., central office), non-Maryland placements, and outcomes beyond retention (e.g., effectiveness metrics) were outside of the scope. No causal comparisons or qualitative mechanisms of retention were investigated.

Clearly stating the delimitations helps readers understand the study's focus and boundaries and supports appropriate interpretation of the findings (Creswell & Creswell, 2022).

Delimitations also help investigators maintain a manageable scope and ensure that the study's purpose and research questions are adequately addressed within the chosen parameters (Leavy, 2022). The delimitations of this study are directly related to the research purpose, problem, and question.

Ethical Assurances

Prior to accessing the data, approval from the National University Institutional Review Board (IRB) was obtained (see Appendix A). The *Belmont Report*, a seminal document in research ethics, established three core principles that guide research involving human subjects, including respect for persons, beneficence, and justice (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). The Belmont principles will be upheld in the context of the quantitative correlational study examining the retention patterns between aspiring principals' participation in the MDPPA and their retention in administrative roles.

In this study, respect for persons was maintained by ensuring the data obtained from MSDE were safeguarded by assigning a unique, non-identifiable code to each participant (NCPHSBB, 1979). Beneficence was upheld by (a) carefully considering the potential risks and benefits of the study and ensuring that the benefits outweigh any minimal risks associated with the use of archival data, (b) using the findings to inform efforts to support and retain principals, and (c) protecting the confidentiality of the data and ensuring that any reports or publications do not include identifying information (NCPHSBB, 1979). Justice was maintained by including all principals who participated in the MDPPA program during the specified time frame, a) ensuring a fair representation of the population under study, (b) analyzing and reporting the results accurately and objectively, without bias or discrimination, and (c) making the findings available

to educational stakeholders and policymakers to inform decisions that promote equity and fairness in principal retention efforts (NCPHSBB, 1979).

Confidentiality and privacy were protected by de-identifying the data and using numeric codes to de-link the uploaded information from specific participants. The data files will be saved on a secure flash drive in a locked cabinet in my office, accessible only to me. The digital data will be destroyed after 3 years. My background as a principal led me to choose this topic, which could influence my interpretations of the findings (Bloomberg, 2023). Therefore, I used bracketing to minimize potential bias and support objectivity throughout the study (Creswell & Creswell, 2022). I followed the pre-planned data analysis plan to ensure that the findings were not compromised. I maintained best research practices and procedures throughout the research process (NCPHSBB, 1979). I remained objective and honest by maintaining thorough records and accurately reporting the findings. Adherence to the Belmont principles supported the development of valid, reliable conclusions that may ultimately benefit educational practice (NCPHSBB, 1979).

Summary

Chapter 3 outlines the research methodology for this quantitative, longitudinal descriptive study. The purpose of the study was to examine retention patterns over time among school administrators who completed the Maryland Promising Principals' Academy (MDPPA). Because participation did not vary in the archival dataset and all individuals in the analytic sample completed the MDPPA, the study describes retention among completers, including exploratory subgroup summaries and contextual comparison with national benchmark principal-retention estimates. This chapter explains the rationale for the selected quantitative design and discusses

alternative designs that were considered and ruled out, including experimental, quasi-experimental, cross-sectional survey, and correlational approaches.

The target population included all aspiring principals ($n = 249$) who completed the MDPPA across five cohorts. A near-census sampling method was used. Archival data from publicly available MSDE staffing files were analyzed, including verified MDPPA cohort participation and yearly retention records. The chapter addresses the reliability and validity of these archival data and provides operational definitions for all variables used in the descriptive and exploratory analyses, including retention, cohort membership, LEA size, geographic region, and relative-risk intervals.

Study procedures, including obtaining National University IRB approval and MSDE confirmation of data accessibility, are described. Data analysis involved uploading de-identified data into SPSS, generating descriptive statistics to summarize retention across the full sample and by cohort, and conducting exploratory subgroup comparisons across cohort, LEA size, and geographic region. Chapter 3 also outlines the assumptions, limitations, and delimitations associated with analyzing archival statewide staffing records.

Ethical assurances are detailed, including adherence to Belmont Report principles and the protection of confidentiality through full de-identification of participant data. Chapter 4 presents the results of these analyses.

Chapter 4: Findings

Effective principals play a vital role in student achievement and school success, and their sustained presence supports stability, coherence, and long-term school improvement (Grissom et al., 2021; Leithwood et al., 2020; Reid, 2021). This chapter presents the findings of a quantitative, longitudinal descriptive study ($n = 249$ across five MDPPA cohorts) examining retention patterns among participants in the Maryland Promising Principals' Academy (MDPPA). The analyses focus on describing the length and distribution of continued service in school-based administrative roles following program completion. Consistent with the study's design, the chapter does not test causal or correlational relationships but instead characterizes observed trends in retention over time. These findings provide a data-informed foundation for understanding leadership stability among MDPPA completers.

The problem addressed is that little is known about the long-term retention patterns of administrators who participate in job-embedded professional development programs, such as the Maryland Promising Principals' Academy (MDPPA), despite high rates of principal turnover and increasing concern about leadership sustainability (Acton, 2021; Superville, 2022). The purpose of this quantitative study was to describe longitudinal retention patterns among administrators who completed a job-embedded professional development program, such as the MDPPA, and remained in school-based administrative roles. Because the archival dataset included only MDPPA completers and no non-participant comparison group, the chapter presents longitudinal descriptive retention patterns and contextual comparisons aligned with the study's purpose and research questions.

The need for this investigation arises from a persistent national challenge: High principal turnover continues to undermine school stability, weaken instructional improvement efforts, and

impose substantial human and financial costs, particularly in the absence of clear evidence describing long-term retention patterns among participants in leadership development programs. Research has shown that principals' effectiveness is maximized after several years in a role, yet between one in five and one in three principals leave their schools annually, with higher rates observed in high-need and urban contexts, and only a small fraction persists beyond a decade (Grissom et al., 2021; Levin et al., 2020). Maryland created the MDPPA to strengthen the readiness of aspiring leaders and support their sustained engagement.

Findings in this chapter are organized to reflect the study's purpose and research question. First, descriptive statistics establish the overall retention landscape among MDPPA completers by examining retention counts across program cohorts. Next, exploratory subgroup comparisons, including descriptive ANOVA and relative-risk estimates, were used to describe how retention patterns varied by cohort, LEA size, geographic region, and time since program completion. Finally, comparisons to national benchmarks contextualize Maryland retention outcomes within the broader landscape of principal retention.

Principal turnover remains a significant concern, with nearly 20% leaving their positions each year and over 40% considering departure, especially in high-need schools (Beckett, 2021; Levin et al., 2020; Superville, 2022). This turnover disrupts stability and undermines the time needed, often 3 years or more, for sustained school improvement (Husain et al., 2020; Tekleselassie et al., 2019). These patterns underscore the importance of this study's focus on retention and leadership sustainability. Whether administrators who participated in programs such as the MDPPA demonstrate sustained tenure in school-based leadership roles over time is a timely and critical descriptive question for understanding patterns of leadership stability. Chapter 4 presents the findings of this study within the context of the persistent challenges surrounding

principal retention and school leadership. The following sections examine the validity and reliability of the data, report the study's findings organized by the research question, and evaluate them in relation to the study's purpose.

Validity and Reliability of the Data

This section explains the reliability and validity of the data used to examine the research question. Reliability and validity were supported through the use of official administrative data sources and adherence to established statistical and ethical protocols (Adeyemi, 2024; Carmines & Zeller, 2022). This study drew upon publicly available administrative staffing records maintained by the Maryland State Department of Education (MSDE). Because the archival dataset contained official state-reported participation and role-assignment information, reliability was grounded in the consistency of MSDE's annual reporting processes rather than in psychometric evaluation of constructed instruments. This approach strengthens confidence in the findings and confirms that the data were appropriate for the descriptive and exploratory statistical procedures selected.

This study supported internal validity by utilizing publicly available administrative data from the Maryland State Department of Education, including verified participation in the MDPPA and school-based assignment information. Although these records were not de-identified, all information formed part of the public record and did not contain confidential or personally sensitive data. This approach ensured transparency and reduced the risk of bias in the study's data sources.

The study strengthened external validity through a near-census sampling approach that included most eligible participants (249 of the 260 participants across five MDPPA cohorts). This approach reduced sampling error and strengthened representativeness of the findings for the

population of MDPPA completers within the Maryland Public School System (Chandola & Booker, 2022; Stratton, 2023). Using a near-census sample increased confidence that the findings represent the broader population of Maryland's school-based administrators.

Reliability was supported through the consistent and systematic recording of participation and retention status in MSDE records (Carmines & Zeller, 2022; Creswell & Creswell, 2022). Variables were coded using uniform criteria, thereby reducing the risk of misclassification. The archival nature of the data ensured stability and consistency in measurement across the participant pool, and no psychometric scales were administered.

Construct validity was supported through the operational alignment of retention and participation variables with established definitions in the leadership development and administrator retention literature (Husain et al., 2021; Shannon-Brown, 2021). Retention was defined as continued service in a school-based administrative role, consistent with prior literature (Beckett, 2021; Superville, 2022). Participation in MDPPA was confirmed via state-maintained program records. The study was framed by communities of practice theory, reinforcing the conceptual link between collaborative professional learning and sustained leadership engagement (Lave & Wenger, 1991; Westberry & Horner, 2022).

Objectivity was supported by following a predefined analysis plan and minimizing direct researcher interaction with the data. I had no direct contact with participants, and all data were obtained from publicly available state records, which included names, schools, and counties, requiring no additional identifying information to be collected. These data were compiled and stored securely during analysis. Any procedural changes were documented and justified using statistical best practices (Creswell & Creswell, 2022).

Because this study relied on archival MSDE staffing records, retention values reflected official state documentation rather than self-reported data. Because archival records did not include a comparison group of nonparticipants, inferential analyses comparing participants and nonparticipants were not possible. Instead, exploratory subgroup comparisons examined whether retention differed across contextual groupings, including cohort membership, LEA size, and geographic region, using established retention-interval structures at 3, 5, 8, and 10 years. These procedures supported the validity of the analysis by applying consistent operational rules to all participants and by ensuring that comparisons were grounded in systematically maintained administrative data. By employing a near-census sample, archival data, and appropriately selected descriptive and exploratory statistical procedures, the study strengthened the reliability and validity of the findings for addressing the research question.

Results

This section presents the results of the analyses conducted to address the research question. It begins with an overview of the data preparation and descriptive statistics describing retention patterns among MDPPA completers. It then summarizes exploratory subgroup analyses, including ANOVA and relative risk estimates for descriptive purposes, to examine whether retention varied by cohort, LEA size, geographic region, or time since program completion. These subgroup procedures were conducted only as exploratory descriptive summaries rather than inferential hypothesis tests, because participation status did not vary. The section concludes with exploratory comparisons to national benchmarks, providing a broader frame for interpreting the study's findings.

Pre-Analysis

The Maryland State Department of Education (MSDE) provided program participation data for all MDPPA cohorts. Retention data were publicly available on the Maryland Report Card website, organized by year, in the data downloads section. These records included publicly available information, such as school administrator names, schools, and counties, as well as retention status, which was indicated by the continuation of the data file in a school-based administration role. Following Institutional Review Board approval, archived records were retrieved from the Maryland Report Card data portal. The initial file contained 260 records for invited aspiring principals who attended the MDPPA; data were available for 254 individuals. The file was imported into Microsoft Excel and visually inspected for completeness and accuracy.

During data cleaning, incomplete or ineligible records were identified and removed, resulting in a final analytic sample of 249 participants. One case was excluded because the participant passed away during their cohort year. Four cases were excluded due to their affiliation with non-traditional educational settings: the Schools for Educational Evolution and Development (SEED) network, a network of public college-preparatory boarding schools for underserved students, and the Juvenile Services Education System (JSES), the education system within Maryland's Department of Juvenile Services providing instruction to youth in detention and committed facilities. These cases were excluded to maintain the internal consistency of the sample and support a more accurate interpretation of retention trends. The findings of this study are specific to Maryland's traditional public school school-based administrators and their LEAs and do not generalize to alternative school environments, such as SEED or JSES programs.

The cleaned dataset was analyzed in IBM SPSS Statistics (Version 30). Table 1 summarizes variables used in the analyses. Because all individuals completed the MDPPA, participation status did not vary; therefore, cohort year served only as a contextual descriptor rather than an inferential independent variable. Complete coding for LEA size and region appears in Appendix B.

Table 1

Study Variables and Coding Summary

Variable	Type	Coding Summary
Cohort Assignment	Contextual Variable	Cohorts 1–5 of MDPPA program years
Years of Retention	Dependent Variable	Full academic years retained post-MDPPA (0–10 years)
LEA Size	Exploratory Variable	District size coded 1 (Very Small) to 5 (Large)
Region	Exploratory Variable	Region coded 1 (Western) to 5 (Eastern)

Dependent Variable Revision. Due to data limitations, the dependent variable was revised to examine the retention of school administrators in their school-based administrative roles following completion of the MDPPA. The original plan proposed quantifying retention as the number of days served after MDPPA completion; however, this information was not available in the archival dataset. As a result, retention was measured as the total number of full academic years in which an individual appeared in the MSDE staffing file in a school-based administrative role. This operationalization did not alter the conceptual definition of retention used in the research question; rather, it reflected the most precise unit of measurement available within the statewide staffing records.

Years of Retention, the primary dependent variable in this study, was coded using values from 0 to 10. A value of 0 indicated fewer than one complete academic year following MDPPA

participation, while a value of 10 indicated continued service for at least ten years. Partial academic years could not be distinguished within the statewide data structure; therefore, retention was recorded based on the most recent year in which an individual appeared in the MSDE staffing file. No parametric correlation tests were conducted; therefore, interval-level assumptions were not required.

Years of Retention was treated as a discrete count variable for quantitative analysis. Because statewide staffing data are reported annually, whole-year counts provided the most accurate and consistent representation of participants' tenure in school-based administrative roles. Although the discrete nature of the variable reduces precision and may limit normality, it represents the most accurate measurement available within the structure of MSDE reporting. Descriptive statistics were used to summarize the distribution of retention years across the full sample and by MDPPA cohort, providing the foundation for subsequent exploratory analyses.

Two contextual variables were examined descriptively: district size (ordinal; very small to large) and region (five-category nominal classification). These variables were explored to determine whether retention patterns varied across different district contexts. Although they were not part of the primary research question, their inclusion supported a broader understanding of administrative longevity across Maryland's school systems.

Demographics

The 249 participants in this study, which achieved near census-level representation, completed the MDPPA across five program years. All were identified as aspiring school leaders in Maryland public schools, by their local superintendent and/or school system, at the time of their cohort year. Despite efforts to obtain additional individual-level demographics, such as age,

race, years of service, or prior roles, none were available. Table 2 reports participants by cohort year.

Table 2

Cohorts for the Maryland Promising Principals Academy (MDPPA)

Cohort #	Program Year	Number of Participants
Cohort 1	2014–2015	49
Cohort 2	2015–2016	47
Cohort 3	2016–2017	48
Cohort 4	2019–2020	51
Cohort 5	2021–2022	54
Total		249

Descriptive Analysis

Descriptive statistics were calculated for the dependent variable, *Years of Retention*, to assess the central tendency, variability, and distribution shape before conducting further analyses. The sample consisted of 249 aspiring principals in one of five MDPPA cohorts. The descriptive statistics were reviewed to identify missing values or remove outliers.

Years of Retention Descriptive Statistics. The descriptive statistics for the dependent variable, *Years of Retention*, provide insight into the distribution and variability of school administrators' tenure in their roles. The mean number of years retained was 5.19, with a standard deviation of 3.25, indicating a moderate spread in the duration of time administrators remained in their positions. The observed range spanned from 0 to 10 years, suggesting that some administrators never held a school-based administrator role, others left immediately after

their cohort year or within the first year, and others remained for a full decade. Since the dataset reflects only retention through the most recent year available – not prior service or since the data was accessed for this study – at the time of analysis; therefore, it is possible that certain participants continued serving beyond the 10-year mark. It is essential to note that this number is influenced by the more recent cohorts having less time in their roles post-participation, which would make it an inaccurate average; rather, it serves as an average to date.

The skewness value of -0.107 , with a standard error of 0.154 , indicates a distribution that is approximately symmetrical and does not deviate significantly from normality in terms of skew. The kurtosis was -1.293 ($SE = 0.307$), indicating a platykurtic distribution, which means the data were relatively flat, with fewer extreme values than a normal distribution would predict. Although slightly platykurtic, the distribution was acceptable for descriptive and exploratory subgroup summaries. Given the archival structure of the data and lack of variability in participation status, no parametric correlation procedures were conducted. The variable demonstrates sufficient variability and normality. Table 3 presents the descriptive statistics for the years of retention across all cohorts.

Table 3

Descriptive Statistics for Years of Retention (N= 249)

Variable	M	SD	Min	Max	Skewness	SE Skewness	Kurtosis	SE Kurtosis
Years of Retention	5.19	3.25	0	10	-0.107	0.154	-1.293	0.307

Note. M = Mean; SD = Standard Deviation; SE = Standard Error.

At each follow-up interval, descriptive statistics summarized administrator retention rates across the five MDPPA cohorts. Retention was assessed at 3-, 5-, 8-, and 10-year intervals; however, not all cohorts had reached every interval, as many participants continue to accrue

years of service in school-based administrative roles. This staggered follow-up period allowed the study to capture retention trends over time while accounting for differences in cohort start dates.

These retention intervals are presented alongside national principal mobility benchmarks to provide context for interpreting observed patterns, though important definitional differences must be noted. Levin et al. (2020) reported that approximately 78% of principals nationally remained in the same school ('stayers') after 3 years. National mobility data also indicate that an additional ~10–12% of principals were 'movers'—changing schools but remaining in the principal role—bringing combined national retention in any principalship to roughly 88–90% at 3 years (National Center for Education Statistics 2023, 2024). This study defined retention as continued service in any school-based administrative role, whether in the same or a different school. Using this broader definition, an average of 78.1% of MDPPA participants across all five cohorts remained in school-based leadership roles after 3 years, providing an initial point of comparison for contextual interpretation. This percentage is modestly below the combined national stayer + mover rate (~88–90%) but slightly above the national same-school rate (~78%), providing additional context for interpreting short-term retention among MDPPA participants. At the 10-year mark, Cohort 1's retention rate (38.78%) can be compared to the national combined stayer + mover rate of approximately 22% (Levin et al., 2020; NCES, 2020). When using this aligned definition of retention, Cohort 1 participants were approximately 1.8 times more likely to remain in a school-based leadership role than the national data indicate. In departure terms, the national attrition rate for principals leaving any principalship within 10 years is roughly 78%, compared to 61.2% for Cohort 1, illustrating a difference in observed long-term retention patterns. When using this aligned definition of retention, Cohort 1 participants exhibited a higher

observed rate of continued service in school-based leadership roles than reflected in national data.

Years of Retention (Overall). Across the 249 principals with complete retention data, the mean years retained was $M = 5.19$ ($SD = 3.25$; range = 0–10). Retention was also summarized in survival-style frequency bands to provide a clearer picture of role continuity over time and to reduce distortion from newer cohorts with fewer years of possible follow-up. Specifically, the percentages of principals who remained in a school-based administrative role for at least 3, 5, 8, and 10 years were calculated for the overall sample and by cohort. Table 2 presents these distributions, complementing the mean years retained by showing the proportion of participants sustaining longer-term tenure. Skewness was -0.11 ($SE = 0.15$) and kurtosis was -1.29 ($SE = 0.31$), indicating an approximately symmetric, slightly platykurtic distribution. Given the sample size and distributional indices, the variable was suitable for descriptive and exploratory analyses. The limited follow-up time available to later cohorts, particularly Cohorts 4 and 5, influenced the overall mean years retained ($M = 5.19$) because these cohorts had fewer years post-program to accrue service. This structural feature of staggered cohorts does not bias the analysis but remains an important consideration when interpreting overall averages.

Descriptive Statistics for Years of Retention by Cohort Year. Mean retention differed by cohort, with earlier cohorts showing higher means, consistent with longer follow-up windows: Cohort 2 ($M = 7.11$, $SD = 3.14$), Cohort 3 ($M = 6.26$, $SD = 2.96$), Cohort 1 ($M = 6.24$, $SD = 3.87$), Cohort 4 ($M = 4.63$, $SD = 1.86$), and Cohort 5 ($M = 2.19$, $SD = 1.25$). These differences reflect the staggered nature of program participation, with earlier cohorts having more time to accrue service than later cohorts. This pattern underscores the importance of considering available follow-up time when comparing retention averages across cohorts.

Cohort 2 reported the highest average retention at 7.11 years (SD = 3.14), followed closely by Cohort 1 (M = 6.24) and Cohort 3 (M = 6.26). These early cohorts had wider ranges and higher upper confidence intervals, suggesting longer tenures and more variability in administrator retention. In contrast, Cohort 4 showed a noticeable decline in average retention to 4.63 years, and Cohort 5 displayed an average of 2.19 years; however, this reflects limited follow-up time rather than a meaningful difference in retention. This downward trend indicates that administrators in more recent cohorts remained in their roles for significantly shorter periods, which is expected given the staggered start dates of the cohorts. Because cohorts completed the program in different years, they had unequal follow-up time. Therefore, observed differences in average retention reflect time-at-risk rather than meaningful cohort differences. Table 4 reports descriptive statistics and 95% confidence intervals. Table 4 presents descriptive statistics for Years of Retention by MDPPA cohort year, including means, variability, and 95% confidence intervals.

Table 4

Descriptive Statistics for Years of Retention by Cohort Year

Cohort	N	Mean	SD	SE	95% CI		Min	Max
					Lower	Upper		
Cohort 1	49	6.24	3.865	.552	5.13	7.36	0	10
Cohort 2	47	7.11	3.143	.458	6.18	8.03	0	9
Cohort 3	47	6.26	2.960	.432	5.39	7.12	0	8
Cohort 4	52	4.63	1.858	.258	4.12	5.15	0	6
Cohort 5	54	2.19	1.245	.169	1.85	2.52	0	3

Retention was also summarized at 3-, 5-, 8-, and 10-year intervals following completion of the MDPPA. Not all cohorts had sufficient follow-up for each interval. At 3 years, retention ranged from 68.5% to 85.4%. At 5 years, retention ranged from 57.4% to 72.9%. At 8 years (for

cohorts with adequate follow-up), retention ranged from 57.1% to 64.6%. Only Cohort 1 had sufficient follow-up at 10 years (38.78% retained).

Cohort-Based Retention at Key Intervals. In addition to analyzing retention as a continuous variable, supplemental descriptive statistics were calculated to illustrate how retention patterns varied across the cohorts at key milestone intervals (Pagano, 2023). Retention was assessed at 3, 5, 8, and 10 years following program completion; however, not all cohorts had reached each interval, due to differences in cohort start dates and available follow-up data. This approach clarified how retention evolved and enabled comparisons across cohorts despite differences in follow-up data.

At the 3-year mark, retention rates increased from 68.5% to 85.4% across cohorts, indicating strong short-term retention among participants in the MDPPA program. At 5 years, retention ranged from 57.4% to 72.9%, showing a slight decline. By 8 years, when cohorts had adequate time, participation retention narrowed from 57.1% to 64.6%. Only Cohort 1 had sufficient follow-up for 10-year retention, with 38.78% of administrators still in their school-based leadership roles at that interval. Retention rates gradually declined, but all cohorts followed a similar general retention pattern across years. Table 5 presents the percentage of participants retained at 3, 5, 8, and 10-year intervals across all cohorts.

Table 5

Cohort Retention Rate at Key Intervals (Percentage Retained)

Cohort	Retained at 3 Years (%)	Retained at 5 Years (%)	Retained at 8 Years (%)	Retained at 10 Years (%)
Cohort 1	77.6	59.2	57.1	38.8
Cohort 2	85.4	72.9	64.6	-

Cohort	Retained at 3 Years (%)	Retained at 5 Years (%)	Retained at 8 Years (%)	Retained at 10 Years (%)
Cohort 3	81.2	70.8	60.4	-
Cohort 4	77.8	57.4	-	-
Cohort 5	68.5	-	-	-

Note. Values represent the percentage of MDPPA participants retained in any school-based administrative role at each follow-up interval.

Exploratory Analyses by LEA Size and Region

Retention patterns among MDPPA participants can be further contextualized by examining variation across district size and geographic region. Maryland's public education system is organized at the county level, resulting in local education agencies that differ substantially in scale, resources, and regional context. These differences range from small, predominantly rural districts to large urban, suburban, and mega-district systems serving well over 150,000 students. Considering retention patterns across district size and geography provides additional context for interpreting observed trends and assessing whether patterns appear consistent across Maryland's diverse local environments.

The descriptive statistics for Years of Retention by LEA size revealed modest variation across the five size categories. Medium-sized LEAs showed the highest average retention ($M = 5.27$, $SD = 2.73$), followed by Large LEAs ($M = 4.67$) and Medium-Large LEAs ($M = 4.49$). Very Small and Small LEAs reported the lowest mean retention values (4.27 and 4.39 years, respectively). All groups shared the same maximum value of 10 years due to cohort start dates. Standard deviations were relatively similar across size groups, suggesting comparable variability in retention. The overlapping 95% confidence intervals indicate that although minor differences were observed, these differences should be interpreted cautiously.

An Extreme Values procedure was conducted to identify the five highest and five lowest retention scores within each LEA size category. All LEA size groups contained administrators with both the minimum (0 years) and maximum (10 years) values of retention, indicating wide variability across contexts. These findings reinforce that retention patterns are not uniform even within similarly sized districts and support the rationale for cautious interpretation of group-level patterns.

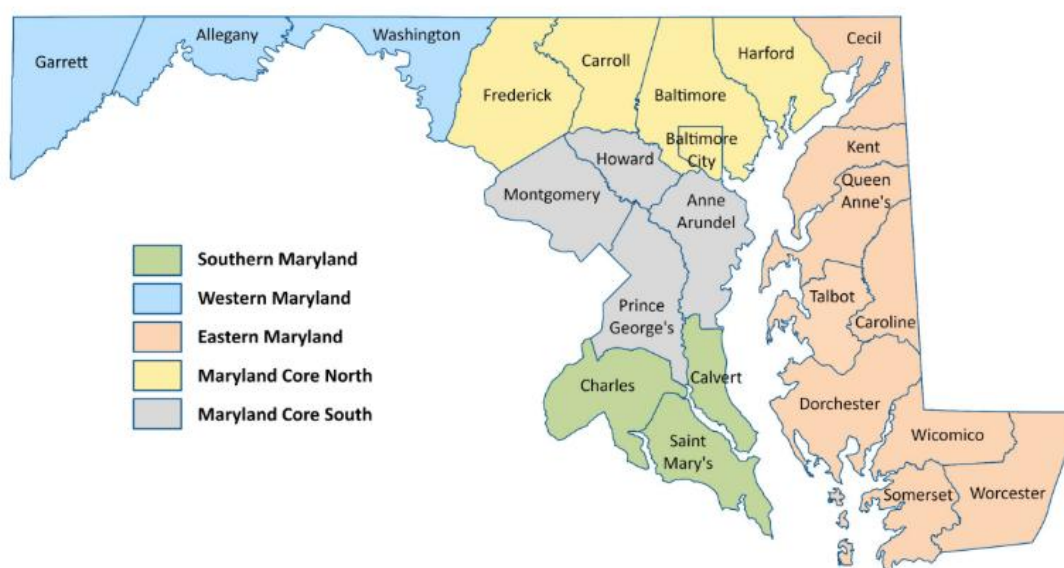


Figure 1

Maryland regions used in exploratory analyses.

Note. Regions include Western Maryland, Maryland Core North, Maryland Core South, Southern Maryland, and Eastern Maryland.

Descriptive statistics were calculated for Years of Retention by Maryland region (Western Maryland, Maryland Core North, Maryland Core South, Southern Maryland, and Eastern Maryland). Mean years of retention ranged from 4.71 in Eastern Maryland to 5.98 in Maryland Core South. Across all regions, the minimum value was 0 years and the maximum was

10 years. Standard deviations were comparable across regions, indicating similar dispersion in retention. These patterns suggest that while minor variation exists across regions, overall retention trends do not differ substantially by geography.

A Spearman's rho correlation was conducted to explore the relationship between LEA size and Years of Retention. Results indicated a statistically significant but weak positive association, $r(244) = .159$, $p = .013$, suggesting that administrators in larger districts tended to remain in their roles slightly longer than those in smaller districts; however, the magnitude of the relationship was small and should be interpreted as descriptive rather than predictive.

A one-way ANOVA was conducted to examine whether retention differed significantly by Maryland region. The analysis revealed no statistically significant difference in retention across regions, $F(4, 244) = 2.078$, $p = .084$, indicating that geographic region was not meaningfully associated with retention patterns among MDPPA participants. The effect size was small ($\eta^2 = .033$), suggesting that regional grouping explained only a minimal portion of variance in retention.

Retention Patterns in National Context

Retention patterns for MDPPA participants can also be understood in relation to national benchmarks. National Center for Education Statistics reports that, in a typical year, approximately 80% of public-school principals remain in the same school (stayers), and an additional 6% move to a different school but remain in the principal role (movers). Approximately 11% of principals leave the principalship altogether (NCES, 2023, 2024). These figures suggest that roughly 86% of principals nationally continue in a principalship after one year.

Over extended periods, retention declines substantially. Focusing on same-school retention, Learning Policy Institute (2017) reported that only about 11% of principals remain in the same school after 10 years, underscoring the instability of long-term leadership at the school level. Prior research consistently demonstrates that attrition accelerates after the early years of the principalship, with notable declines occurring beyond the third and fifth years as role demands intensify and opportunities for mobility increase (Levin et al., 2020; RAND Corporation, 2020). Consistent with this long-horizon pattern, prior research describes decreasing same-school retention as tenure extends beyond the early years of the principalship (Levin et al., 2020; RAND Corporation, 2020), reinforcing the broader pattern of leadership turnover observed across states and districts.

When examined using a role-based definition of persistence, national benchmarks similarly indicate that long-term principal retention is uncommon. Analyses of national principal workforce data show that approximately 22% of principals remain in school-based administrative roles after 10 years (Levin et al., 2020; RAND Corporation, 2020), highlighting the broader context in which principal turnover is the norm rather than the exception. This benchmark provides important descriptive context for interpreting retention patterns among Maryland Promising Principals Academy participants.

In contrast to national counterparts, MDPPA participants demonstrated markedly stronger persistence. At the 10-year mark, Cohort 1 retained 38.8% of its participants in school-based leadership roles—nearly 1.8 times the national role-based estimate—representing a relative reduction of approximately 22 percentage points in departure risk compared to national attrition levels. These contextual comparisons provide perspective on how observed retention patterns among MDPPA participants compare with national benchmarks, particularly at the longest

available follow-up interval. These supplemental milestone statistics provide a more familiar view of the data, as they are often used in state or national comparisons, offering context for long-term trends in administrator tenure. Although retention generally declined over time, as expected, the pattern was consistent across cohorts, providing support for the primary variable. This consistency strengthens confidence that the observed retention patterns accurately reflect administrator tenure across all cohorts.

Relative Risk Analysis of Retention by Cohort

To further examine differences in retention patterns, descriptive relative risk (RR) values were calculated for each cohort at the 3-year, 5-year, 8-year, and 10-year follow-up intervals. This analysis compared the likelihood of a principal from a given cohort remaining in any school-based leadership role (stayers + movers) relative to the overall average for all other cohorts. This approach provided a standardized lens for examining cohort-level retention patterns across time, highlighting variations that might not be evident from descriptive statistics alone. Because cohorts had unequal time since program completion, RR values are interpreted descriptively only, as earlier cohorts had more time at risk to accrue years of retention.

For example, Cohort 2 exhibited slightly higher observed retention at each eligible interval (RR = 1.10 at 3 years; RR = 1.23 at 5 years; RR = 1.13 at 8 years), though these differences were modest and not interpreted as statistically meaningful. At the longest interval for which multiple cohorts had sufficient follow-up—the 8-year mark—retention rates were broadly comparable across the earliest cohorts, with Cohort 1 retaining 57.1% of participants, compared with 64.6% in Cohort 2 and 60.4% in Cohort 3. These findings suggest generally consistent mid-term retention patterns, with Cohort 2 displaying a modestly higher observed level of persistence at 8 years. Because only Cohort 1 has reached the 10-year follow-up interval

(38.8%), decade-long retention can currently be observed only for this cohort. As additional cohorts accrue extended follow-up time, future analyses will be able to assess whether similar long-term patterns emerge.

Table 6 displays these RR retention trends across follow-up intervals. When interpreted alongside national mover and stayer benchmarks (Levin et al., 2020; National Center for Education Statistics, 2020), Cohort 1's decade-long retention rate, although based solely on Maryland data, markedly exceeds national averages for principal role continuity. This comparison should be interpreted with this definitional distinction noted, as Maryland's retention measure is more restrictive. Maryland data capture only school leaders who remained in school-based administrative roles within the state, whereas national estimates may also include school leaders who continued in the role after moving to another state. As a result, national retention rates may appear slightly higher due to the inclusion of interstate movers, potentially understating the relative advantage observed for Maryland's MDPPA participants.

Relative risk analyses were conducted to contextualize retention patterns across cohorts, with Cohort 1 used as an initial point of reference due to its longer follow-up window. As shown in Table 6, Cohorts 2 and 3 demonstrated consistently higher observed retention at the 3-, 5-, and 8-year intervals, suggesting comparatively stronger early- and mid-term persistence than the reference group. Cohort 4 tracked closely with Cohort 1, while Cohort 5 exhibited lower observed retention at the 3-year mark. These findings indicate modest variation across cohorts, though the study was not designed to test differences in program delivery or implementation over time. Because cohorts differed only in time since program completion, RR estimates reflect available follow-up rather than underlying cohort differences. Cohort 1 retained the most years solely because it had the longest observation window; therefore, Cohort 1 did not function as a

true reference group, and RR values are interpreted as descriptive indicators rather than inferential comparisons.

Table 6

Relative Risk (RR) Retention Trends Across Cohorts and Time

Cohort	RR 3 Years	RR 5 Years	RR 8 Years	RR 10 Years
Cohort 1	1.00	1.00	1.00	1.00
Cohort 2	1.10	1.23	1.13	—
Cohort 3	1.05	1.20	1.06	—
Cohort 4	1.00	0.97	—	—
Cohort 5	0.88	—	—	—

Note. The table displays the relative likelihood of retention for different cohorts at 3-, 5-, 8-, and 10-year intervals. Retention encompasses both “stayers” (those remaining at the same school) and “movers” (those transitioning to a different school) in school-based leadership roles.

Assumption Considerations

Inferential procedures were not conducted to test the primary research question because participation status did not vary. Instead, analyses were limited to descriptive and comparative approaches, as variation in retention outcomes was examined within a single participant group and extended follow-up was available for only one cohort, precluding correlational or inferential testing. Assumption considerations (e.g., distributional characteristics, independence) are reported to support the appropriateness of descriptive and exploratory subgroup summaries. Therefore, analytic procedures focused on descriptive summaries and exploratory subgroup comparisons (e.g., across cohorts, LEA size, and geographic region) to examine variation in

observed retention patterns. These characteristics supported the use of descriptive summaries and exploratory analyses.

Assumptions related to the use of Years of Retention in descriptive and cohort-based exploratory analysis were reviewed. Normality was reviewed using skewness and kurtosis indices (skew = -0.11 ; kurtosis = -1.29), which indicated an approximately symmetric distribution with modest flattening. Because MSDE staffing records are collected once annually, Years of Retention was analyzed as a discrete count variable rather than a continuous measure. Observations were independent by design because each participant represented a single administrative career trajectory.

Research Question- Retention Patterns Following MDPPA Completion

The primary research question examined what longitudinal descriptive trends exist in retention in school-based administrative roles among participants of the Maryland Promising Principals' Academy (MDPPA). Retention was quantified as the total number of academic years in which individuals appeared in the MSDE staffing file following MDPPA completion. This approach captured full-year service in a school-based leadership role and reflected the structure of statewide staffing records.

Descriptive analyses demonstrated substantial variation in Years of Retention among MDPPA completers. Across all five cohorts, the sample averaged 5.19 years ($SD = 3.25$), with values ranging from 0 to 10 years. Cohorts with earlier start dates displayed higher mean retention due to longer follow-up windows; Cohorts 1–3 retained an average of approximately six to seven years, while Cohorts 4–5 demonstrated shorter average tenure because fewer years had elapsed since participation. These patterns highlight the need to interpret mean retention in relation to the time available for follow-up.

Retention was also summarized at four milestone intervals—3, 5, 8, and 10 years—to provide an additional lens on persistence in administrative roles. At three years, an average of 78.1% of all participants remained in school-based leadership roles. At ten years, only Cohort 1 had reached this milestone, retaining 38.8% of participants. These milestone statistics provide a familiar interpretive framework and align with the manner in which state agencies and national organizations often report administrator mobility.

Relative risk (RR) estimates supplemented descriptive statistics by illustrating observed differences in continued service across MDPPA cohorts. At most intervals, Cohorts 2 and 3 exhibited slightly higher observed retention of continued administrative service relative to Cohort 1, though differences were modest. Cohort 5 displayed the lowest 3-year retention rate, reflecting limited time for participants to accumulate service. RR values highlighted meaningful differences in cohort retention patterns that were not apparent from descriptive averages alone.

Collectively, these findings indicate that a substantial proportion of MDPPA participants sustained school-based administrative roles for extended periods following program completion, with the clearest evidence observed in the inaugural cohort, the only group with sufficient post-participation follow-up to assess long-term retention, with many remaining in leadership well beyond the early-career years when national attrition is most pronounced. Earlier cohorts demonstrated the longest service, reflecting greater available follow-up time rather than cohort-specific differences. Across cohorts, retention patterns indicate sustained participation in school-based leadership roles over the mid-term, with long-term persistence among cohorts with sufficient follow-up exceeding national expectations for principal role continuity.

These results align with the study's purpose by describing administrators' observed retention patterns following completion of the MDPPA. By summarizing both average tenure

and milestone persistence across cohorts, the analysis describes how long MDPPA participants remained in school-based leadership roles. The observed trends provide a foundation for interpreting retention patterns among MDPPA participants within the broader context of leadership stability in Maryland schools and inform the evaluation of findings presented in the next section.

Evaluation of the Findings

Taken together, the findings indicate broadly consistent retention patterns across cohorts and contexts, with the most meaningful differences emerging at extended follow-up intervals when viewed relative to national benchmarks. Exploratory analyses were conducted to examine whether Years of Retention varied by contextual characteristics such as district size and geographic region. Descriptive patterns indicated that larger districts tended to retain MDPPA completers slightly longer than smaller districts; however, differences were modest and should be interpreted cautiously. No meaningful differences in retention were observed across Maryland's geographic regions. These contextual differences by district size and geography were modest in magnitude and are best understood as background variation rather than defining features of retention outcomes.

Retention patterns were also summarized at key follow-up intervals to explore whether the likelihood of continued service differed over time. Relative-risk estimates indicated small cohort-level variation, with Cohorts 2 and 3 exhibiting slightly higher observed retention during early and mid-term intervals. Cohort 5 exhibited the lowest early-term retention, reflecting limited post-program follow-up time. These results highlight modest cohort differences that may reflect timing rather than differences in program delivery.

When viewed within the broader national context of principal retention, these findings take on greater meaning. Nationally, the median principal tenure in a school is approximately four years, and only about 11% of principals remain in the same school after 10 years (Levin et al., 2020). While national metrics differ from those used in this study—which counted service in any Maryland school-based leadership role—they provide useful comparison points. Under this broader definition, 38.8% of Cohort 1 participants remained in a school-based administrative role 10 years after completing the MDPPA, a persistence rate approximately 1.8 times higher than national mover + stayer benchmarks (~22%). These differences indicate that MDPPA completers remained in school-based administrative roles at substantially higher rates than national benchmarks for principal role continuity, though program participation cannot be isolated as a causal factor. These descriptive patterns are consistent with prior research that highlights the potential role of structured, mentoring-based professional development in supporting administrator stability.

Interpretation of these findings is shaped by Maryland’s staffing data structure, which captures only school leaders serving within Maryland public schools. Individuals who continued in leadership positions outside the state were counted as non-retained here, potentially understating true long-term retention. Nevertheless, the observed patterns indicate strong persistence among MDPPA participants, particularly in the earliest cohorts with the longest follow-up windows, suggesting that long-term retention may be understated under the more restrictive Maryland-only definition.

The observed patterns of sustained participation and long-term persistence align with the communities of practice (CoP) framework, which posits that shared expertise, professional identity, and collaborative learning contribute to sustained engagement within

professional communities (Lave & Wenger, 1991). The MDPPA's design intentionally fosters cross-district networks, reflective practice, and collaborative professional learning—conditions that may enhance professional resilience and increase the likelihood of continued service in school-based administrative roles. While causal conclusions cannot be drawn, the descriptive results are consistent with theoretical expectations that structured professional communities can strengthen administrator commitment and mitigate long-term attrition.

Summary

A central quantitative descriptive finding of this study is that earlier MDPPA cohorts demonstrated longer observed retention in school-based roles; however, this pattern reflects greater available follow-up time rather than meaningful subgroup differences. Because cohort year represents elapsed time since program completion, later cohorts have had fewer opportunities to accrue years of service, and observed differences in retention therefore reflect time-at-risk rather than differential program impact. Importantly, this staggered cohort structure nonetheless enabled exploratory comparison to national benchmarks, revealing that Cohort 1 participants exhibited substantially higher 10-year role continuity than national averages.

Because cohort year simply reflects elapsed time since program completion, earlier cohorts had a longer opportunity window to accrue years of service. Accordingly, the observed inverse trend by cohort is interpreted as a time-at-risk artifact rather than a meaningful difference among cohorts; it simply shows that, in a staggered cohort design, earlier completers have had more years available to accrue service.

Exploratory analyses suggested that district size was modestly associated with retention, with participants from larger districts who participated in MDPPA remaining slightly longer on average. In contrast, geographic region did not show a statistically significant relationship with

retention. These additional findings provide contextual background for interpreting the descriptive retention patterns but were not central to the study's research question.

While this expected cohort-timing pattern helped contextualize retention across completion years, clearer comparative patterns emerged in the national comparison. When retention was examined, MDPPA participants, particularly those in earlier cohorts who have reached 10 years retained, remained in school-based roles at higher rates than school leaders nationally. These exploratory patterns, though descriptive and not causal, provide additional insight into potential program relevance and support continued monitoring as later cohorts progress further into their careers.

Viewed alongside national benchmarks, MDPPA participants demonstrated higher observed role continuity than school leaders nationally. Viewed alongside national benchmarks, MDPPA participants demonstrated higher observed role continuity than school leaders nationally, most clearly at extended follow-up intervals where direct comparison is possible. Most importantly, the only cohort with a full decade of follow-up (Cohort 1) retained 38.8% of participants in school-based administrative roles, compared to a national benchmark of approximately 22% for long-term, role-based principal continuity. MDPPA participants in Cohort 1 were approximately 1.8 times more likely to remain in a school-based leadership role after 10 years than school leaders nationally, and their risk of leaving was reduced by roughly 22 percentage points (61.2% attrition versus 78% nationally). This 10-year finding is especially noteworthy, as it highlights that MDPPA participants outperformed the national averages in the short and mid-term and sustained substantially greater longevity at the most critical long-term measure.

National comparators were drawn from the National Center for Education Statistics' Principal Follow-up Survey (PFS) and related National Teacher and Principal Survey (NTPS) reports, which provide annual estimates of principals who remain in the profession as stayers or movers, as well as cross-sectional information on tenure distributions. While NCES does not publish a longitudinal 10-year survival estimate using a consistent role-based definition, prior national analyses drawing on these data indicate that approximately 22% of school leaders remain in principal roles at the 10-year mark (Levin et al., 2020). Accordingly, 10-year comparisons presented here are descriptive and contextual, reflecting differences in data structure and definition rather than direct equivalence. These national statistics are used solely to situate MDPPA retention patterns within the broader landscape of principal role continuity nationally.

The patterns observed in this study provide a foundation for interpretation in Chapter 5, where results will be considered in light of existing research and implications for leadership development programs. Additionally, study limitations and recommendations for future research on principal retention and leadership preparation programs are outlined. Although this study was not designed to directly test the complete conceptual model of principal pipeline theories, the higher long-term retention observed in early MDPPA cohorts contributes empirical evidence that may support theoretical perspectives linking embedded leadership development to sustained role continuity. Chapter 5 will build on these findings by discussing how the sustained retention patterns revealed here align with communities of practice theory and outlining implications for policy, preparation programs, and future research.

Chapter 5: Implications, Recommendations, and Conclusions

The problem addressed in this study is the limited empirical evidence examining whether participation in structured, job-embedded leadership development programs, such as the Maryland Developing Principals Academy (MDPPA), is associated with sustained retention in school-based administrative roles. Principal turnover continues to destabilize schools, disrupt instructional continuity, and weaken long-term improvement efforts (Acton, 2021; Superville, 2022). While leadership preparation programs have expanded nationwide, there remains insufficient longitudinal research examining whether these investments contribute meaningfully to administrator longevity. Without clear evidence, policymakers and state agencies are left to make critical decisions about leadership development funding and design without a strong empirical foundation. This study responds to that gap by examining retention patterns among MDPPA participants over time and acknowledges the concern that early leadership preparation alone may be insufficient to support long-term principal stability. The purpose of this quantitative descriptive study was to examine patterns of retention over time among administrators who participated in the Maryland Promising Principals Academy (MDPPA) and remained in school-based administrative roles following program completion. Archival data were used to analyze retention at multiple intervals following program completion. Exploratory analyses also examined variation in retention by geographic region and district size, and contextualized results using national principal retention benchmarks, to better understand how these patterns compared within the broader leadership landscape. Together, these analyses provide a clearer understanding of how retention unfolds among MDPPA participants.

A quantitative descriptive research design was used to address the study's problem and purpose. Archival data on MDPPA participation were obtained from the Maryland State

Department of Education (MSDE). Every administrator who participated in the MDPPA was identified; however, a small number were excluded due to circumstances such as death during participation or lack of employment in one of Maryland's 24 LEAs. The final analytic dataset included 249 of 260 administrators after data cleaning. Descriptive statistics summarized retention rates at 3-, 5-, 8-, and 10-year intervals. Relative risk indices were also calculated as supplemental comparative indicators to describe differences in long-term retention across cohorts.

Because retention could be measured only for years following MDPPA completion using the MSDE staffing file and stop at the time of this research, the retention counts analyzed in this study represent a conservative estimate of leadership tenure. Many participants served in school-based leadership roles prior to participation in the MDPPA, but those years could not be captured in the archival dataset. Therefore, actual total tenure for many administrators is likely greater than the values reflected in this analysis.

The results revealed encouraging patterns of sustained retention among MDPPA participants, with gradual declines over time that mirrored expected trends in the profession. Differences across cohorts were most evident at earlier follow-up intervals, where Cohort 2 demonstrated modestly higher observed retention than Cohort 1 at the 3-year mark. These patterns are descriptive and reflect early persistence rather than differential program effects, as cohorts varied only by time since completion. Although no consistent interaction was identified between cohort membership and time since completion, overall retention trajectories remained relatively stable across cohorts, suggesting that participation in the MDPPA was associated with continued school-based service, but this association cannot be interpreted as a causal influence.

This description provides an overview of patterns observed in the data and establishes the foundation for the implications discussed later in this chapter.

When compared to national trends, MDPPA participants demonstrated higher rates of continued service in school-based administrative roles where national benchmarks are available. Nationally, about 78% of principals remained in the same school after three years (Levin et al., 2020), a narrower definition than used in this study, while the highest observed MDPPA cohort achieved 85.4% retention at the 3-year mark. Although definitions differ, this provides a reference point. At ten years, Cohort 1's retention rate (38.8%) in any Maryland school-based leadership role far exceeded the national same-school estimate of 11% and also surpassed the combined national stayer+mover approximation of 22% (Levin et al., 2020; NCES, 2020), suggesting promising long-term continuity among early MDPPA participants, while recognizing the differences in how retention is defined.

National education datasets such as the National Teacher and Principal Survey (NTPS) and the Principal Follow-Up Survey (PFS) provide only one-year mobility data, tracking whether principals remain at the same school, transfer, or leave the profession. These datasets do not provide longitudinal, multi-year survival estimates or interval-matched retention trajectories, nor do they consistently capture continued service across different school-based administrative roles (for example, serving as an assistant principal or moving to a different school as principal). Because no national benchmark directly matches the multi-year, any-school-based definition of retention used in this study, the retention patterns observed among MDPPA participants stand out as promising trends that warrant further exploration. This definitional difference limits the precision of direct comparisons but highlights that the consistently higher MDPPA rates still indicate encouraging trends in leadership continuity. These differences highlight the importance

of ongoing research and careful consideration when comparing Maryland's outcomes to national datasets.

This study had several limitations. First, the use of archival data restricted access to additional demographic and contextual variables that may influence administrator retention, such as race, gender, age, school characteristics, individual career paths, or prior leadership experience. Second, because each MDPPA cohort differed in the number of years since program completion, the available follow-up periods were unequal, constraining analyses at later time points—particularly for more recent cohorts with limited longitudinal data. Third, although the study included nearly all eligible participants from five MDPPA cohorts, it excluded individuals who were not employed in Maryland public school districts or who had died during the cohort year. As a result, although the findings reflect a near-complete population of relevant participants, the results remain limited to one state-based leadership development program, which may limit the generalizability of results to other contexts or models. Despite these limitations, the results provide meaningful descriptive insight into patterns of leadership continuity and highlight the value of ongoing research using more comprehensive data sources.

Finally, as a practitioner-scholar with over two decades of professional experience in Maryland public education, and as a mentor for the final MDPPA cohort, I brought prior knowledge and contextual insight to this study. My motivation to pursue this topic stemmed not only from my policy and leadership roles but also from my lived experience as a long-serving principal who witnessed and experienced both the promise and the strain of school leadership. These experiences shaped my interest in the topic and strengthened my commitment to conducting a systematic analysis of multi-year principal retention. I entered this research with a

deep conviction that principal longevity matters, not just for administrators themselves but also for teachers, students, and communities who benefit from steady, effective leadership

These practitioner insights sharpened my ability to interpret findings in ways that resonate with practitioners and policymakers, but they also required constant attention to objectivity, transparency, and methodological rigor. Throughout this project, I worked deliberately to separate personal experience from empirical evidence while still honoring the insights that professional practice can bring to scholarship. This reflexivity is central to my identity as a practitioner-scholar: to acknowledge my connection to the problem of practice, use that connection as a source of motivation, and remain disciplined in ensuring that conclusions are grounded in systematic analysis and evidence rather than personal narrative alone. This reflective stance supported the credibility of the study and strengthened the interpretation of the descriptive results.

The remainder of Chapter 5 presents interpretations of the findings, implications for policy and practice, recommendations for future research, and conclusions. This section builds directly on the results from Chapter 4, linking them to the theoretical framework and literature discussed in Chapters 1 and 2. Together, these elements provide a comprehensive view of how the study's findings inform leadership development, administrator retention, and the broader state and national educational policy context. This overview establishes the foundation for examining the study's implications and identifying opportunities for strengthening the leadership preparation efforts.

Implications

This study's findings carry several important implications for leadership development and administrator retention efforts. The primary analysis demonstrated descriptive variation in

retention across cohorts, with earlier cohorts remaining in school-based administrative roles for longer periods, a pattern largely influenced by differences in available follow-up time rather than demonstrated program effect. Supplemental comparisons using relative risk suggested observable differences across cohorts at select follow-up intervals; however, these patterns were descriptive in nature and not inferentially tested as evidence of program impact. Exploratory analyses indicated a weak association between district size and retention, with participants in larger districts demonstrating slightly longer observed service in school-based leadership roles; however, differences were modest. No meaningful differences were observed by geographic region. Taken together, the findings of this study provide a clear descriptive portrait of principal retention among participants in the MDPPA. Across cohorts, many participants remained in school-based administrative roles for multiple years following program completion, with long-term role continuity most evident among cohorts with sufficient follow-up. While the study's descriptive design does not permit causal conclusions, the observed retention patterns exceed national expectations where comparison data is available and are consistent with theoretical perspectives that emphasize the role of sustained professional learning, networks, and shared practice in supporting leadership persistence. These findings underscore the importance of investing in structures that support long-term principal sustainability, not only for individual leaders, but for schools, educators, and communities that depend on stable leadership over time.

These findings take on greater significance in the context of a growing national concern about principal shortages and the sustainability of the principal pipeline. According to the National Association of Secondary School Principals (NASSP, 2022), nearly 40% of principals report being burned out and considering leaving their roles. Federal data from the National Teacher and Principal Survey (NTPS) show high turnover and mobility rates, especially in high-

poverty schools. Projections from the Wallace Foundation and the Learning Policy Institute warn that leadership pipelines are weakening due to declining interest in principal preparation programs and persistently high early-career exit rates (Wallace Foundation, 2021; Learning Policy Institute, 2017, 2020). Within this broader national landscape of instability, the comparatively higher long-term retention observed among some MDPPA cohorts—particularly at the 10-year interval—offers an encouraging descriptive indicator of continuity when viewed alongside supportive district and state system conditions. These contextual comparisons reinforce the importance of investing in long term leadership support structures that help stabilize the school leadership workforce.

Specifically, job-embedded, non-evaluative mentoring emerges as a potentially valuable strategy for supporting administrators beyond initial preparation. The descriptive trends observed in this study suggest that early access to mentoring, combined with ongoing professional learning structures, may contribute to a positive environment for leadership continuity. The consistency of multi-year retention among several MDPPA cohorts reinforces the value of examining mentoring as part of comprehensive leadership development frameworks. This implication aligns with prior research that emphasizes the importance of ongoing, context-specific support for new and aspiring principals.

Research Question

The research question addressed whether longitudinal retention patterns differed descriptively across MDPPA cohorts and time since program completion. Clear variation was observed at the 3-year and 10-year intervals, with Cohort 1 demonstrating the most pronounced long-term continuity. However, these patterns were not consistent across all measured time points and should be interpreted as descriptive trends rather than evidence of statistical

relationships or causal effects. The most compelling signal emerged from Cohort 1, whose 10-year retention rate of 38.8% far exceeded national same-school retention benchmarks. Because later cohorts have not yet reached equivalent follow-up windows, it remains premature to assess whether similar long-term patterns will emerge. As additional cohorts accumulate more years of service, future analyses will help clarify whether these descriptive trends continue.

The retention gains observed in Chapter 4, particularly Cohort 1's decade-long results compared to national benchmarks, offer important descriptive insight. The proportion of MDPPA participants who remained in school-based administrative roles suggests that job-embedded professional learning delivered through a cohort model may be associated with environments that support leadership continuity. Although these trends cannot be attributed directly to program participation, they highlight a notable pattern of persistence among early cohorts. Given the established connection between leadership stability and improved outcomes for students, educators, and school communities, these findings support continued exploration of cohort-based preparation models as a potential contributor to sustained leadership service. This interpretation aligns with the study's descriptive purpose and reinforces the value of examining retention as an indicator of leadership sustainability.

As a former school leader, I have observed that early training and relationships are crucial. During my own cohort-based leadership experiences, I remained connected with colleagues for years, relying on those bonds for encouragement, thought partnership, and problem-solving. As an assistant principal, I also benefited from two principals who continued to serve as mentors and champions throughout my career, alongside a supervisor who modeled supportive leadership while pushing my growth. These experiences illustrate how relational capital, peer networks, and trusted mentors can support persistence in demanding leadership

roles. Rather than serving as a causal explanation, this perspective provides a practitioner context that aligns with the descriptive patterns observed in the data. This context highlights how enduring professional relationships can contribute to the durability of leadership over time.

These results suggest that state and district systems must move beyond simply launching principals and instead design long-term leadership ecosystems that support sustained service. The MDPPA, a one-year program offered to a limited number of aspiring leaders, may provide a strong starting point, but the descriptive findings indicate that lasting stability is more likely to emerge when early preparation is complemented by continuing, non-evaluative mentoring and sustained professional networks. Retention appears linked not to a single moment of program completion, but to the ongoing structures that shape leaders' ability to remain in demanding roles over time. Intentional, responsive leadership development, therefore, functions as a stability mechanism that supports stability rather than as a discrete intervention. This framing aligns with the study's descriptive purpose by characterizing patterns of continued service rather than attributing causality.

One important implication of these findings is that while principal retention is shaped by broad systemic conditions such as workload, burnout, political pressures, and limited support, the most notable long-term pattern observed in Cohort 1 suggests that early, high-quality preparation may coincide with sustained role continuity when leaders are also embedded in supportive systems. Leadership development alone cannot eliminate the broader forces contributing to attrition; however, the descriptive trends indicate that cohort-based preparation paired with non-evaluative mentoring may help establish conditions that support longer-term persistence. In this way, the findings position the MDPPA as one element within a larger ecosystem of leadership

supports rather than as a singular solution. The interpretation reinforces the importance of comprehensive, multi-faceted approaches to leadership stability.

These findings point to a clear need for districts, states, and policymakers to think beyond one-time training models and invest in systemic supports that sustain leaders over time. Although programs such as the MDPPA provide a valuable launchpad, the descriptive results suggest that lasting stability depends on what occurs after program completion, including access to ongoing mentoring, protected professional learning time, and leadership networks. Retention, as reflected in this study, appears less connected to a single intervention and more closely tied to the presence of sustained structures that support administrators through the evolving demands of the role. Intentional, planned, and responsive leadership development therefore emerges as essential to promoting continuity, supporting role persistence, and strengthening long-term school leadership capacity. The findings emphasize the importance of viewing leadership development as an ongoing, career-long support system.

The Cohort 1 results suggest that early preparation can lay a durable foundation for long-term retention, as nearly four in 10 participants remained in school-based leadership after a full decade. While this pattern is notable, it represents only one cohort that has reached a complete 10-year follow-up window; therefore, it should be interpreted as a promising descriptive signal rather than definitive evidence of program influence. Later cohorts have not yet accrued sufficient time in role to determine whether comparable patterns will emerge. This finding highlights both the potential value of early leadership development experiences and the importance of continued observation as additional cohorts reach longer retention intervals. Multi-year, job-embedded induction, ongoing leadership coaching, and structured mentoring (Darling-Hammond et al., 2022; Hays & Mahfouz, 2020) may help early career gains translate into

longer-term outcomes. Policies that create sustainable leadership pipelines with continued developmental opportunities may help address the organizational and personal challenges contributing to leadership attrition (Faizuddin et al., 2022; Grissom et al., 2019; Superville, 2022).

The strong 10-year results for Cohort 1 suggest that early preparation and mentoring may help leaders build staying power, but sustaining principals across an entire career likely requires more than an initial boost. Leadership demands evolve as administrators move through different phases of their careers, and retention over time is shaped by changing role expectations, professional pressures, and system conditions. In my experience, the support principals need to stay and thrive shifts as the demands of the role become more complex. Early-career administrators often require hands-on coaching and structured guidance to navigate the transition into leadership. Mid-career leaders may benefit from opportunities to deepen their expertise, expand their influence, or engage in system-level responsibilities. Veteran leaders often seek roles that allow them to mentor others or contribute to broader organizational change. These evolving needs highlight the importance of differentiated, developmentally responsive support structures rather than uniform retention strategies. When this kind of flexibility is built into the system, it can promote leadership stability and continuity, both of which are strongly associated with improved school performance, teacher retention, and student success (Brauckmann et al., 2023; Darling-Hammond et al., 2022). Policymakers may consider how retention strategies can be intentionally aligned with distinct career stages to support sustained leadership over time.

The Cohort 1 results indicate that early preparation can help principals remain in their roles significantly longer than national norms, and the lived experience of principals explains why this matters. For practitioners, these findings reinforce what many leaders already know

firsthand: the job does not get easier after training; it becomes more complex. The context in which school leaders navigate is constantly evolving, with challenges including persistent teacher shortages, increased concerns about student behavior, declining academic performance, and the growing influence of national political tensions on local school boards and classrooms. While programs like the MDPPA may provide an essential launchpad, sustained success in school leadership requires opportunities for continuous learning, reflection, and connection. Ongoing professional development must move beyond compliance workshops and offer meaningful, embedded experiences where leaders can grapple with real challenges, reflect on their practice, and grow in community with others (Hays & Mahfouz, 2020; Westberry & Horner, 2022). Creating protected time and space for leaders to engage in peer-to-peer mentoring, thought partnership, and collaborative problem-solving can be transformative, not just for the individual but for the entire system. Districts should consider establishing communities of practice rooted in trust and relevance, consistent with the principles advanced by Lave and Wenger (1991) and Wenger-Trayner and Wenger-Trayner (2020). Creating structured opportunities for peer learning and collaborative problem-solving can strengthen leadership capacity and improve systemwide stability.

The decade-long persistence of Cohort 1 underscored that while principals can remain in their roles for extended periods, doing so often carries a human cost. Just as important as professional learning is the need for support systems that address the emotional and operational weight of the role. Coaching, mental health resources, and manageable workloads are not luxuries; they are essentials. Leaders do not leave because they lack competence; they leave because the role becomes unsustainable, often resulting in significant personal, physical, and emotional strain. The cumulative effects of decision fatigue, isolation, constant scrutiny, and

crisis response demands increase over time, particularly in under-resourced contexts, reinforcing the need for proactive systems of care and support. Without intentional strategies that prioritize leader well-being, the sustainability of school leadership remains at risk (Grissom et al., 2021; Husain et al., 2021; Reid, 2021).

The results of this study suggest that MDPPA's cohort-based model and non-evaluative mentoring, features aligned with communities of practice (CoP) theory, may help establish early relational capital that supports staying power. This pattern reflects how effective school leaders often grow through ongoing collaboration, mentorship, and shared learning over time. Cohort 1's extended retention provides the clearest descriptive evidence of this dynamic. Consistent with CoP theory (Lave & Wenger, 1991; Wenger-Trayner & Wenger-Trayner, 2020), these findings suggest that extending collaborative learning structures beyond the initial program year may strengthen the sustainability of leadership engagement. The practical implication is to build multi-year, cross-cohort networks, supported by non-evaluative mentoring and job-embedded problem-solving opportunities. This implication points to the need for multi-year, cross-cohort networks supported by job-embedded, non-evaluative mentoring.

Most districts lack the dedicated time, protected space, facilitation capacity, and funding necessary to sustain these types of communities over time. When principal learning is reduced to isolated workshops or compliance-driven meetings, the conditions for collective growth are diminished. The findings from this study suggest that sustained engagement in collaborative professional communities may contribute to greater leadership resilience and continuity. These results align with research showing that when leaders are deeply engaged in long-term professional communities, it supports identity development, collective learning, and persistence (Hays & Mahfouz, 2020; Westberry & Horner, 2022). The Blueprint for Maryland's Future

presents an opportunity to embed sustainable communities of practice into the state's leadership development infrastructure, particularly through the evolving career ladder and the NBCT principal pathway.

Recommendations for Practice

Retaining principals requires moving away from viewing leadership preparation as a finite moment or initial induction program. Theories that frame leadership as a continuous developmental journey, supported by dynamic communities of practice (Lave & Wenger, 1991; Wenger-Trayner & Wenger-Trayner, 2020), more accurately reflect the realities of the profession. This study's findings reinforce the value of leadership development models that emphasize sustained peer engagement, shared learning, and reflective practice over time. Future leadership initiatives should intentionally integrate early-career preparation with ongoing peer collaboration, adaptive learning structures, and continued professional support across the leadership lifespan (Darling-Hammond et al., 2022; Horner & Westberry, 2022).

Accordingly, recommendations are organized in three areas: (a) for districts and state agencies responsible for designing, funding, and implementing leadership supports, (b) for higher education institutions and leadership preparation programs that shape the pipeline of future principals, and (c) for schools and systems serving high-need communities where retention challenges are often most significant. Together, these recommendations emphasize the value of cohort-based communities of practice and ongoing structures that help leaders remain in school-based roles over time.

In Maryland, this is especially relevant as the state continues implementing the Blueprint for Maryland's Future, builds out the leadership career ladder, and invests in instructional leadership through the National Board Certification for Teachers (NBCT) expectation for

principals. The Blueprint presents an opportunity to embed sustained communities of practice, meaningful coaching, and differentiated supports into the state's leadership development system. These structures must go beyond compliance and instead support principals in strengthening instructional practice, advancing teacher development, and building coherent schoolwide systems that promote collective efficacy. Aligning leadership development with these long-term structural supports may contribute to improved leadership stability and effectiveness across the state.

States and Districts Responsible for Designing and Implementing Leadership Supports

The most apparent implication of this study is that more school-based administrators should have access to early, cohort-based preparation paired with a non-evaluative mentor, and that these supports should extend beyond the first year and adapt as leaders progress in their careers. The most compelling evidence comes from Cohort 1: a decade after program completion, nearly 39% of participants remained in school-based leadership, far exceeding national benchmarks. This result suggests that the MDPPA model, which combines early training, a supportive cohort, and non-evaluative mentorship, can help establish durable staying power. The 10-year descriptive retention rate for Cohort 1 was higher than national estimates; however, because only one cohort has reached a full follow-up window and the study lacked a comparison group, these differences cannot be directly attributed to program participation. In addition, retention may reflect pre-MDPPA tenure, district-level supports, career preferences, or other contextual factors not captured in the dataset. Consequently, these findings should be interpreted as preliminary signals rather than evidence of program influence

At the same time, the findings indicate that training in isolation is insufficient. Retention depends on what happens after the program: the supports, networks, and conditions leaders

encounter once they are in the role. In my own career, the relationships built through a cohort model and the guidance of non-evaluative mentors such as principals, supervisors, and colleagues were pivotal in helping me navigate challenges and persist in principal leadership for over a decade. These experiences align with the broader literature on communities of practice, which emphasizes that professional growth and identity are sustained through ongoing collaboration and shared learning over time (Lave & Wenger, 1991; Wenger-Trayner & Wenger-Trayner, 2020).

For districts and state agencies, the implication is clear: principal development should be designed as a long-term investment rather than a one-time intervention. Programs such as the MDPPA should evolve into multi-year networks that connect leaders across cohorts, offering job-embedded coaching, peer problem-solving, and non-evaluative mentoring that reduces isolation and provides thought partners. These supports must be practical and integrated into daily work, not compliance-driven add-ons. Evidence from this study suggests that when leaders are connected and supported over time, they are more likely to remain in their roles, ultimately benefiting teachers, students, and the entire school community.

Retention also requires attention to the leadership lifecycle. Early-career principals often benefit most from intensive coaching and hands-on mentoring, while mid-career leaders seek opportunities to deepen their expertise and expand their influence. Veteran leaders, on the other hand, are often motivated by mentoring others or shaping system-level improvements. Aligning supports with these evolving needs helps ensure that principals not only enter the role better prepared but also thrive across their careers and remain in school-based leadership where they are most needed.

In addition, these findings highlight an important theoretical implication: leadership development is best understood as a continuous professional journey, rather than a finite moment. The sustainability of leadership must be treated as a core design principle. The findings of this study suggest that retention is not only about preparation, but also about the conditions leaders encounter once in the role. Leaders in this study demonstrated persistence beyond national averages; however, national research indicates that many still leave due to burnout, excessive workload, and a lack of systemic support. Intentional structures and supports addressing the challenges of the job are needed not only during induction but throughout the entire-leadership lifecycle. To address this, districts and states should extend support beyond induction, invest in sustained communities of practice, tailor strategies by career stage, prioritize principal well-being, and leverage policy tools like Maryland's Blueprint and the NBCT designation to institutionalize job-embedded leadership development. Embedding wellness resources, protecting professional learning time, and building strong networks are not luxuries; they are essentials. If Maryland is serious about retaining principals, leadership development must be treated as a lifelong professional arc that begins with early, cohort-based preparation and continues through multi-year, differentiated, and responsive support. Consistent with prior research, retention is shaped not only by preparation, but by the conditions leaders encounter once in the role, including workload intensity, burnout, and access to systemic support.

Extending structures like MDPPA across career stages and embedding them into state initiatives, such as Maryland's Blueprint for the Future, could strengthen the leadership workforce and improve conditions and outcomes for both educators and students. By considering the unique needs of school leaders as they progress along their leadership journey, embedding cohort-based communities of practice, and connecting professional learning to the daily work

and processes of leadership, school leaders experience greater support, timely intervention, and collegial collaboration. This approach may lead to significantly increased longevity in the role. As noted in the literature, the results of keeping effective principals in school-based roles longer have wide-ranging benefits for schools, teachers, students, and communities.

The findings from this study offer insight into how administrator retention unfolds across multiple years following MDPPA participation. The descriptive patterns highlight variation by cohort and follow-up interval, with some groups demonstrating stronger long-term continuity than others. These observations align with national research emphasizing the importance of early-career support, professional learning networks, and job-embedded development. The trends identified in this study provide a useful starting point for considering the conditions that support sustained leadership service. This interpretation anchors the discussion of implications for practice and policy.

These findings also reinforce an important design principle for states and districts: leadership development, and retention, is best understood as a continuous professional journey, rather than a finite moment or initial induction program. Theories that frame leadership as a continuous developmental journey, supported by dynamic communities of practice (Lave & Wenger, 1991; Wenger-Trayner & Wenger-Trayner, 2020), more accurately reflect the realities of the profession. Future leadership initiatives should intentionally integrate early-career preparation with ongoing peer engagement, reflective practice, and adaptive learning structures throughout a leader's career (Darling-Hammond et al., 2022; Horner & Westberry, 2022).

In Maryland, this integration is especially relevant as the state continues implementing the Blueprint for Maryland's Future, builds out the leadership career ladder, and invests in the power of instructional leadership through the National Board Certification for Teachers (NBCT)

expectation for principals. The Blueprint presents a critical opportunity to embed long-term communities of practice, meaningful coaching, and differentiated supports into the state's leadership development infrastructure. These structures must go beyond compliance and focus principal time and energy on improving student learning by strengthening teacher effectiveness and building systems that foster collective efficacy.

If Maryland is serious about attracting and retaining high-quality school leaders, it must shift its mindset. Leadership development can no longer be treated as a one-time launch; it must be understood as a lifelong professional arc. Principals deserve career pathways that prioritize instructional impact, protect time for teacher development, and provide sustained support to lead in complex environments. When principals are supported in becoming true instructional leaders, grounded in networks, reflection, and continuous growth, they not only improve retention but also enhance the learning conditions of every student and the professional lives of every educator they lead.

The study's findings suggest several recommendations for enhancement and leadership development in Maryland. The evidence suggests that programs like the MDPPA provide a strong launchpad but require multi-year support to sustain their impact. Districts, state agencies, and higher education institutions must work together to extend job-embedded mentoring, coaching, and professional development well beyond a leader's first year. By doing so, the state can build a stable leadership pipeline that benefits schools, teachers, and students over time.

A first recommendation is to provide multi-year coaching and mentorship, cohort-based collaboration with peers, and job-embedded professional development that supports principals throughout their leadership lifecycle. The results of this study, particularly the decade-long retention rate of Cohort 1, demonstrate that early preparation, combined with non-evaluative

mentoring, builds staying power. Extending these supports into later career stages can help leaders adapt to new challenges, sustain motivation, identify, develop and maximize areas of strength to be leveraged for their school and district, and demonstrate a long-term commitment to their schools and communities. This recommendation aligns with the broader literature emphasizing that leadership is strengthened when new administrators receive ongoing, personalized guidance.

A second recommendation is to invest in sustained communities of practice (CoPs) that connect leaders across schools, districts, and experience levels. communities of practice theory (Lave & Wenger, 1991) emphasizes the power of collaborative, ongoing learning to develop professional identity and competence. The findings of this study suggest that when principals are part of networks that encourage shared problem-solving, peer support, and reflection, they are more likely to remain in leadership roles. Building structured CoPs at regional or statewide levels can reduce isolation, foster collective efficacy, and help principals tackle complex challenges together. Districts and state leaders might consider creating mechanisms that allow cohorts to continue collaboration beyond the initial program year.

A third recommendation is to differentiate supports by career stage. Early-career principals often benefit from intensive, non-evaluative coaching, clear role expectations, and structured mentoring to navigate the steep learning curve. Mid-career leaders may need opportunities to deepen their instructional expertise, learn to develop collective efficacy and leadership structures more deeply within their team, and expand their impact at the system level. In contrast, veteran leaders may be motivated by mentoring others or leading district-wide initiatives. Aligning supports with these evolving needs reflects a developmental view of leadership, ensuring that principals receive timely and relevant assistance throughout their

careers. By investing in sustained professional learning, districts may support administrator growth and mitigate factors that contribute to turnover.

A fourth recommendation is to prioritize principal well-being by addressing burnout and workload intensity with systemic interventions. The literature and this study's findings point to the human cost of leadership, including decision fatigue, isolation, and stress. Embedding wellness resources, administrative coaching, and time protections into leadership development systems may help create conditions that support sustained leadership engagement. The role more sustainable. Such measures signal that leadership well-being is integral to effectiveness and retention, rather than an optional add-on. This recommendation underscores the need to embed leader wellness into ongoing support structures to promote continuity in demanding leadership roles.

A fifth recommendation is for states and districts should also engage in deeper, more intentional examination of principal placement and reassignment practices. Leadership effectiveness is shaped not only by preparation and support, but by the extent to which principals are thoughtfully matched to school communities and afforded sufficient time to establish trust, hire and develop teams, build collective efficacy, and lead sustained improvement —patterns consistently noted in national leadership research (Wallace Foundation, 2021; Learning Policy Institute, 2017). Frequent reassignment or premature movement of principals can disrupt school culture and contribute to leadership churn discussed throughout this study that undermines long-term progress.

Districts and state agencies should evaluate existing reassignment practices in light of national trends in principal tenure, local school performance trajectories, and emerging research on leadership stability to better understand what constitutes an appropriate and productive

duration of service in a given school. Such analysis should inform more deliberate placement strategies, including thoughtful alignment between school context and leader experience.

Experienced principals may be better positioned to lead complex or high-need environments, while newer principals may benefit from settings that allow for growth and mentorship. Moving away from a “survival of the fittest” approach toward intentional leadership matching and continuity planning has the potential to reduce churn, strengthen school communities, and support sustained improvement over the long term.

A fifth recommendation is to leverage Maryland’s Blueprint for the Future and related policy tools to build lasting leadership infrastructure that centers principals as instructional leaders. By institutionalizing career ladders, National Board Certified Teacher (NBCT) principal designations, and job-embedded leadership development, Maryland can intentionally design a coherent, statewide leadership infrastructure district-specific initiatives. Such an approach positions leadership development as a purposeful system—designed to support school leaders, strengthen the schools they serve, and cultivate a sustainable leadership pipeline over time. Anchoring this infrastructure in state policy can secure sustained funding, promote continuity of services, and ensure that principals have ongoing access to coaching, mentoring, and professional learning necessary to lead instructional improvement across the arc of their careers.

Critically, this approach reinforces the Blueprint’s underlying belief that principals play a central role in translating individual teacher effectiveness into collective efficacy at the school level (Wallace Foundation, 2012, 2021; Learning Policy Institute, 2017; Viviane Robinson, 2018). Stable, well-supported principals are uniquely positioned to align instructional vision, develop teams, support teacher growth, and sustain coherent improvement efforts across years. By investing in leadership infrastructure that treats principal development as continuous and

instructionally anchored, Maryland can strengthen both administrator continuity and the conditions necessary for sustained school improvement statewide.

Taken together, these recommendations emphasize that principal retention cannot be solved with isolated or time-limited interventions. Leveraging the Blueprint for Maryland's Future and related initiatives can transform the leadership pipeline into a long-term, job-embedded system of support rather than a one-time preparation program. By investing in sustained mentoring, differentiated professional learning, and policy structures that prioritize leader well-being and effectiveness, Maryland may extend the promise of the MDPPA into a statewide model that strengthens administrator longevity and advances school improvement. This integrated approach highlights the importance of sustained systemic conditions in supporting long-term leadership retention.

Although this study focused primarily on retention outcomes, it is equally important to consider principal effectiveness alongside longevity. Long-term retention matters only if the leaders who stay are advancing instructional quality, building strong school cultures, and developing teachers in ways that improve student outcomes. Policymakers and researchers, therefore, need to examine not only whether principals remain in their role, but also the extent to which their leadership contributes to measurable improvements in teaching and learning. Connecting retention and effectiveness strengthens understanding of how leadership stability influences broader educational outcomes.

Future policy and research efforts should develop shared statewide metrics that connect principal retention to indicators such as school-level academic growth, teacher retention, and professional learning outcomes. Attention should be paid to metrics aligned with instructional leadership, including the ability to foster collective teacher efficacy, support novice educators,

and implement coherent schoolwide instructional systems. By combining retention data with measures of effectiveness, Maryland may better understand whether the principals retained over time are those who consistently deliver strong results for students and staff. These metrics would help clarify the relationship between leadership development structures and long-term administrator success.

Maryland has an opportunity to expand research on principal retention by examining how different forms of in-role support contribute to leadership stability over time. Future studies should incorporate mixed methods approaches that capture principals' lived experiences, contextual conditions, and organizational supports that shape career decisions. Additional research should also compare retention patterns across programs or examine how leadership development efforts interact with school-level factors. These directions may deepen understanding of the supports needed to sustain principal effectiveness. Taken together, these research priorities highlight the importance of studying both structural and experiential factors that influence long-term leadership retention.

Leadership Preparation Programs that Shape the Pipeline of Future Principals

Although this study focused on in-role retention, the findings point to a broader opportunity for higher education institutions and leadership preparation programs to play a sustained role in shaping, supporting, and retaining the school leadership pipeline, and overall school improvement efforts. The MDPPA model, which combines cohort-based learning with non-evaluative mentoring, suggests that early, structured preparation may be associated with extended retention among some participants. Prior research similarly indicates that preparation models extending beyond coursework and time-limited field experiences are more likely to support leadership readiness and persistence (Wallace Foundation, 2012; Learning Policy

Institute, 2017). These patterns indicate that university-based leadership programs should move beyond coursework and time-limited field experiences to include sustained, job-embedded supports that extend into the early years of practice, and beyond. Integrating early-career mentoring, cohort networking, and practical leadership experiences into preparation programming may strengthen leadership readiness at entry and reduce early attrition.

A clear priority emerging from these findings is the need for stronger, more intentional partnerships between universities and school districts to create seamless induction-to-practice pipelines. Rather than disengaging at the point of certification obtainment, higher education institutions could remain connected to graduates during their first years in leadership, coordinating with districts to provide mentoring, coaching, and networking opportunities aligned with local needs. Research on clinically rich and practice-based preparation emphasizes the value of such partnerships in aligning theory with the realities of school leadership (Darling-Hammond et al., 2022). Co-designed fieldwork and early-career supports tied to district priorities—such as instructional improvement or school turnaround—can help aspiring principals practice leadership in authentic, high-stakes contexts before assuming full responsibility.

Higher education institutions are also uniquely positioned to serve as hubs that connect research, preparation, and practice in a continuous loop. By engaging experienced principals as adjunct faculty, mentors, or practice-based researchers, universities can enrich preparation programs while creating avenues for veteran leaders to contribute to the field. Situated within a communities of practice framework, these arrangements allow knowledge to circulate bidirectionally between research and practice (Lave & Wenger, 1991). Institutions can generate applied research grounded in the experiences of practicing principals and disseminate insights to districts statewide. Positioned as neutral conveners, universities can sustain communities of

practice that bridge leadership theory and practice across career stages, strengthening both preparation and ongoing professional growth.

Finally, the findings underscore the importance of embedding communities of practice and sustained cohorts within leadership preparation as an entry point to a longer professional arc. Exposure to collaborative professional networks during preparation can help aspiring leaders anticipate and actively participate in communities that endure well beyond graduation. By equipping principals with the tools, networks, and mindsets for career-long growth, higher education institutions can play a critical role in addressing retention challenges, supporting the teacher workforce, and improving outcomes for students and schools. These actions may help cultivate leaders who are better positioned to thrive and remain in demanding administrative roles.

Addressing Principal Placement and Retention Gaps in High-Need Schools

Principal turnover is especially acute in high-poverty schools and schools serving predominantly students of color (Learning Policy Institute, 2017; Wallace Foundation, 2021). National and state-level research consistently shows that principals in these contexts face greater challenges and leave their roles at much faster rates than their peers (Grissom et al., 2021; Levin et al., 2020). This instability undermines instructional continuity, weakens teacher retention, and compounds achievement gaps. The persistence of these patterns underscores the need for targeted and sustained support to stabilize leadership where continuity matters most. These conditions make leadership retention in high-need contexts a central equity concern for districts and states.

Whereas this study could not include disaggregated analysis of administrator retention by school-level demographics or Title I status due to data limitations, the findings are especially

salient for high-need schools where leadership continuity is most critical and often least sustained. Cohort 1 results demonstrate that early, cohort-based preparation combined with non-evaluative mentoring may offer insight into supports associated with leadership stability in challenging school contexts. These findings suggest that state and local policymakers can leverage the MDPPA framework to develop targeted, equity-focused supports that address leadership turnover in schools serving the highest concentrations of student need. This alignment between preparation structures and equity-focused policy needs highlights a critical area for continued development.

High-poverty and under-resourced schools often combine the highest student needs with the fewest experienced teachers and the most significant-accountability pressures. Research shows that new principals assigned to such schools are more likely to leave the profession entirely, rather than move to another school, compared to peers who begin in less demanding contexts (Grissom et al., 2019). In practice, this means that talented leaders who might have thrived with a more gradual entry into the role are at greater risk of burning out and exiting leadership altogether. These patterns emphasize the importance of differentiated, long-term supports for principals in high-need schools.

From my own professional experience, I have seen the impact of this dynamic. Leading high-poverty schools presents unique challenges, including high staff turnover, shortages of qualified teachers, complex student needs, overlapping grant and compliance requirements, extended family and community needs that require interagency collaboration, and a commitment to addressing contextual challenges that are not directly education related but impact education (health, housing, mental health, food instability, etc). These realities demand skills and supports far beyond what traditional preparation programs impart. Even experienced leaders can struggle

without differentiated assistance, underscoring why high turnover persists and why leaders in these contexts require multi-year, tailored support to succeed and remain. This practitioner insight aligns with descriptive findings emphasizing the importance of sustained support structures.

Viewed through an equity lens, the findings from this study underscore the importance of sustained, structured supports for principals serving in the most challenging contexts. While retention patterns varied by cohort and follow-up interval, the longer-term persistence observed among earlier MDPPA cohorts highlights the potential value of early, cohort-based preparation paired with ongoing, non-evaluative support. These trends suggest that leadership stability is shaped not only by initial readiness, but by the professional conditions principals encounter once in the role—particularly in high-need schools where demands are greatest and continuity is most fragile. The findings reinforce the need to intentionally design leadership supports that promote persistence where stability matters most and to differentiate the supports, resources, and staffing in the most challenged school settings.

Equally important, leaders of high-need schools should have access to communities of practice that connect them across districts, enabling them to share adaptive strategies, co-develop solutions, and access peer support. Such networks can reduce isolation, foster collaboration, and help leaders sustain their work in the most challenging environments. By ensuring that high-need schools benefit from the continuity, vision, and instructional expertise of strong principals, districts and states can advance educational equity while improving teacher stability and student outcomes. These supports position leadership development as a key lever for equity and school improvement.

Ultimately, solving for principal retention in Maryland requires more than system-wide reforms. With more than half of Maryland schools designated as Community Schools and over 55% of students at the poverty level of free and reduced meals many school leaders are navigating complex challenges in the very communities that need their leadership the most. It requires targeted, equity-focused action to stabilize leadership where it is most urgently needed. Opportunities abound for creating specialized cohorts, like the MDPPA, that provide job-embedded professional learning about leading high-poverty schools. These cohorts can extend basic fiscal training to better manage the large concentration of poverty grants and resources, and additional personnel assigned to these schools and establish interpersonal connections among colleagues engaged in similar work. Ensuring that high-need schools' benefit from the continuity, vision, and instructional expertise of strong principals is not only a retention strategy; it is a cornerstone of educational equity. Taken together, these priorities reinforce the need for sustained, differentiated support structures designed specifically for leaders in the most challenging contexts.

District Leaders and Superintendents Responsible for Placing and Supporting School Leaders

District leaders and superintendents play a decisive role in shaping the conditions that influence whether school leadership is sustained over time or marked by frequent turnover. Consistent with this study's findings, national research underscores the central role of principals as instructional leaders and community anchors whose effectiveness and longevity are closely tied to the professional conditions under which they work (Wallace Foundation, 2012; Learning Policy Institute, 2017). When districts invest intentionally in the individuals serving as principals, through careful placement, clear expectations, and sustained support, they strengthen one of the most influential levers for long-term school and system stability.

Extending the impact of leadership development requires moving away from layered, compliance-driven structures that fragment principals' roles and consume time needed for instructional leadership. Research has shown that excessive administrative burden, limited autonomy, and misalignment between district demands and school needs contribute to principal stress and attrition, particularly in high-need contexts (Learning Policy Institute, 2017; Wallace Foundation, 2021). Districts can better support retention by prioritizing leadership capacity within schools, minimizing unnecessary procedural demands, and treating principals as trusted leaders responsible for guiding teaching, learning, and community engagement.

Intentional communities of practice offer another critical support mechanism for sustaining principals in demanding roles. Structured opportunities for principals to collaborate, share expertise, and problem-solve around authentic challenges can reduce isolation and reinforce professional commitment over time (Lave & Wenger, 1991; Wallace Foundation, 2021). To make these supports effective, districts must also establish protected time and space for principal communities of practice to meet regularly and collaboratively address real-world challenges. Such networks recognize principals as experts in their school communities and provide space for district leaders to listen, learn, and respond to school-level needs rather than relying solely on top-down directives. Purposeful networks reduce isolation, foster problem-solving, and create a culture of continuous improvement that strengthens principal longevity. By organizing professional learning around authentic problems of practice and cross-school collaboration, district leaders can leverage peer expertise to improve outcomes for both leaders and their schools. These collaborative structures align district support strategies with research emphasizing the value of professional learning networks.

Finally, districts should differentiate supports across the leadership lifecycle. Early-career principals often require intensive coaching and protection from overload, while more experienced leaders benefit from opportunities to deepen practice, mentor peers, and contribute to broader system learning. By providing tailored mentorship and wellness resources at each stage of the leadership lifecycle, districts may increase the likelihood that principals remain in their roles and continue to develop professionally, ultimately improving stability for teachers, students, and school communities. Research suggests that sustained, career-stage-responsive supports are associated with greater leadership stability and persistence (Wallace Foundation, 2012). By aligning expectations, autonomy, and support with principals' developmental needs, superintendents can foster a stable leadership workforce capable of sustaining improvement for students, teachers, and communities. This career-stage approach strengthens leadership continuity and supports long-term workforce capacity.

State Agencies and Policymakers

State agencies and policymakers occupy a critical position in shaping the conditions that influence principal retention, effectiveness, and long-term sustainability. Leveraging implementation of the Blueprint for Maryland's Future, the state has an opportunity to move beyond discrete leadership initiatives toward a coherent, statewide infrastructure that treats principal development as a continuous investment rather than a one-time intervention. Embedding leadership coaching, mentoring, job-embedded professional development, workload supports, and principal wellness into state-level strategy can help stabilize school leadership and reduce avoidable churn across districts.

In addition to strengthening infrastructure, the state can formalize leadership pathways that encourage professional growth and persistence over time. The National Board Certified

Teacher (NBCT) principal designation identified in the Blueprint for Maryland’s Future offers a mechanism for building statewide networks of instructional leaders who engage in sustained communities of practice, mentor peers, and contribute to systemwide learning. Linking these roles to structured professional networks, recognition, and advancement opportunities may strengthen leadership identity, promote collaboration across districts, and reinforce a long-term career arc for accomplished principals serving in diverse contexts.

State agencies can also strengthen the leadership career ladder by using the NBCT principal designation to build formal, ongoing professional networks of instructional leaders capable of driving necessary changes. Under this approach, principals who earn NBCT status would participate in long-term communities of practice where they mentor other leaders, share best practices, and continue their own professional growth. The state could further recognize and incentivize this work through micro-credentials or leadership badges, creating a structured pathway that links sustained learning, peer collaboration, and career advancement. These structures can institutionalize job-embedded professional learning and create a formal mechanism for recognizing and rewarding ongoing professional growth. When leaders see a clear career trajectory tied to structured supports and opportunities for advancement, they are more likely to remain in their roles and contribute to school improvement over time. This structured pathway may help cultivate long-term leadership persistence across varied school contexts.

The need for coordinated state leadership is further intensified by the expanding role schools now play in addressing complex societal challenges. Increasingly, schools function as the primary problem-solving engine for issues related to health access, food insecurity, housing instability, addiction, mental health, and family well-being—conditions that directly affect

students' readiness to learn and academic progress. While these challenges originate outside the education system, their consequences surface daily in schools and become part of the principal's work in advancing outcomes such as reading proficiency and instructional achievement.

This reality points to the value of establishing a focused, state-level center for principal leadership and innovation. Several states have begun to invest in centralized leadership centers or principal networks that coordinate leadership development, applied research, and cross-sector collaboration, recognizing that schools increasingly serve as hubs for addressing academic and non-academic barriers to learning (Wallace Foundation, 2021). Such a center in Maryland could support interagency coordination across education, health, housing, and human services, reducing the expectation that individual principals or districts independently navigate fragmented systems, identify resources, and address systemic challenges in isolation. By aligning resources, facilitating data and information sharing, and developing scalable models for integrated support, the state could strengthen schools as sites of coordinated service delivery while preserving principals' ability to focus on instructional leadership and school improvement.

State agencies are also uniquely positioned to serve as connectors between institutions of higher education and local education agencies, ensuring that leadership preparation, ongoing support, and applied research function as an integrated system rather than parallel efforts. By facilitating structured partnerships focused on principal learning, mentoring, and practice-based research, the state can strengthen the flow of knowledge between theory and practice while ensuring that leadership development efforts remain responsive to school-level realities. Such coordination may enhance the relevance, quality, and sustainability of leadership supports statewide.

State agencies also have a responsibility to use data not only for accountability, but for learning. Tracking principal retention annually—alongside measures of post-preparation support, teacher retention, instructional improvement, and school climate—can help policymakers distinguish between mere longevity and meaningful leadership impact. Developing feedback loops that inform policy refinement ensures that leadership development efforts sustain high-impact leaders and contribute to improved outcomes for students, educators, and communities. By investing in robust data systems and utilizing this information to inform policy, Maryland may model how to align leadership development with measurable improvements in school performance, teacher stability, and student outcomes. These data systems created opportunities for more targeted and evidence-informed policy decisions.

State agencies could more intentionally incorporate the expertise of accomplished principals into policy design and implementation efforts. Establishing a formal advisory or think-tank structure composed of experienced school leaders from diverse contexts could provide the Blueprint with grounded, practitioner-informed perspectives on implementation challenges and opportunities. Such a structure would elevate practitioner voice, promote cross-district learning, and ensure that state policy remains responsive to the lived realities of school leadership. Engaging principals in this way positions them not only as implementers of reform, but as co-constructors of Maryland's educational future.

Taken together, these strategies position the state not simply as a regulator, but as a convener, connector, and steward of leadership conditions. By investing in coordinated infrastructure, elevating practitioner expertise, and aligning cross-agency supports, Maryland can strengthen principal stability and capacity at scale, ensuring that school leaders are equipped to meet the instructional and community needs placed upon today's schools.

Recommendations for Program Designers (MDPPA)

Program designers for initiatives such as the MDPPA can enhance leadership development by providing ongoing support beyond the initial training period. Redesigning follow-up structures to keep participants connected across cohorts, roles, and years after program completion can help sustain the benefits of the original experience. This continuity enables principals to continue sharing best practices, receiving mentorship, and building networks that promote professional growth and retention over time. Sustained connection across cohorts reflects a core principal of communities of practice and supports continued leadership development.

In addition, MDPPA and similar programs should incorporate opportunities for long-term leadership inquiry, reflective practice, and leadership role evolution. Integrating job-embedded professional learning with individualized coaching and mentoring within multi-year structures enables leaders to navigate the evolving demands of their roles. These ongoing supports move the program from a one-time experience to a career-long resource that reinforces the stability and effectiveness of Maryland's leadership pipeline. Embedding these structures may strengthen leadership resilience and help sustain long-term administrator engagement.

By implementing these changes, program designers can ensure that the MDPPA's early benefits are translated into long-term retention outcomes. Establishing cross-cohort communities of practice, hosting regular alumni events, and conducting leadership labs can provide safe spaces for principals to problem-solve, reflect on their practice, and support one another in real-time. These enhancements align with the findings of this study, which indicate that early, structured, non-evaluative mentoring combined with ongoing professional networks offers a

promising strategy for stabilizing leadership and advancing educational equity. Together, these improvements position program design as a key contributor to leadership sustainability.

In Maryland, this shift can build on the foundational elements of the Career Ladder and the NBCT principal pathway to create a continuum of leadership development that evolves as leaders do. These recommendations underscore the importance of not only providing high-quality preparation but sustaining support throughout a principal's career. This approach reframes leadership development as a pipeline that evolves alongside a principal's career, rather than a one-time program, aligning with the professional arc described in communities of practice theory and offering greater potential for long-term retention. Embedding leadership development within a long-term continuum may strengthen leadership stability and expand the state's capacity to retain effective administrators.

Key Gaps in Maryland Implementation

Despite recent advances under the Blueprint for Maryland's Future, several gaps remain that may undermine leadership retention and limit the impact of leadership development programs. These gaps represent high-leverage opportunities for statewide improvement and are closely aligned with the findings of this study. Addressing them would strengthen the leadership pipeline, improve conditions for principals, and increase the likelihood that effective leaders remain in school-based roles. Highlighting these gaps demonstrates where systemic adjustments may yield meaningful improvements in leadership stability.

One critical gap is inconsistent access to post-induction coaching. Many early-career principals enter their roles without sustained guidance after their initial preparation. Maryland could address this gap by funding and deploying trained leadership coaches statewide, prioritizing early-career principals and those serving in high-need or isolated schools.

Strengthening the roles of principal supervisors so that they are equipped to provide effective mentorship, coaching, and capacity-building—not solely evaluation—would further reinforce retention. These supports may help early-career leaders navigate role complexity and develop the capacity needed for long-term success.

Another gap is the lack of sustained cross-cohort principal networks. Building formal communities of practice at the regional or statewide level, aligned with the Blueprint pillars and leadership career ladder, would help principals share adaptive strategies, co-develop solutions, and access peer support. Expanding Blueprint leadership training to include job-embedded, cohort-based models that emphasize instructional leadership and the Five Core Propositions of National Board Certification for Teachers could provide an infrastructure for these networks. Formalizing these networks may reduce isolation and strengthen collaborative learning across diverse school districts.

Leadership workload, role clarity, and wellness also remain under-addressed. Principals often face overwhelming administrative demands that prevent them from focusing on instructional leadership and staff development. Maryland can embed administrative wellness initiatives, trauma-informed leadership professional development, and principal mental health resources into statewide expectations and district practices. Conducting a statewide review of principal job descriptions to assess alignment with instructional leadership priorities and removing extraneous responsibilities would further support retention, allowing leaders to focus their time on what matters most. Reimagining the role of the principal to ensure alignment to the Blueprint's vision of instructional leadership is paramount to achieving the goals of the Blueprint. These strategies may help ensure that principal roles remain sustainable across varied school contexts.

A final gap is the absence of statewide retention data disaggregated by leadership supports. Without this information, it is difficult to determine which interventions are most effective. Maryland should begin tracking and evaluating which support structures, such as coaching, mentoring, or communities of practice, correlate with long-term principal retention. In addition, surveying principals annually on job satisfaction, instructional leadership capacity, and the supports they receive, and need would provide policymakers with actionable insights. These data-informed practices may help policymakers develop more targeted retention strategies.

Equally important, retention data is not currently paired with measures of leader effectiveness. Developing new metrics to assess principal impact, such as improvements in instructional quality, teacher growth and retention, and schoolwide outcomes, would ensure that the leaders retained are also achieving strong results. Ensuring that this approach is established with a goal of supporting, developing, retaining, and empowering effective school leaders could leverage school leadership as a lever for school improvement. Exploring longitudinal models that connect leadership behaviors to downstream effects on school performance, teacher retention, and student success, especially in high-need schools, may provide a richer understanding of how supports influence both retention and effectiveness. These expanded measures would strengthen the state's ability to assess both the quality and longevity of school leadership.

In addition to these gaps, Maryland must prepare for the projected national shortage of qualified principals. Surveys by NASSP (2022) and studies by the Wallace Foundation and Learning Policy Institute warn of a weakening leadership pipeline due to burnout, early-career exits, and declining interest in principal preparation programs. Combined with statewide interventions designed to keep top performing educators in the classroom with pay enhancements, National Board salary enhancements and new roles that support community

school initiatives, there are many viable career pathways for educators who previously pursued their administration license. Districts and the state will need to proactively identify, target, and prepare candidates for school leadership to ensure an ample supply of quality candidates are available as schools need new leadership. Proactively addressing Maryland's leadership support gaps now will not only strengthen current retention but also ensure the state is equipped to attract, prepare, and sustain the next generation of school leaders. These forward-looking actions may help Maryland build stronger and more resilient leadership pipelines.

Rethinking Principal Development: A Call for Lifelong Leadership Growth

Although the MDPPA and similar programs offer a robust foundation, this study reinforces that one-time leadership development is not enough. Principals operate in increasingly complex, high-pressure environments where expectations evolve faster than the supports designed to help them succeed. To retain and strengthen school leaders over time, principal development must be reconceptualized as a lifelong professional arc rather than a finite preparation stage. Reframing development in this way emphasizes the importance of ongoing, responsive supports that align with the evolving demands of the leadership role.

Too often, principal development focuses narrowly on the aspiring leader pipeline, leaving seated principals with little more than compliance training or generalized professional development. This gap forces mid-career and veteran principals to navigate high-stakes roles without the collaborative inquiry, tailored coaching, and job-embedded growth opportunities they need. Reframing leadership learning across the entire career span would enable systems to provide intentional differentiation of support for novice, mid-career, and seasoned leaders, recognizing the unique pressures and priorities at each stage. This differentiated approach may strengthen leadership persistence and enhance professional growth.

Maryland has an opportunity to expand research on principal retention by examining how different forms of in-role support contribute to leadership stability over time. Future studies could incorporate mixed methods approaches that capture principals' lived experiences, contextual conditions, and organizational supports that shape career decisions. Additional research might also compare retention patterns across programs or examine how leadership development efforts interact with school-level factors. These directions would deepen understanding of the supports needed to sustain principal effectiveness. Together, these areas of inquiry can guide the evolution of leadership development across the state.

Redesign Principal Development as a Lifelong Arc

The findings of this study point to several areas for continued growth in both leadership development practice and educational leadership research. While the MDPPA focused on retention outcomes following participation, its implications extend more broadly to the way the field approaches leadership preparation, support, and sustainability. Reframing principal development as a continuous professional journey rather than a one-time intervention better reflects the lived experience of administrators and may increase the likelihood of long-term retention. These insights highlight opportunities to align leadership development with the evolving expectations of school administration.

Districts and states should invest in a developmental arc for school leaders that extends far beyond early training. Leadership development must span the full career continuum, encompassing entry, growth, sustainability, and transitions, and be anchored in job-embedded learning, coaching, professional reflection, and leadership wellness. This approach requires policy frameworks and funding that support sustained learning for seated principals, not only for those aspiring to the role. Programs like the MDPPA provide a valuable starting point, but

without long-term continuation, their impact is limited. This comprehensive arc of support may help ensure a more stable and effective leadership workforce.

Redesigning leadership development around longevity also aligns with the communities of practice framework described in Chapter 2. By embedding leaders in multi-year networks that combine mentorship, collaborative problem-solving, and adaptive learning structures, states and districts can help principals navigate the evolving demands of their roles. This type of continuous engagement not only promotes retention but also improves the effectiveness of leadership practices across schools and systems. Embedding these structures may create conditions that support both professional growth and leadership stability.

Future Directions for Practice

Leadership development programs, school districts, and state education agencies must begin treating principal development as a career-long arc, not a one-time event. This study's findings, along with the national literature, highlight the need for ongoing investment in coaching, peer networks, and differentiated professional learning that evolves with leaders throughout their careers. Embedding these supports into policy and practice may help ensure that early preparation translates into long-term leadership stability. This shift toward career-long development aligns support structures with the complex realities of school leadership.

One important shift is to strengthen school–university partnerships so that preparation and in-role leadership form a seamless continuum. Higher education institutions can collaborate with districts to align coursework with real-world instructional leadership needs, integrate frameworks such as the Five Core Propositions of National Board Certification, and co-create long-term communities of practice. These partnerships may provide novice principals with authentic experiences and ongoing support, while also offering mid-career and veteran leaders

opportunities to mentor others and expand their influence. Developing these partnerships helps ensure that leadership learning remains relevant across the career continuum.

Principal preparation must also move beyond technical training to include instructional sustainability. Coursework should address how leaders sustain themselves, their teams, and instructional systems over time while adapting to the changing needs of students, staff, and state or federal mandates such as the Blueprint for Maryland's Future. Programs that build capacity in distributed leadership, professional learning communities, and data-informed improvement cycles rooted in equity and collective efficacy help leaders navigate the complexity of the role. These programmatic priorities position instructional leadership as a central component of sustainable school improvement.

At the same time, elevating instructional leadership in policy and practice is essential. As Maryland develops NBCT principal designations within the Blueprint for Maryland's Future, both state policy and higher education must support school leaders in becoming drivers of instructional excellence—not just operational managers. This responsibility requires protecting time for teacher development, prioritizing systems of effective teaching, building collective efficacy within the school through the intentional use of teacher leaders and leadership teams under the principals' intentional coordination and designing school leadership roles that center on learning and growth. Focusing on instructional leadership strengthens principals' capacity to advance teaching and learning across their schools.

Ultimately, the field must undergo a cultural shift from preparation to professional sustainability. Coaching, job-embedded reflection, and career-stage-based supports should be routine features of every district and state's leadership development infrastructure. By embedding these structures into daily practice, systems can create conditions where principals

not only enter the role better prepared but also thrive throughout their careers, leading to stronger schools and more equitable student outcomes. This cultural shift highlights the need for long-term investments that strengthen and sustain the leadership workforce.

Recommendations for Future Research

The findings and limitations of this study suggest several important directions for future research that could deepen understanding of school administrator retention and improve the design of leadership development systems across local, state, and national contexts. As the MDPPA represents only one state-level program, further research can clarify which elements of leadership preparation and ongoing support are most strongly associated with long-term administrator stability. Addressing these questions will help policymakers and practitioners develop evidence-based strategies for retaining effective leaders. These priorities underscore the importance of expanding the evidence base for leadership development and retention.

One promising area of investigation is the role of long-term communities of practice. Grounded in CoP theory (Lave & Wenger-Trayner, 1991; Wenger-Trayner, 2020), future studies should investigate how sustained peer engagement, beyond time-limited training models, supports the development of principal identity, instructional leadership, and retention. Longitudinal research could track how cross-cohort networks and mentoring relationships influence leadership resilience and reduce burnout throughout administrators' careers. This line of inquiry may illuminate the mechanisms by which collaborative learning supports long-term leadership persistence.

Another recommendation is to employ mixed-methods approaches to explore the contextual and individual factors that shape retention. While this study focused on program participation and time since completion, principal retention is influenced by many interconnected

elements such as district culture, workload, support systems, and personal or professional goals (Grissom et al., 2021; Reid, 2021). Combining quantitative retention data with qualitative interviews or case studies may yield richer insights into why administrators choose to stay or leave, revealing nuances that numbers alone cannot capture. This approach may help researchers better understand how contextual influences shape leadership trajectories.

Future research should also examine subgroup retention trends within and across cohorts. Disaggregating data by race, gender, school type (urban, suburban, rural), school characteristics (Title I, Low-Performing, Community School), and years of teaching or leadership experience can inform more equitable and targeted retention strategies. Understanding how different leader populations experience preparation, support, and retention pressures may enable states and districts to design interventions that address the needs of underrepresented or underserved groups (Beckett, 2021; Darling-Hammond et al., 2022). This disaggregated perspective underscores the importance of equity-centered approaches to leadership support.

Extended longitudinal studies are likewise needed to understand the full career trajectories of principals. While this study examined retention up to the 10-year mark, tracking administrators for 15 to 20 years may provide valuable insights into reentry patterns, career transitions, and the delayed impact of professional development on leadership stability (Grissom et al., 2019; Leithwood et al., 2020). As later MDPPA cohorts reach critical retention milestones, analyzing their outcomes at the 5-, 8-, and 10-year marks will further illuminate the program's long-term influence. These extended analyses may reveal how leadership trajectories evolve over time.

Ultimately, future research should assess intervention models that extend leadership support beyond the initial year. Experimental and quasi-experimental studies could test the

impact of job-embedded coaching, cross-cohort leadership networks, and sustained mentorship on retention and performance. These studies would give policymakers and program designers actionable evidence on which strategies best stabilize leadership pipelines and build instructional capacity (Darling-Hammond et al., 2022; Faizuddin et al., 2022; Westberry & Horner, 2022). This work may help states and districts identify support structures that contribute to long-term leadership sustainability.

Conclusions

The problem addressed in this study is the limited empirical evidence examining whether participation in structured, job-embedded leadership development programs, such as the Maryland Developing Principals Academy (MDPPA), is associated with sustained retention in school-based administrative roles. While principal turnover remains a persistent national concern, there is limited empirical evidence describing whether participants in statewide leadership development initiatives remain in school-based administrative roles for longer periods following program completion. This study addressed that gap by examining multi-year retention patterns among MDPPA participants, providing descriptive evidence of leadership continuity over time. Clarifying these patterns is essential for informing the design of leadership development systems intended to support sustained service in school-based leadership roles. With school leadership stability widely recognized as a critical factor in teacher retention, school improvement, and student outcomes (Darling-Hammond et al., 2022; Superville, 2022), this study sought to describe long-term retention trends among MDPPA participants and to explore whether sustained, job-embedded professional learning and support are reflected in patterns of continued service in school-based administrative roles.

Across cohorts, retention patterns did not vary systematically by time since program completion at the 3-, 5-, or 8-year follow-up intervals, indicating broadly similar retention trajectories for most MDPPA participants. While modest differences appeared at individual time points, the most salient and sustained pattern emerged at the 10-year interval, where Cohort 1's retention rate substantially exceeded national benchmarks for school-based leadership continuity. This finding is notable given the rarity of decade-long persistence in the principalship nationally and provides important context for interpreting long-term leadership sustainability.

The patterns identified suggest that while programs such as the MDPPA may establish a strong foundation for leadership entry and early persistence, long-term retention is shaped by a constellation of organizational, personal, and systemic conditions that extend beyond initial program participation (Beckett, 2021; Grissom et al., 2021; Reid, 2021). Understanding these layered influences is essential for interpreting retention trends across extended time horizons. At the same time, the findings underscore the potential of structured, cohort-based leadership development to contribute to leadership longevity. Early MDPPA cohorts demonstrated higher rates of continued service in school-based administrative roles relative to national expectations, suggesting that embedded professional learning and non-evaluative mentoring may support sustained engagement in demanding leadership roles. These patterns align with communities of practice theory, which emphasizes shared learning, mentorship, and professional identity development as mechanisms supporting persistence and resilience over time (Jean Lave & Etienne Wenger, 1991; Wenger-Trayner & Wenger-Trayner, 2020).

Finally, these results reinforce the importance of systemic conditions in sustaining school leadership. Programs like the MDPPA can help principals launch effective entry into the principalship, long-term retention depends on supportive district and state policies, differentiated

professional learning, manageable workloads, and attention to principal well-being. Without these ongoing structures, even well-prepared leaders may exit school-based roles prematurely—particularly in high-need contexts where continuity is most critical. Viewed together, the findings position principal retention as a multi-layered challenge requiring coordinated supports across preparation, practice, and policy.

In summary, this study contributes to a growing body of research suggesting that principal retention is a complex and multifaceted challenge that cannot be addressed solely through initial preparation and limited opportunities such as the MDPPA. Policymakers, researchers, and practitioners should continue to explore sustained, systemic supports that acknowledge the evolving nature of leadership work and foster long-term administrator resilience, satisfaction, and success. As leadership shortages persist and expectations on school leaders continue to grow, understanding what helps administrators stay—and thrive—has never been more urgent. These conclusions underscore the importance of investing in long-term leadership developmental systems.

This chapter concludes by returning to the problem and purpose outlined in Chapter 1. The study began with the question of whether the MDPPA contributed to longer retention in school-based administrative roles and why such retention matters for schools, teachers, and students. By situating the findings within the communities of practice theory and the national leadership-retention landscape, this chapter demonstrates that high-quality initial preparation, combined with sustained support structures, holds promise for stabilizing the principalship. The evidence and recommendations presented here underscore that leadership development must be viewed as a career-long investment—one that can improve and enhance principal retention, strengthen school leadership, and improve educational outcomes across Maryland and beyond.

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Appendix A
IRB Approval Letter



9388 Lightwave Ave.
San Diego, CA 92123
irb@nu.edu

Notice of Exemption
October 6, 2025

To: Rachel Amstutz

Project Title: RAmstutz Dissertation
NU IRB Number: IRB-FY23-24-1
Modification Determination: Not Human Subjects Research

Status: Active - Research activities may begin as of October 6, 2025

Dear Rachel Amstutz:

The study referenced above has been reviewed by the National University IRB. The IRB has determined the proposed modification to your research is Not Human Subjects Research, which means you will not need to renew your study and may begin your study effective immediately.

Please review your Post Approval Responsibilities here: [Approved Documents Guidelines](#)

For any questions regarding your protocol, please reach out to the IRB at irb@nu.edu.

Sincerely,

Handwritten signature of Joseph M. Marron in black ink.

Dr. Joseph Marron, IRB Chair

Handwritten signature of Brianna Mongeon in black ink.

Dr. Brianna Mongeon, Director, HRPP & IRB

Handwritten signature of Jenessa Eberhardt in black ink.

Jenessa Eberhardt, Associate Director, HRPP & IRB