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Organizational Management of Distance Learning: An Analysis of Teacher Feedback Throughout Hampton Roads Public High Schools During the Covid-19 Pandemic Response

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ORGANIZATIONAL MANAGEMENT OF DISTANCE LEARNING: AN ANALYSIS OF TEACHER FEEDBACK THROUGHOUT HAMPTON ROADS PUBLIC HIGH SCHOOLS DURING THE COVID-19 PANDEMIC RESPONSE

by

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ABSTRACT

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Public schools throughout the United States experienced closures and transitions to online curriculum in the spring of 2020 due to the COVID-19 pandemic. However, many of the policies and strategies implemented to manage teaching faculty were hastily designed and employed out of necessity. This study sought to examine organizational management policies and strategies throughout public high schools in the Hampton Roads region of Virginia through teaching faculty perspectives. This cross-sectional study examined descriptive and correlational statistics of survey responses to determine and evaluate how schools managed communication, responsibilities and delegation, and training for distance learning in order to provide policy recommendations for the remainder of the COVID-19 pandemic and future emergency action plans. Results from the survey indicated mostly positive teacher feedback to policies and strategies on communication and training. While the research did not find policies and strategies for responsibilities and delegation consistent throughout schools in region, this research discovered correlations between teachers' opinions and organizational strategies for delegation. Finally, this study provides practical recommendations as well as considerations for further research on organizational management in public schools.

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CHAPTER 1

INTRODUCTION

In the Spring of 2020, the spread of the Coronavirus Disease (COVID-19) began affecting public education throughout the United States. Consequently, Virginia Governor Ralph Northam ordered K-12 Virginia schools to close for two weeks to decrease the spread of the pandemic effective March 16 (Virginia Department of Education, n.d.-a). Following the closure, worsening figures for containment forced Virginia schools to remain closed for the rest of the academic year, prompting schools equipped with capabilities to transition to remote learning (Virginia Department of Education, n.d.-a). This abrupt and massive obstruction to the standard operation of public schooling not only diminished traditional classroom time but affected children's access to valuable resources provided by school facilities and programs such as meals, technology, and extracurricular activities (Kluth, 2020).

Nonetheless, flattening the infection rate curve in the United States required drastic measures that disrupted business, education, government, and community. While the announcement of school closures for the remainder of the year shocked some, the recommendation had scientific backing. The last major pandemic, the 2009 H1N1 influenza virus, provided an initial blueprint for the possible effects of a global pandemic. The 2009 pandemic was responsible for 274,304 hospitalizations and 12,469 deaths in the United States, although the disease affected younger populations more than older populations (Terry, 2020). The disease dramatically spread in the spring of 2009, similar to the onset of COVID-19 in the United States in the spring of 2020. Research developed by Halder et al. (2010) created a simulation model to investigate the effectiveness of school closures as interventions to decrease infections. Their model demonstrated a 9% decrease of illness attack rate – from 50% to 41% –

over an eight-week school closure period for a disease with basic reproduction (R_0) greater than two. Halder et al. (2010) concluded highly transmissible epidemics responses should include immediate, long-duration school closures, combined with other interventions, such as anti-virals.

With the R_0 of COVID-19 estimated to be roughly 2.2, falling in line with models developed by Halder et al. (2010), the recommendations from the Center for Disease Control (CDC) for school closures were fitting (Cascella et al., 2020). However, the immediate closure of many schools left children, parents, teachers, and administrators perplexed on how to proceed with the rest of the academic year. The Commonwealth of Virginia's Executive Order No. 55, Va. Code of Reg. § 44-146.17 (2020) provided initial directives in support of social distancing, but vaguely addressed public school operations. The Virginia Department of Education (VDOE) released 12 memoranda as of April 6, 2020 to the superintendents and principals of the 2,181 schools under its jurisdiction (Virginia Department of Education, n.d.-a). While many of these included informational updates, guidance on graduation requirements, and licensure conditions for staff, the memoranda ultimately left many decisions at the discretion of superintendents and school boards. While this seemed like an appropriate delegation of authority during a time of uncertainty, many administrators were scrambling to determine the minimum requirements and methods to continue the academic year.

The Hampton Roads region of Virginia includes the cities of Norfolk, Virginia Beach, Chesapeake, Portsmouth, Newport News, Hampton, and Suffolk. It provided a variety of population densities and demographics, with a total population of roughly 1.7 million people (Conduent Healthy Communities Institute, 2020). Effectively, it provided a suitable model to analyze policies implemented throughout the public-school districts, as well as survey feedback, to determine how best to develop future disease response policy.

With little existing policy on pandemic response and vague guidance provided by VDOE, public school administrators were faced with developing strategies for the remainder of the academic year. This delegation of authority and period of uncertainty caused major disruptions for education, the primary purpose of public schools. While research indicated school closures to be suitable for decreasing infection rates, problems of transition to remote learning, access to technology, organizational management and uncertainty dramatically affected the 2019-2020 academic year. However, this provided a unique opportunity to understand the difficulties of managing public school teaching faculty during periods of remote learning from the perspective of teachers.

Statement of the Problem

The problem of this study was to identify Hampton Roads public high school teachers' opinions of organizational management policies and strategies during the COVID-19 pandemic response for the purpose of improving faculty management practices.

Research Goals

The study addressed the following research questions:

- RQ_1. What policies and strategies were developed by school administrators to manage teaching faculty during COVID-19 response?
- RQ_2. What were teachers' opinions regarding the effectiveness of policies and strategies developed for organizational management during COVID-19 response?
- RQ_3. What was the relationship between organizational management strategies for delegation and teachers' opinions on the effectiveness of those strategies?

Background and Significance

The Hampton Roads region of Virginia includes 36 public, non-charter high schools, depicted in Table 1 with a total of 69,577 enrolled students and a mean of 1,618 students per high school (SchoolDigger, n.d.-a). While the Secretary of Education proposed rules to govern distance learning for higher education, very little national policy dictated requirements for primary or secondary education (United States Department of Education, 2020). To illustrate, the CDC published the "Interim Guidance for Administrators of US K-12 Schools and Child Care Programs" on its website with direction to work with local health officials for dismissals, event cancellations, and social distancing measures (National Center for Immunization and Respiratory Diseases, Division of Viral Diseases, 2020). Nonetheless, Governor Ralph Northam's order to close all schools through the remainder of the academic year solidified the decisions for public schools in the region.

With a total of roughly 3,960 teaching faculty employed throughout the region, this population covered a variety of teaching subjects and methods for public high schools, including both traditional and specialized curricula. Without clear statewide direction previously developed by VDOE, public school administrations and teaching staff were left with discretionary authority to create policies that best aligned with each district. Even though Virginia public K-12 schools required standing policy for medical emergency responses under the School Safety Audits and School Crisis, Emergency Management, and Medical Emergency Response Plans Required, Va. Code § 22.1-279.8 (2019), many of these include advisory or informational resources without strict policies, and use guidelines based on influenza virus.

Furthermore, statewide policies developed prior to Executive Order No. 55, Va. Code of Reg. § 44-146.17 (2020) on distance learning and use of technology did not account for the

Table 1

Hampton Roads Region Public High Schools

District	Name	Type	Enrollment	Teacher/ Student Ratio
Chesapeake City Public Schools	Deep Creek High	Public (M)	1,613	14.4
	Grassfield High	Public (M)	2,303	17.3
	Great Bridge High	Public	1,428	15.1
	Hickory High	Public	1,735	16.4
	Indian River High	Public	1,706	15.2
	Oscar F Smith High	Public	2,148	13.1
	Western Branch High	Public	2,144	15.7
	MEAN		1868	15.3
Hampton City Public Schools	Bethel High	Public	1732	16.2
	Hampton High	Public	1524	15.7
	Kecoughtan High	Public	1660	15.6
	Phoebus High	Public	1020	12.8
	MEAN		1484	15.1
Newport News City Public Schools	Denbigh High	Public (M)	1307	13.2
	Heritage High	Public	1172	15.8
	Menchville High	Public	1538	15.7
	Warwick High	Public	1574	16.5
	Woodside High	Public	1891	15.9
	MEAN		1496	15.4
Norfolk City Public Schools	Booker T. Washington High	Public	885	10.5
	Granby High	Public	1954	13.7
	Lake Taylor High	Public	1164	11.8
	Maury High	Public (M)	1657	13.2
	Norview High	Public (M)	1881	14.9
	MEAN		1508	12.8
Portsmouth City Public Schools	Churchland High	Public (M)	1415	14.9
	I.C. Norcom High	Public (M)	1065	13.2
	Woodrow Wilson High	Public (M)	1327	12.9
	MEAN		1269	13.7
Suffolk City Public Schools	King's Fork High	Public	1494	14.2
	Lakeland High	Public (M)	1056	13.5
	Nasemond River High	Public (M)	1569	15.6
	MEAN		1373	14.4
Virginia Beach City Public Schools	Bayside High	Public (M)	1944	14.7
	First Colonial High	Public (M)	1878	17.0
	Floyd Kellam High	Public	1973	15.8
	Frank W. Cox High	Public	1815	16.2
	Green Run High	Public	1392	13.2
	Kempsville High	Public	1694	14.9
	Landstown High	Public (M)	2211	16.1
	Ocean Lakes High	Public (M)	2069	16.3
	Princess Anne High	Public	1779	14.1
	MEAN		1862	15.4
ALL	**TOTAL**		69,577	N/A
	MEAN		1,618	14.7

Notes: (M) refers to Magnet Schools. Data for Chesapeake from SchoolDigger (n.d.-a), for Hampton from SchoolDigger (n.d.-b), for Newport News from SchoolDigger (n.d.-c), for Norfolk from SchoolDigger (n.d.-d), for Portsmouth from SchoolDigger (n.d.-e), for Suffolk from SchoolDigger (n.d.-f), and for Virginia Beach from SchoolDigger (n.d.-g).

unprecedented closures as seen during COVID-19. Several of the schools in the Hampton Roads region were capable of remote learning options; however, VDOE established the Virtual Learning Advisory Committee in 2014 but did not create policies requiring capabilities for distance learning in public schools (Virginia Department of Education, n.d.-b). With the immediate order to close public schools, this left administrations responsible to quickly develop and implement policies to manage, teach, assess, feed, and graduate students throughout the Hampton Roads region.

This study specifically aims to investigate how teachers observed various policies and strategies implemented throughout high schools in the Hampton Roads region for the purpose of developing recommendations for effective organizational management. With the large population of teachers facing similar circumstances nationwide, this study illuminates the efficacy of certain policies and strategies from an organizational management framework. Employee perceptions of organizational capacity and effectiveness significantly contribute to employee outcomes and educational leadership styles correspond to student achievement outcomes (Karadag et al., 2015; Zhang et al., 2009). Effectively, it is prudent to assess teachers' opinions to facilitate improvement in organizational management policies and strategies during this pandemic. Teachers have a unique viewpoint during the COVID-19 response, as they are greatly affected by policy development, have varying degrees of input in decision-making at the school administration-level, and often have high predictive capabilities of student performance (Südkamp et al., 2012). As such, their opinion as both a government employee and as an educator is valuable in developing effective organizational management policies for public education during pandemic responses.

Limitations

The following are limitations related to the survey populations and research design:

- Responses were voluntarily submitted by teaching staff employed by public high schools in the Hampton Roads region. No screening for employment history or job satisfaction was utilized for the anonymous surveys, so results may have been skewed by staff more likely to criticize actions taken by administrators.
- This study utilized only public high schools in the Hampton Roads region, so results may not be generalizable to other regions, states, or grade levels.
- Surveys and research were conducted after the end of the planned academic year to provide a snapshot of teacher feedback on the current policies for each public high school. Due to the volatile nature of the emergent pandemic response, many of the schools may have drastically changed policies or modified response plans since conducting this study.

Assumptions

The following assumptions were required to address the research questions accurately and reliably:

- Teaching staff provided honest, unbiased opinions on organizational management policies and strategies.
- Policies implemented represented the rational decision-making process of school administrations to best address the pandemic response applicable for each city district. Individual high schools adhered to policies implemented by their respective city.
- Public magnet schools fall under the jurisdiction of greater city districts and did not have major differences in capabilities to implement pandemic response measures.

Procedures

This study utilized a cross-sectional, quantitative approach to analyze teacher feedback on organizational management policies and strategies during COVID-19 response. Anonymous surveys were issued to 2,940 public high school teachers throughout the Hampton Roads region and included demographic data and feedback for administrative functions. Surveys utilized a Likert-type scale to indicate strength of agreement on statements regarding administrative functions and instructional procedures. All teaching staff throughout the schools were afforded the opportunity to respond, and all participation was voluntary. Survey responses were examined using descriptive statistics to examine policies, strategies, and teachers' opinions during the COVID-19 response efforts. Additionally, Pearson's correlation coefficient was used to explore the relationship between strategies for organizational responsibilities and teachers' opinions.

Definition of Terms

The following definitions are key terms used throughout this study:

- *Academic year*: a period of instruction spanning at least 180 teaching days or a total of at least 990 instructional hours per year (Definitions for Regulations Establishing Standards for Accrediting Public Schools in Virginia, 8 Va. Admin. Code 20-131-5, 2019);
- *Distance education* or *learning*: "a formal learning activity where students and instructors are separated by geography, time, or both for most of the instructional period. Distance learning materials are delivered through a variety of media including, but not limited to, print, audio recording, videotape, television broadcasts, computer software, web-based interaction, and other online technologies. Teachers support distance learners through communication via mail, telephone, e-mail, or other web-based technologies or software" (Virginia Department of Education, n.d.-b);

- *District policy*: procedures and guidance developed by school district superintendents that may be formally or informally distributed throughout all public schools falling within the jurisdiction of the respective city;
- *Organizational Culture*: systems of common symbols, meanings, rules, communication, understanding, and norms shared within a group of individuals with a collective identity (Alvesson, 2013);
- *School policy*: procedures and guidance developed by individual school principals that may be formally or informally distributed to administrative and teaching staff;
- *Secondary* or *high school*: a publicly funded institution meeting the accreditation standards for the state of Virginia for grades 9 through 12, which for the purpose of this study, includes conventional curriculum as well as magnet schools (Definitions for Regulations Establishing Standards for Accrediting Public Schools in Virginia, 8 Va. Admin. Code 20-131-5, 2019).

Organization of Chapters

This study sought to explore the perceived responses from teaching faculty on emergency policies enacted by public high schools in the Hampton Roads region of Virginia. Chapter 1 provided an introduction and background of this study, discussed research goals, procedures, foundational assumptions and limitations, and key terms. The study will provide a current status of research and literature on recommendations of public-school actions during emergent closures, organizational management in public schools, as well as organizational management in remote settings in Chapter 2. Chapter 3 will provide an in-depth review of methodology and procedures, followed by research findings in Chapter 4. Chapter 5 will provide conclusions from

the results, shortcomings of this study, implications and recommendations of these findings, and discussions for further studies.

CHAPTER 2

LITERATURE REVIEW

The literature pertinent to this study was focused on organizational management of public schools, management in virtual environments, and the validity of teachers' opinions in assessing education. While this paper does not directly discuss the pertinence or appropriateness of school closures, it is necessary to provide some contextual insight on why public schools closed and what literature has recommended from previous emergency situations. Research on recommended structures and policies for organizational management in public high schools and online schools is limited but offers some insight on a fundamental understanding on how schools should normally operate (Poirier et al., 2019).

Research on management in virtual environments provided some context on how regular operations occur in online-based organizations but, more importantly, demonstrated a lack of research on organizational management in crises and emergencies in online settings. Finally, understanding why teachers' opinions are important in assessing educational institutions validates the development of the instrument utilized in this study.

Public School Actions During Emergent Closures

Much of the epidemiology research regarding school closures was concentrated in the late 2000s, responding to outbreaks of H1N1 and H5N1 influenza, mumps, severe acute raspatory syndrome (SARS), and general growing concerns for pandemic influenza (Centers for Disease Control and Prevention, 2015). As previously stated, Halder et al. (2010) concluded a pandemic with a R_0 of 2.0, similar to that of COVID-19 estimates, had a reduction of attack rate

from 50% to 45% during a two-week closure, 43% during a four-week closure, and 41% during an eight-week closure. Combinations with antiviral treatments and household prophylaxis with simultaneous school closures resulted in amplified reductions, with roughly 10% less attack during the eight-week period. The closure recommendations were nuanced, as duration of closure is not proportional to reduction in attack rate. Effectively, extending closures more than two weeks only brought about one percent decrease per week. However, the timing of closures mattered as much as the length of the closure (Halder et al., 2010). In the simulation-based models, immediate closures based on first diagnosis slowed initial spread of the epidemic, but once distancing measures were relaxed, the growth restarted. As stated in the study, "Therefore, determining the optimal school closure trigger is crucial when the number of times schools close and their duration is limited" (Halder et al., 2010, p. 9).

Several other models have been utilized before research conducted by Halder et al. (2010). However, all these models, including Halder et al., used models based on pandemic influenza epidemics and resulted in varying findings. Ferguson et al. (2006) published research titled "Strategies for mitigating an influenza pandemic," concluding school closures during the peak of a pandemic were able to reduce peak attack rates by up to 40%, but unable to effectively reduce attack rates, whereas case isolation or household quarantine could have a significant impact, if feasible. However, the model was dated and restricted school closure strategy to only three weeks.

Germann et al. (2006) and Davey et al. (2008) concluded highly mobile societies, like the United States, did not benefit from mitigation strategies like school closures, as models predicted a slower rate of attack but no decrease in overall infections. However, individual school closures were not implemented and triggers for closures were based on initial case diagnosis or several

cases per community, unlike the variable triggers used in Halder et. al (2010) based on infection rates. Nonetheless, variations of these methods and conclusions caused ambiguity for policymakers regarding effective school closure strategies. Milne et al. (2008) emphasized the benefit of long duration school closures, but also stated an "apparent lack of consensus highlights the sensitivity of individual-based models to the details of interpersonal contact and individual behavioral patterns, and suggests that obtaining reliable estimates of these parameters should be a priority" (p. 7).

Disregarding the ambiguity, the conclusions all had a similar foundational principle: school closures positively affected the rate of attack. Regardless of impact on total infection quantities, large-scale pandemic response would be considered within the contexts of the capabilities of the health care infrastructure to provide treatment measures. School closures could be utilized as tools within a larger policy effort to maintain a manageable infection rate or provide slight relief on the health care system. However, research indicated this does have a costly effect. Models using the human capital method by Sadique et al. (2008) in the United Kingdom concluded about 16% of the workforce would take time off to provide childcare, with a decrease of 1% gross domestic product (GDP) for closures lasting 12 weeks.

Similar modeling in Norway by Xue et al. (2012) found school closure had moderate impact on the spread of infection, "but the resulting disruption to society imposes a potentially great cost in terms of lost productivity from parents' work absenteeism" (p. 1). These estimates were based solely on the decrease in workforce, while additional dramatic economic and social encumbrances occur within health care sectors. Research on cost-effectiveness of school closures in the United States found high-transmission, low-risk infections, similar to COVID-19, were best combatted using a 1.1% school-aged prevalence closure trigger coupled with a reopening

trigger of a decrease in school-aged prevalence to 25% of the original value, but included high societal costs (Araz et al., 2012). Effectively, when policymakers started to consider the cost-effectiveness of school closures, incorporating both economic burdens and greater societal conditions, results became increasingly complex.

Administrators were faced with unfavorable external pressures forcing major policy development during the COVID-19 pandemic. As Harris and Jones (2020) describe the decision-making process, it was a "perfect storm with imperfect leadership responses" (p. 245). While the literature on effective strategies for school closure triggers and procedures and implementation of distance learning policies was uncertain, a synthesized consensus drawn was *something is better than nothing*. Letting schools operate at full capacity could result in overwhelming infection attack rates, crippling health care infrastructure. Failing to develop and provide any instruction during school closures would result in inconsistent and unregulated learning experiences, at best (Araz, et. al., 2012).

Organizational Management in Public Schools

Organizational management of teaching faculty in the literature focuses on improving student outcomes using general concepts of structure and culture. Management recommendations are principally tailored to maximize student achievement vice employee satisfaction. These include broad frameworks like New Public Management (NPM), site-based decision making, outcome-based instructional management, and strategic staffing (Christman et al., 2009; Garcia, 2019; Mulford, 2003; Spady, 1982). Moreover, these recommendations commonly address restructuring or major policy changes controlled internally by administrators. For the day-to-day operations, there is no practical need to empirically study detailed operations of organizational management, as administrations will employ policies and strategies that fit the schools' needs

accordingly (Karadag et al., 2015). Effectively, the literature provides very little baseline frameworks for effective policies and strategies for communication, delegation, and training.

Furthermore, even less of the research has used teachers' opinions or feedback to develop an assessment of contemporary organizational management in public schools (Kuo et al., 2014). A study conducted in 2011 examining teachers' perceptions of leadership behaviors and correlations with student achievement found that teachers in both improving and non-improving schools had minimal differences between perceptions of principals' leadership styles (transactional, passive-avoidant, and, transformational) while all three were statistically significant of student achievement (Hardman, 2011). This research introduced the notion that teachers' perceptions of leadership styles do not directly translate towards changes in student achievement but, moreover, "leadership styles that can positively or negatively influence the practices of their teachers" and thus, affect school capacity (Hardman, 2011, p. 144).

The limited research available on organizational management of public schools during emergent conditions and closures provides some guidelines to practitioners but with little empirical justification. First, distributed leadership in learning networks involves professional collaboration at multiple levels of leadership (Azorín et al., 2019). This framework dissolves traditional concepts of school administrators operating as isolated units in favor of complex networks of learning professionals that can quickly connect, communicate, and collaborate to effectively address changing conditions (Harris & Jones, 2020). This could include intra-district collaboration of principals, superintendents, and school boards or even geographically distant faculty collaborating on distance learning curriculum (Hanover Research, 2013; Kruger et al., 2018).

Another practical recommendation for instructional leadership during the pandemic incorporates crisis and change management. For the foreseeable future, school administrators must prioritize managing crises and change (Harris & Jones, 2020). Similarly, self-care must be a top priority by school leadership and administrators in order to mitigate stress-related injuries and overall faculty retention (Harris & Jones, 2020; Reichert, 2020).

Research specifically addressing public school teachers transitioning to online environments indicates overall negative feedback. In a survey-based study measuring K-12 pre-service and in-service teachers' concerns on teaching online, teachers negatively perceived teaching online, were reluctant to pursue online instructional opportunities, and targeted the need for additional resources and training in order to provide effective online education (Rakes & Dunn, 2015). Similarly, teachers felt underprepared to teach in an online, videoconference format, finding development of relationships, fostering interaction, and course management difficult (Rehn et al., 2018). A qualitative study on teachers' perceptions in an asynchronous, self-paced, supplemental virtual high school by Hawkins et al. (2011) found teachers had limited interactions beyond those focused on content, and consequently, felt more like a grader or tutor. Effectively, professional development and organizational training should, at the minimum, be offered to faculty during transitionary periods to maintain student outcomes and mitigate negative teacher feedback (Borup & Stimpson, 2019; Rakes & Dunn, 2015).

Organizational Management in Virtual Settings

Research from organizational theory paradigms provide a more cohesive understanding of management in virtual settings. For communication, policies and strategies that facilitate trust and strong relationships provide the most consistent benefits in online environments (Ford et al., 2017; Graves & Karabayeva, 2020). For example, frequent regular conversations using

synchronous technology (i.e. video chats) rather than asynchronous communication technology was found to increase perceptions of manager-employee relationships and trust (Ford et al., 2017). Virtual meetings shorter in duration held more frequently were found to be more effective than longer meetings (Rubinger et al., 2020). Furthermore, synchronous technology must be engaging while time efficient in order to be effective (Pullan, 2011). Icebreakers, engagement activities, discussion, and continuous check-ins are effective strategies to foster engaging virtual meetings (Kanter, 2017).

Organizational training in virtual environments includes two key concepts: stress management and virtual competence. Stress management in virtual environments is more complex due to the lack of physical boundaries between work and home, and virtual employees are more likely to experience symptoms of overwork and stress (Ely & Padavic, 2020). As recommended by McMurtrie and Crane (2017), employee resilience to stress can be significantly augmented through employer-facilitated training on recovery, work-life balance, and stress management techniques. Similarly, organizations can greatly benefit from training specifically addressing technology. Employee competency now must encompass virtual capability (Ford et al., 2017). In a study on virtual work arrangements and work outcomes, researchers identified individual virtual competence as a new but necessary workplace competency to better develop virtual work interventions (Wang & Haggerty, 2014). Furthermore, skill, knowledge, and ability gained from training on technology among banking employees was shown to have significant effects on productivity as well as employee commitment to the organization (Daniel, 2018).

Research on delegation and authority in virtual organizations provides positive correlations between shared responsibility and work outcomes. In a study on virtual teams for software development, delegation was positively correlated with team member satisfaction and

motivation, as well as performance (Zhang et al., 2009). These findings parallel research conducted by Drescher (2017), concluding leader delegation enhances employee performance and affective outcomes, improves employee evaluations of leaders, and effectively, encourages leaders to continue delegating authority and tasks.

CHAPTER 3

METHODOLOGY

The problem of this study was to identify Hampton Roads public high school teachers' opinions of organizational management policies and strategies during the COVID-19 pandemic response for the purpose of improving faculty management practices. This study sought to examine three research questions: RQ_1. What policies and strategies were developed by school administrators to manage teaching faculty during COVID-19 response; RQ_2. What were teachers' opinions regarding the effectiveness of policies and strategies developed for organizational management during COVID-19 response; RQ_3. What was the relationship between strategies for delegation of organizational responsibilities and teachers' opinions?

This cross-sectional study utilized descriptive methods to determine management policies and strategies, as well as inferential statistics to determine correlations between teachers' perceptions and management practices for organizational responsibilities. This design was utilized to provide the most practical recommendations to school administrators in the Hampton Roads area and Virginia Department of Education (VDOE) with reasonable expectations of variances between districts. Teachers' perceptions were the primary mechanism to analyze organizational management as they provide valuable insight on both the implementation and efficacy of policies and strategies.

Participants

The target population included a total of approximately 3,960 public high school teachers in the Hampton Roads region (Conduent Healthy Communities Institute, 2020). Of the 36 schools in the Hampton Roads region, researchers were able to contact teachers from 32 schools for participation. Participants were contacted by email from publicly available information from school websites with follow-up email reminders one week prior to the survey end-date. The email sent to teachers for participation can be found in Appendix C. Survey participation was voluntary with no compensation offered and all participants received human subject participation disclaimers prior to responding, shown in Appendix A.

Survey Instrument

Surveys, as found in Appendix B, were developed to assess teachers' perceptions of administrative management during COVID-19. Surveys questions were designed to address common anecdotal responses on school administration responses during COVID-19 from several teachers throughout the region. The survey was piloted for face validity on six public high school teachers not included in the sample population before dissemination. Changes to the original instrument were not required. The surveys utilized a five-point Likert-type scale with answers ranging from strongly agree to strongly disagree. These also provided demographic information regarding age, gender, employment location, employment time (in years) as a teacher, employment time (in years) at the specific high school, and teaching subject. Table 2 depicts how survey questions (SQ) were structured to address the first two research questions of this study.

Survey questions for RQ_1 were developed to objectively quantify three overarching themes for organizational management policies and strategies in public high schools during

COVID-19: communication, organizational roles and responsibilities, and organizational training. These themes were broken into four sections of survey questions to categorize and analyze certain policies: communication frequency (SQ_{17} and SQ_{22}), communication duration (SQ_{18}), responsibilities and delegation (SQ_{11}, and SQ_{24}), and organizational training (SQ_{26} and SQ_{27}). Survey questions for RQ_2 provided insight on the effectiveness of policies and strategies

Table 2

Survey Instrument Summary

Research Question	
RQ_1. What policies and strategies were developed by school administrators to manage teaching faculty during COVID-19 response?	RQ_2. What were teachers' opinions regarding the effectiveness of policies and strategies developed for organizational management during COVID-19 response?
Survey Instrument Question/Statement	
SQ_{11}. The school sought input for developing teaching strategies during the school closure.*	SQ_9. I was aware of the school's emergency operations protocols prior to COVID-19.*
SQ_{17}. How many times per week were you required to virtually meet with school faculty (including full staff meetings and/or department meetings)? (Less than once per week, 1-3 times per week, 4-6 times per week, 7-10 times per week, none).	SQ_{10}. The school provided effective and prompt notification to faculty of the school closure.*
SQ_{18}. What was the average length of time per virtual staff meeting? (Less than 30min, 30-60min, 60-90min, greater than 90min, not applicable).	SQ_{12}. The school provided effective and prompt notification to teaching faculty regarding the transition to distance learning.*
SQ_{22}. How much did staff electronic correspondence (email, text, messenger apps, etc.) change during the COVID-19 response? (Decreased a lot, decreased a little, stayed about the same, increased a little, increased a lot).	SQ_{13}. The administration and faculty communicated enough during the closure.*
SQ_{24}. The school clearly designated certain faculty with additional responsibilities during the COVID-19 response.*	SQ_{14}. The administration and faculty communicated too much during the closure.*
SQ_{26}. Did the school offer additional training in order to teach online? (Yes, no).	SQ_{15}. Communication during the closure was applicable to me and helped me perform my responsibilities.*
SQ_{27}. Did the school require additional training in order to teach online? (Yes, no).	SQ_{16}. Communication during the closure was effective and time efficient.*
	SQ_{19}. Online virtual meetings were effective.*
	SQ_{20}. The school developed appropriate policies and procedures to maintain communication with students and parents.*
	SQ_{21}. The school provided enough information to parents to reduce direct contact with me.*
	SQ_{23}. Electronic correspondence was effective.*
	SQ_{25}. The school administration was effective at delegating responsibilities.*
	SQ_{28}. Additional training and resources offered by the school were effective.*
	SQ_{29}. The school provided clear guidelines to transition classrooms online.*
	SQ_{30}. I had enough time, preparation, and resources to transition my curriculum to online.*

Notes: SQ – Survey Question

* - Answers included five-point Likert-type scale (Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree).

in each of the categories above. For communication frequency, the researcher used SQ_{13} and SQ_{14} to address teachers' opinions; SQ_{16} was developed to examine teacher feedback on communication duration; SQ_{25} provided teachers' opinions on responsibilities and delegation; SQ_{28} was used to examine feedback on organizational training. However, the survey also included several questions to provide additional insight on policies and strategies that were not directly identified in RQ_1. These include SQ_9, SQ_{10}, SQ_{12}, SQ_{15}, SQ_{19}, SQ_{20}, SQ_{21}, SQ_{23}, SQ_{29}, and SQ_{30}.

Surveys were disseminated to participants by official school emails. The emails included a summary of the research study and an invitation link to the online, anonymous survey. The link immediately took participants to the online informed consent forms, followed by the survey. Surveys took approximately 15 minutes for completion. Teachers were afforded four weeks to complete the survey, beginning on June 8, 2020. After completion, all survey data were stored locally and converted to secure data analysis programs.

Data Analysis

Participation in the survey was reported with a breakdown of demographics by percentages. To address RQ_1 (What policies and strategies were developed by school administrators to manage teaching faculty during COVID-19 response?), the mean (*M)* and standard deviation (*SD*) were reported along with the median (*Mdn*) and inter-quartile range (IQR) of responses from teachers for SQ_{11}, SQ_{17}, SQ_{18}, SQ_{22}, and SQ_{24}. Because only two options were available ("yes" or "no") for SQ_{26} and SQ_{27}, percentages of responses were reported. Likert-type scale responses for SQ_{11} and SQ_{24} were quantified by "strongly agree" = 1, "agree" = 2, "neither agree nor disagree" = 3, "disagree" = 4, and "strongly disagree" = 5. For SQ_{17}, responses were quantified by "less than once per week" = 1, "1-3 times per week" = 2, "4-

6 times per week" = 3, "7-10 times per week" = 4, and "none" = 5. For SQ_{18}, responses were quantified by "less than 30 minutes" = 1, "30-60 minutes" = 2, "60-90 minutes" = 3, "greater than 90 minutes" = 4, and "not applicable" = 5. For SQ_{22}, responses were quantified by "decreased a lot" = 1, "decreased a little" = 2, "stayed about the same" = 3, "increased a little" = 4, and "increased a lot" = 5.

To address RQ_2 (What were teachers' opinions regarding the effectiveness of policies and strategies developed for organizational management during COVID-19 response?), the researcher again used the mean (*M*) and standard deviation (*SD*) as well as the median (*Mdn*) and inter-quartile range (IQR) for survey questions SQ_9, SQ_{10}, SQ_{12}, SQ_{13}, SQ_{14}, SQ_{15}, SQ_{16}, SQ_{19}, SQ_{20}, SQ_{21}, SQ_{23}, SQ_{25}, SQ_{28}, SQ_{29}, and SQ_{30}. All survey questions used for RQ_2 followed the same Likert-type response structure as SQ_{11} and SQ_{24}, described above. SQ_{14} was the only negative statement used to assess teachers' opinions. Effectively, higher scores of 4 ("disagree") or 5 ("strongly disagree") are associated with positive results.

To address RQ_3 (What was the relationship between strategies for delegation of organizational responsibilities and teachers' opinions?), the researcher used Pearson's correlation coefficient (*r*) to describe the relationships between schools' strategy for delegation (SQ_{24}) and teachers' opinions on the effectiveness of delegation (SQ_{25}) and if these relationships were statistically significant ($p>.05$). Pearson's correlation coefficient was selected as a parametric test since both variables included data with large enough sample sizes to provide an accurate depiction of the association in accordance with Sullivan and Artino (2013) and Murray (2013).

CHAPTER 4

RESULTS

The problem of this study was to identify Hampton Roads public high school teachers' opinions of organizational management policies and strategies during the COVID-19 pandemic

response for the purpose of improving faculty management practices. This research was framed by three research questions: (RQ_1) What policies and strategies were developed by school administrators to manage teaching faculty during COVID-19 response; (RQ_2) What were teachers' opinions regarding the effectiveness of policies and strategies developed for organizational management during COVID-19 response; and (RQ_3) What was the relationship between strategies for delegation of organizational responsibilities and teachers' opinions?

Response Rate

The sample population of Hampton Roads public high school teachers included approximately 3,960, requiring a recommended sample size of 351 (Krejcie & Morgan, 1970). Of the 2,940 public school teachers contacted, 364 participated with 326 complete survey responses, generating a response rate of 12.4%. Of the 32 schools selected for participation in this study, only one school (I.C. Norcom) provided no responses to SQ_2 (Please select where you are currently teaching). Response counts and percentage of responses per school are depicted in Table 3. Throughout the school districts in the region, the Chesapeake school district included 27.8% of responses, Hampton included 10.5%, Newport News included 15.0%, Norfolk included 9.4%, Portsmouth included 1.4%, Suffolk included 4.0%, and Virginia Beach included 32.0%. To provide context for the proportion of teachers per district throughout the region, the Chesapeake school district includes 21.7% of teachers in Hampton Roads, Hampton includes 9.8%, Newport News includes 12.3%, Norfolk includes 14.6%, Portsmouth includes 7.0%, Suffolk includes 7.2%, and Virginia Beach includes 27.5%.

Demographic Data

Respondents were predominantly female – 76% female, 22% male, 1% gender variant/non-conforming, 1% no response, and less than 1% transgender - and ranged in age with

Table 3

Survey Response Summary by School

School	Count (% of Total)	School	Count (% of Total)
Deep Creek High	2 (0.6%)	Lake Taylor High	11 (3.1%)
Grassfield High	14 (4.0%)	Maury High	14 (4.0%)
Hickory High	29 (8.2%)	Churchland High	3 (0.8%)
Indian River High	11 (3.1%)	I.C. Norcom High	0 (0.0%)
Oscar F. Smith High	18 (5.1%)	Woodrow Wilson High	2 (0.6%)
Western Branch High	24 (6.8%)	King's Fork High	7 (2.0%)
Bethel High	13 (3.7%)	Lakeland High	7 (2.0%)
Hampton High	10 (2.8%)	Bayside High	10 (2.8%)
Kecoughtan High	6 (1.7%)	First Colonial High	4 (1.1%)
Phoebus High	8 (2.3%)	Floyd Kellam High	12 (3.4%)
Denbigh High	7 (2.0%)	Frank W. Cox High	14 (4.0%)
Heritage High	4 (1.1%)	Green Run High	7 (2.0%)
Menchville High	16 (4.5%)	Kempsville High	19 (5.4%)
Warwick High	14 (4.0%)	Landstown High	12 (3.4%)
Woodside High	12 (3.4%)	Ocean Lakes High	18 (5.1%)
Booker T. Washington High	8 (2.3%)	Princess Anne High	17 (4.8%)

the median response of 41-50. Twenty-nine percent of respondents were teaching for more than 20 years, followed by 21% for 0-5 years of teaching, 18% for 6-10 years, 17% for 11-15 years, and 16% for 16-20 years. However, nearly half of respondents had been employed at their current school less than five years, with 49% for 0-5 years of teaching at current high school, 16% for 6-10 years, 14% for 11-15 years, 11% for 15-20, and 10% for more than twenty years. English was the most common content subject for teachers responding to the survey with 15.7%, followed by special education with 15.1%, mathematics with 14.8%, social studies with 13.4%, science with 11.0%, world languages with 6.4%, family consumer science and technology with 5.8%, business and marketing with 5.8%, music and fine arts with 5.2%, other with 4.1%, and physical education and health with 2.6%.

Policies and Strategies Developed

The first question of this research sought to identify the policies and strategies implemented by public high schools in the Hampton Roads region. As described earlier, SQ_{11},

SQ_{17}, SQ_{18}, SQ_{22}, SQ_{24}, SQ_{26}, and SQ_{27} were used to assess what policies and strategies were developed by school administrators to manage teaching faculty during COVID-19 response, as shown in Table 4.

For policies and strategies on communication frequency, SQ_{17} and SQ_{22} were used to identify how often teachers communicated with administrators. For SQ_{17} ("How many times per week were you required to virtually meet with school faculty [including full staff meetings and/or departmental meetings]"), teachers consistently indicated schools met one to three times per week on average (n = 325, M = 2.02, SD = 0.84, Mdn = 2, IQR = 0). For SQ_{22} ("How much did staff electronic correspondence [email, text, messenger apps, etc.] change during the COVID-19 response?"), most teachers (72.7%) reported an increase to some degree in electronic correspondence (n = 323, M = 4.17, SD = 1.02, Mdn = 5, IQR = 2). Teachers' responses to SQ_{18} ("What was the average length of time per virtual staff meeting?") were utilized to assess organizational strategies for managing communication duration. Responses were consistent (n = 325, M = 2.14, SD = 0.72, Mdn = 2, IQR = 0), indicating most schools in the region held virtual meetings for 30 to 60 minutes in length.

Organizational policies and strategies for managing responsibilities and delegation were assessed by SQ_{11} and SQ_{24}. For SQ_{11} ("The school sought input for developing teaching strategies during the school closure."), teachers did not agree nor disagree on average (n = 325, M = 2.90, SD = 1.25, Mdn = 3, IQR = 2). Similarly, teachers' responses ranged and did not agree nor disagree (n = 324, M = 2.87, SD = 1.00, Mdn = 3, IQR = 2) to SQ_{24} ("The school clearly designated certain faculty with additional responsibilities during the COVID-19 response.").

Finally, to identify policies and strategies for organizational training, SQ_{26} assessed if the school offered training to teachers to transition classrooms online and SQ_{27} assessed if the school

required training. Most teachers (84.3%) indicated training was offered by the school, but a majority of teachers (62.5%) reported it was not required by the school.

Teachers' Opinions of Policies and Strategies

Teacher feedback regarding the effectiveness of policies and strategies yielded overall positive responses from teachers. Only one question (SQ_9) included a higher frequency of negative responses among all schools. Teachers' opinion data, including mean (*M*), standard deviation (*SD*), median (*Mdn*), and *IQR*, is summarized in Table 4. All data included in Table 4 uses Likert-type scales ranging from 1 = "strongly agree" to 5 = "strongly disagree". SQ_{13} and SQ_{14} were not specifically designed as inverse questions regarding the quantity of communication between administration and faculty. However, these two questions tested if the amount of communication was too little or too much, so agreement to SQ_{13} and disagreement to SQ_{14} should be interpreted positively. As seen in the scores below, the average opinion of teachers throughout the region was the administration and faculty communicated enough but not too much.

Relationship of Teachers' Opinions and Strategies for Delegation

A Pearson's correlation coefficient was computed to assess the relationship between strategies for delegation (SQ_{24}) and teachers' opinions of those strategies (SQ_{25}). The correlation coefficient was calculated with response data from SQ_{24} ("The school clearly designated certain faculty with additional responsibilities during the COVID-19 response.") and SQ_{25} ("The school administration was effective at delegating responsibilities.") as variables. Strategies designating faculty with additional responsibilities and teachers' opinions on the effectiveness of delegation were moderately correlated, $r = .55$, $N = 322$. This relationship was statistically significant ($p < .01$) and means increases in school strategies designating faculty with

Table 4

Teachers' Opinion Summary

Survey Question	*n*	*M*	*SD*	*Mdn*	*IQR*
SQ_9. I was aware of the school's emergency operations protocols prior to COVID-19.	325	3.22	1.34	4	2
SQ_{10}. The school provided effective and prompt notification to faculty of the school closure.	324	2.17	1.05	2	2
SQ_{12}. The school provided effective and prompt notification to teaching faculty regarding the transition to distance learning.	324	2.65	1.16	2	2
SQ_{13}. The administration and faculty communicated enough during the closure.	324	2.31	1.17	2	2
SQ_{14}. The administration and faculty communicated too much during the closure.	322	3.77	0.98	4	1
SQ_{15}. Communication during the closure was applicable to me and helped me perform my responsibilities.	321	2.40	0.98	2	1
SQ_{16}. Communication during the closure was effective and time efficient.	323	2.73	1.11	2	2
SQ_{19}. Online virtual meetings were effective.	323	2.46	0.90	2	1
SQ_{20}. The school developed appropriate policies and procedures to maintain communication with students and parents.	321	2.52	1.07	2	1
SQ_{21}. The school provided enough information to parents to reduce direct contact with me.	323	2.82	1.13	3	2
SQ_{23}. Electronic correspondence was effective.	323	2.36	0.86	2	1
SQ_{25}. The school administration was effective at delegating responsibilities.	325	2.71	1.00	3	1
SQ_{28}. Additional training and resources offered by the school were effective.	324	2.51	0.89	2	1
SQ_{29}. The school provided clear guidelines to transition classrooms online.	325	2.96	1.08	3	2
SQ_{30}. I had enough time, preparation, and resources to transition my curriculum to online.	325	2.92	1.19	3	2

Note: All answers included a 5-point Likert-type scale. 1 = "Strongly agree"; 2 = "agree"; 3 = "neither agree nor disagree"; 4 = "disagree"; 5 = "strongly disagree"

additional responsibilities were correlated with increases in teachers' opinions on the effectiveness of delegation in the organization. As demonstrated in Zhang et al. (2009) and Drescher (2017), more favorable employee perceptions of delegation illicit positive performance and affective outcomes.

CHAPTER 5

CONCLUSION

This study explored teachers' responses to determine the organizational management policies and strategies implemented throughout Hampton Roads public high schools and

examine teachers' opinions during the COVID-19 pandemic. This study used descriptive statistics, including mean, standard deviation, median and inter-quartile range, for survey responses to assess what policies and strategies were prevalent throughout the Hampton Roads region and what teachers' attitudes were on these policies and strategies. Table 5 provides a summary of median responses by each of the research questions from this study. Last, the study used Pearson's correlation coefficient to determine the relationship between organizational delegation and teachers' opinions on the effectiveness of those strategies.

Demographics from the survey responses aligned with national averages for public school teaching populations as identified by Walker (2018). However, response rates were disproportionally distributed throughout the region. Hampton City, Newport News, and Virginia Beach public school districts included a proportional distribution of responses that were representative of the region. However, Chesapeake schools provided considerably more responses than representative, while Norfolk, Portsmouth, and Suffolk had appreciably lower response rates. This skews the research in two distinct ways: 1) responses to identify policies and strategies employed in Virginia Beach and Chesapeake disproportionately outweighed other cities in the region (nearly 60% of all responses came from these two districts); 2) opinions and attitudes from teachers employed in Norfolk, Portsmouth, and Suffolk school districts were disproportionately underrepresented in the descriptive statistics. However, the magnitude of differences between school districts were quite small. Effectively, data reported in Chapter 4 and conclusions drawn from these data can be regarded as generalizable for the region.

Organizational Communication

Policies and strategies for organizational communication throughout the region were consistent. Virtual meetings were reliably reported as occurring one to three times per week

Table 5

Median Response Summary

Survey Question	Median Response
RQ_1. What policies and strategies were developed by school administrators to manage teaching faculty during COVID-19 response?	
SQ_{11}. The school sought input for developing teaching strategies during the school closure.	Neither agree nor disagree
SQ_{17}. How many times per week were you required to virtually meet with school faculty (including full staff meetings and/or department meetings)?	1-3 times per week
SQ_{18}. What was the average length of time per virtual staff meeting?	30-60 minutes
SQ_{22}. How much did staff electronic correspondence (email, text, messenger apps, etc.) change during the COVID-19 response?	Increased a lot
SQ_{24}. The school clearly designated certain faculty with additional responsibilities during the COVID-19 response.	Neither agree nor disagree
SQ_{26}. Did the school offer additional training in order to teach online?	Yes
SQ_{27}. Did the school require additional training in order to teach online?	No
RQ_2. What were teachers' opinions regarding the effectiveness of policies and strategies developed for organizational management during COVID-19 response?	
SQ_9. I was aware of the school's emergency operations protocols prior to COVID-19.	Disagree
SQ_{10}. The school provided effective and prompt notification to faculty of the school closure.	Agree
SQ_{12}. The school provided effective and prompt notification to teaching faculty regarding the transition to distance learning.	Agree
SQ_{13}. The administration and faculty communicated enough during the closure.	Agree
SQ_{14}. The administration and faculty communicated too much during the closure.	Disagree
SQ_{15}. Communication during the closure was applicable to me and helped me perform my responsibilities.	Agree
SQ_{16}. Communication during the closure was effective and time efficient.	Agree
SQ_{19}. Online virtual meetings were effective.	Agree
SQ_{20}. The school developed appropriate policies and procedures to maintain communication with students and parents.	Agree
SQ_{21}. The school provided enough information to parents to reduce direct contact with me.	Neither agree nor disagree
SQ_{23}. Electronic correspondence was effective.	Agree
SQ_{25}. The school administration was effective at delegating responsibilities.	Neither agree nor disagree
SQ_{28}. Additional training and resources offered by the school were effective.	Agree
SQ_{29}. The school provided clear guidelines to transition classrooms online.	Neither agree nor disagree
SQ_{30}. I had enough time, preparation, and resources to transition my curriculum to online.	Neither agree nor disagree

lasting 30 to 60 minutes (SQ_{17}, $Mdn = 2$ and SQ_{18}, $Mdn = 2$). Teacher feedback indicated these online virtual meetings were effective (SQ_{19}, $Mdn = 2$). Electronic correspondence, including email, text, and messenger applications, consistently increased throughout the region (SQ_{22}, $M = 5$ ["increased a lot"]). This increase was a sensible strategy to disseminate information while following restrictions on face-to-face communications without the burden of scheduling virtual

meetings. Moreover, this increase was not associated with negative teacher feedback on communication (SQ_{15}, *Mdn* = 2).

While there is limited research regarding effective communication duration and meeting for public schools in virtual environments, these results correspond with recommendations from organizational management research. As discussed in Ford et al. (2017), frequent synchronous meetings utilizing video formats were more effective at maintaining organizational trust. Furthermore, synchronous meetings better maintained social connections of employees in virtual environments, decreasing stress brought on by perceptions of isolation (Graves & Karabayeva, 2020). Shorter duration meetings held more frequently throughout the week were more effective at delivering organizational communication (Rubinger et al., 2020). Assuming public schools act under the same guiding principles of organizational management used in these studies, these communication strategies employed throughout Hampton Roads public high schools were effective.

Opinions on organizational communication reflected overall positive feedback. Teachers throughout the region reported schools provided effective and prompt notification of the school closure and transition to distance learning (SQ_{12}, *Mdn* = 2). Also, teachers felt administration communicated enough during the closure but not too much (SQ_{13}, *Mdn* = 2 and SQ_{14}, *Mdn* = 4). However, data on these opinions were not as consistent (SQ_{12}, *SD* = 1.16, IQR = 2 and SQ_{13}, *SD* = 1.17, IQR = 2).

Furthermore, teachers were not as consistent in response to time efficiency of communication. While the median score for SQ_{16} (“Communication during the closure was effective and time efficient.”) corresponded to agreement with the statement, the mean leaned further towards “neither agree nor disagree” (*M* = 2.73) and both measures of dispersion were

high relative to other statements regarding communication (*SD* = 1.11, IQR = 2). This may indicate that some communication strategies throughout the region were effective and applicable but not as time efficient. Nonetheless, teachers consistently agreed communication was effective, applicable, and helped perform their responsibilities.

Teacher attitudes regarding school communication to students and parents were not as positive, however. While teachers agreed that schools developed appropriate policies and procedures to maintain communication with students and parents (SQ_{20}, *Mdn* = 2), teachers neither agreed nor disagreed the school actually communicated with parents enough to reduce direct contact with their teacher (SQ_{21}, *Mdn* = 3). While SQ_{21} ("The school provided enough information to parents to reduce direct contact with me.") had a majority of teachers agree, the dispersion of responses (*SD* = 1.13, *IQR* = 2) provides valuable insight in light of the overall positive feedback from other survey questions regarding communication. This may have been caused by parents continuing to contact teachers directly, regardless of the amount of communication schools provided.

Delegation and Responsibilities

Organizational policies and strategies for managing responsibilities and delegation did not illicit a meaningful average response across the region. Mean and median values from responses SQ_{11} ("The school sought input for developing teaching strategies during the school closure.") and SQ_{24} ("The school clearly designated certain faculty with additional responsibilities during the COVID-19 response.") corresponded to "neither agree nor disagree" with a large dispersion in responses (SQ_{11}, *Mdn* = 3 and SQ_{24}, *Mdn* = 3). Effectively, it is difficult to report an average strategy across public high schools in the Hampton Roads region.

Consequently, the average opinion on policies and strategies for delegation and responsibilities, assessed by SQ_{25} ("The school administration was effective at delegating responsibilities.") was also "neither agree nor disagree" (SQ_{25}, *Mdn* = 3). This was because a similar number of responses occurred between "neither agree nor disagree," "agree," and "disagree." To illustrate, SQ_{24} had a similar ratio of respondents agree (34.0%), neither agree nor disagree (32.7%), and disagree (27.5%).

However, correlation tests on policies and teacher feedback did provide significant results. This study identified a moderate positive correlation, (r = .55, n = 322), between policies clearly designating certain faculty with additional responsibilities and teachers' opinions on the effectiveness of delegating responsibilities. This means that organizational strategies that lead to delegating certain responsibilities to faculty have positive impacts on teachers' opinions on the school's effectiveness to delegate responsibilities. While this correlation has no direct research demonstrating a positive relationship with educational outcomes, research in organizational management indicates perceptions of effective delegation have positive effects on employee performance and organizational outcomes (Ugoani, 2020; Zhang, 2017). Effectively, school administrations that delegate responsibilities and authority could expect to decrease workload on administrative staff, increase work capacity of teaching faculty, and/or increase employee trust and motivation within the organization.

Organizational Training

Most schools (62.5%) in the region offered training for online teaching but did not require it. Overall, teachers indicated additional training and resources offered by the school were effective. Interestingly, 71.1% of teachers that reported training was required to teach online either agreed or strongly agreed that additional training and resources were effective.

Conversely, of the respondents that reported training was optional to teach online, only 45.5% reported that additional training and resources were effective. Furthermore, respondents that were not required to conduct training to teach online were nearly double as likely to find additional training and resources ineffective. In other words, teachers that were required to conduct training for transitioning online valued the training more. When considering the potential problems for public school teachers transitioning to online teaching identified in Rakes and Dunn (2015) and Rehn et. al. (2018) against the potential benefits identified in Daniel (2018), schools may benefit from requiring training for faculty with less likelihood teachers consider the training ineffective. Nonetheless, the data did not address the quality or quantity of training, which may have impacted teachers' opinions on the effectiveness. Last, schools should consider faculty training on emergency operation plans, as the median value from SQ_9 ("I was aware of the school's emergency operations protocols prior to COVID-19.") indicated more teachers are unaware of the policies (SQ_9, $Mdn = 4$).

Recommendations

From the data on teachers' opinions on policies and strategies and existing research on organizational management, this study can offer several inferences for practical application on policy development during emergent school closures.

- Communication polices and strategies should be considered with the likelihood of teacher frustration or fatigue. Teachers' opinions on communicating *too much* and inefficiency increase with longer meetings, meetings held more often, and more electronic communication. This research supplements recommendations in private and public sector research to keep virtual meetings under 60 minutes in duration, no more than three times

per week, with as minimal and concise electronic communication as required (Kanter, 2017; Pullan, 2011; Rubinger et al., 2020).

- Conduct assessments on the needs of teaching faculty to develop policies and strategies to accurately address these. Roughly one-third of teachers (35.7%) indicated they did not have enough time, preparation, and resources to transition online (SQ_{30}, *Mdn* = 3).
- Increase teacher inclusion in the policymaking process when able, especially on policies and strategies regarding the transition to online teaching. Once policies and strategies are produced, develop a mechanism to provide clear direction to teachers that is easily accessible (e.g. temporary policy handbooks or quick reference guides). Roughly one-third of teachers (37.3%) disagreed the schools provided clear guidelines to transition classrooms online (SQ_{29}, *Mdn* = 3).
- Designating faculty with additional responsibilities can improve faculty perceptions on the effectiveness of delegation, which may have positive impacts on employee satisfaction and performance (Ugoani, 2020; Zhang et al., 2017). This may include professional collaboration intra-district to develop distance learning curriculum, managing departmental communication, or monitoring and mitigating crisis-related stress (Hanover Research, 2013; Harris & Jones, 2020).
- Require training to teaching faculty that have limited or no experience with teaching online. Required training is more likely to result in positive feedback on the effectiveness of training and potentially limit the negative outcomes of transitioning online (Rehn et al., 2018).
- Provide training on the school's emergency operations protocols, as teachers on average throughout the region were unaware of these prior to COVID-19 (SQ_{9}, *Mdn* = 4).

Nonetheless, all these recommendations based on teacher feedback need to be examined considering other ramifications from school policies. The current state of research indicates that teachers' perceptions of organizational management practices during normal conditions correlate to organizational capacity, which can promote student achievement in turn (Hardman, 2011). Yet these are not the only variables and effects to consider. Student outcomes, administration resources, social, political, and economic externalities, and student and parent feedback should all contribute to administration considerations on policies and strategies for organizational management of faculty. While employee satisfaction and outcomes are important in developing organizational management policies, they only provide for a portion of the variables that need to be considered by public schools.

Considerations for Further Research

This research used a survey instrument to determine and assess organizational management policies on communication, responsibilities and delegation, and training during the COVID-19 pandemic. However, this research was regionally limited. Further research to replicate these findings across geographically, socially, and economically diverse populations can further substantiate or fine-tune recommendations for school administrators. Samples within each school were not large enough to provide data for comparative analysis between schools or districts. Further research may benefit by focusing research efforts on a single school district to identify and compare policies and strategies between schools. More specifically, a qualitative approach exploring the dynamics of teacher feedback on organizational management and culture in public schools may provide more impactful insights.

Finally, further research should explore public school organizational management outside of extreme conditions. While COVID-19 provided a platform to study policies and strategies

employed in regional public high schools during crisis, there is limited research examining organizational management with such a large, nationwide population – roughly 3.2 million total public-school teachers (Riser-Kositsky, 2020). The research presented here provides a framework for policies and strategies accessed in case of emergency but can only contribute to normal operations of public schools in a limited capacity.

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Appendix A

Participant Informed Consent

PROJECT TITLE: Organizational Management of Distance Learning: An analysis of teacher feedback throughout Hampton Roads public high schools during the COVID-19 pandemic response

INTRODUCTION: The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. This research will study high school teacher perceptions of administrative policies through an anonymous, online survey.

RESEARCHERS
Mickey Kosloski, Ph.D., Associate Professor, Old Dominion University, Darden College of Education & Professional Studies, STEM Education and Professional Studies
Cody Trudeau, Old Dominion University, Darden College of Education & Professional Studies, STEM Education and Professional Studies

DESCRIPTION OF RESEARCH STUDY: Several studies have been conducted looking into the subject of effective organizational management and teaching strategies in public high school settings. None of them have explained the effective organizational and instructional strategies during a crisis response, as seen during the COVID-19 pandemic. If you decide to participate, then you will join a study involving research of your survey responses to several questions regarding how your high school has responded to COVID-19 social distancing efforts. If you say YES, then your participation will last for approximately 9 minutes during the online survey. Approximately 4,700 Hampton Roads public high school teachers will be participating in this study.

RISKS AND BENEFITS: If you decide to participate in this study, then you may face a risk of discomfort related to providing critical feedback about your organization. The researcher tried to reduce these risks by enforcing anonymity and utilizing as few personal identifiers as possible. And, as with any research, there is some possibility that you may be subject to risks that have not yet been identified. The main benefit to you for participating in this study is the expression of opinions and development of recommended policies in case of future crises requiring social distancing. Others may benefit by gaining valuable insight on effectiveness of administrative and educational policies throughout public schools.

COSTS AND PAYMENTS: The researchers are unable to give you any payment for participating in this study.

NEW INFORMATION: If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

CONFIDENTIALITY: The researchers will take reasonable steps to keep private information, such as anonymous surveys and data collected by the research team, confidential. No names or other identifiable information will be requested on the instrument. All data submitted in the

survey will be stored on a secure password-protected computer and accessed only by the research team separate from you school affiliations. The subject's information will not be used or distributed for future research studies even if identifiers are removed, nor will the findings be reported directly to your school administrators. The results of this study may be used in reports, presentations, and publications, but the researcher will not identify you; results will be reported in aggregate only. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

WITHDRAWAL PRIVILEGE: It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study at any time. Your decision will not affect your relationship with Old Dominion University, or otherwise cause a loss of benefits to which you might otherwise be entitled.

COMPENSATION FOR ILLNESS AND INJURY: If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact Dr. Mickey Kosloski, responsible project investigator, at 757-683-3314, Dr. Laura Chezan, the current Human Subjects chair for the Darden College of Education and Professional Studies at 757-683-7055 at Old Dominion University, or the Old Dominion University Office of Research at 757-683-3460, who will be glad to review the matter with you.

VOLUNTARY CONSENT: By clicking the "I acknowledge" button below and proceeding, you are saying several things. You are saying that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them:

Mickey Kosloski: 757-683-3314
Cody Trudeau: 610-804-6727

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Dr. Laura Chezan, the current Human Subjects chair for the Darden College of Education and Professional Studies at 757-683-7055, or the Old Dominion University Office of Research, at 757-683-3460.And importantly, by acknowledging receipt of this Informed Consent Form and clicking the "I acknowledge" button below, you are telling the researcher YES, that you agree to participate in this study.

Appendix B

Public Education Administrative Management Instrument

SQ_1: Informed consent acknowledgement. (I acknowledge)

DEMOGRAPHIC INFORMATION

SQ_2: Please select where you are currently teaching: (Deep Creek High, Grassfield High, Hickory High, Indian River High, Oscar F. Smith High, Western Branch High, Bethel High, Hampton High, Kecoughtan High, Phoebus High, Denbigh High, Heritage High, Menchville High, Warwick High, Woodside High, Booker T. Washington High, Lake Taylor High, Maury High, Churchland High, I.C. Norcom High, Woodrow Wilson High, King's Fork High, Lakeland High, Bayside High, First Colonial High, Floyd Kellam High, Frank W. Cox High, Green Run High, Kempsville High, Landstown High, Ocean Lakes High, Princess Anne High)

SQ_3: Please indicate your teaching subject: (English, Science, Social Studies, Mathematics, Business & Marketing, World Languages, Physical Education & Health, Family Consumer Science & Technology, Music & Fine Arts, Special Education, Other)

SQ_4: Please select the applicable age range. (20-30, 31-40, 41-50, 51-60, 61+)

SQ_5: Please select the applicable gender. (Male, Female, Transgender, Gender Variant/Non-conforming, Prefer not to answer)

SQ_6: Please select the applicable range employed as a teacher (in years). (0-5, 6-10, 11-15, 16-20, 21+)

SQ_7: Please select the applicable year range teaching at your current school (in years). (0-5, 6-10, 11-15, 16-20, 21+)

ADMINISTRATIVE MANAGEMENT

SQ_8: Please carefully read each statement below and mark the applicable level of agreement.

SQ_9: I was aware of the school's emergency operations protocols prior to COVID-19. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{10}: The school provided effective and prompt notification to faculty of the school closure. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{11}: The school sought input for developing teaching strategies during the school closure. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{12}: The school provided effective and prompt notification to teaching faculty regarding the transition to distance learning. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{13}: The administration and faculty communicated enough during the closure. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{14}: The administration and faculty communicated too much during the closure. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{15}: Communication during the closure was applicable to me and helped me perform my responsibilities. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{16}: Communication during the closure was effective and time efficient. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{17}: How many times per week were you required to virtually meet with school faculty (including full staff meetings and/or departmental meetings)? (Less than once per week, 1-3 times per week, 4-6 times per week, 7-10 times per week, None)

SQ_{18}: What was the average length of time per virtual staff meeting? (Less than 30min, 30-60min, 60-90min, Greater than 90min, Not applicable)

SQ_{19}: Online virtual meetings were effective. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{20}: The school developed appropriate policies and procedures to maintain communication with students and parents. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{21}: The school provided enough information to parents to reduce direct contact with me. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{22}: How much did staff electronic correspondence (email, text, messenger apps, etc.) change during the COVID-19 response? (Decreased a lot, Decreased a little, Stayed about the same, Increased a little, Increased a lot)

SQ_{23}: Electronic correspondence was effective. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{24}: The school clearly designated certain faculty with additional responsibilities during the COVID-19 response. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{25}: The school administration was effective at delegating responsibilities. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{26}: Did the school offer additional training in order to teach online? (Yes, No)

SQ_{27}: Did the school require additional training in order to teach online? (Yes, No)

SQ_{28}: Additional training and resources offered by the school were effective. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{29}: The school provided clear guidelines to transition classrooms online. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

SQ_{30}: I had enough time, preparation, and resources to transition my curriculum to online. (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree)

Appendix C

Participant Contact Email

Initial Contact Email

Dear Prospective Participants,

My name is Cody Trudeau and I am a graduate student with Old Dominion University's Occupational and Technical Studies program. I am conducting an anonymous survey about your experiences as high school faculty during the COVID-19 social distancing protocols. This research is specifically studying organizational management in public education throughout the Hampton Roads region in order to develop effective policy recommendations for faculty management in case of future events requiring distance learning.

The link below will take you to an informed consent summary and an anonymous, online survey that will take less than 10 minutes. Your participation is entirely voluntary, and the survey will remain open for participation until June 26. Please feel free to contact Dr. Mickey Kosloski or me if you have any questions or concerns regarding the research.

https://odu.co1.qualtrics.com/jfe/form/SV_cuOnr3EjGE5L5Rz

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V/R,
Cody Trudeau

Participation Reminder Email

Dear Prospective Participants,

I greatly appreciate all the participation in this survey so far, but wanted to remind all interested in providing valuable input for this research project the survey will close after this Friday. Please use the link below if interested in participating to access informed consent information and survey, and thank you again.

https://odu.co1.qualtrics.com/jfe/form/SV_cuOnr3EjGE5L5Rz

For any questions or concerns, please feel free to contact the research team below:

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V/R,
Cody Trudeau

VITA

Cody P. Trudeau

Department of Educational Foundations & Leadership, Old Dominion University

Education

- Bachelor of Science (May 2013) in Political Science, Westminster College, New Wilmington, Pennsylvania

Professional Experience

- United States Navy Surface Warfare Officer (2014-Present), Norfolk, Virginia