The Enduring Irrationality of Rationalization: The Unchangeable Work of Pharmacy Workers During a Global Pandemic

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DEDICATION

This is dedicated to all the frontline workers, both in healthcare and retail fields.

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To my sweet husband Samir, you are the greatest! Thank you for always helping me with everything, for always feeding me good food, for listening to my stories and readings, and for encouraging me to always follow my heart. I love you.

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LIST OF ABBREVIATIONS

Accreditation Council for Pharmacy Education ..... ACPE
American Medical Association ..... AMA
Artificial Intelligence ..... AI
Body Mass Index ..... BMI
Canadian Pharmacists Association ..... CPhA
Centers for Disease Control and Prevention ..... CDC
Class or Schedule II Controlled Prescription ..... C-II
Clinical Practice Standardization ..... CPS
Consumer Price Index ..... CPI
Consumer Value Store ..... CVS
Corporate Social Responsibility ..... CSR
Corona Virus Disease of 2019 ..... COVID-19
Doctor of Pharmacy ..... PharmD
Designated Hitter ..... DH
Drug Enforcement Administration ..... DEA
Durable Medical Equipment ..... DME
Electronic Prescriptions for Controlled Substances ..... EPCS
Evidence-Based Medicine ..... EBM
Food and Drug Administration ..... FDA
Health Insurance Portability and Accountability Act ..... HIPAA
Institutional Review Board ..... IRB
John Hopkins University ..... JHU
Morphine Milligram Equivalent ..... MME
National Association of Boards of Pharmacy ..... NABP
National Drug Codes ..... NDC
Operational Process Standardization ..... OPS
Over-The-Counter ..... OTC
Personal Protective Equipment ..... PPE
Person-In-Charge ..... PIC
Pharmacy Benefit Manager ..... PBM
Pharmacy Technician Certification Board ..... PTCB
Polymerase Chain Reaction ..... PCR
Prior Authorization ..... PA
Protected Health Information ..... PHI
Quick Response ..... QR
Severe Acute Respiratory Syndrome Coronavirus 2 ..... SARS-CoV-2

Standard Operating Procedure ..... SOP
Tetanus, Diphtheria, Pertusis (vaccine) ..... TDAP
United States Department of Health and Human Services ..... US DHHS
United States Department of Justice ..... US DOJ
Universal Product Code ..... UPC
Virginia's Legislative Information System ..... VA LIS
World Health Organization ..... WHO
2-Dimensional 2D

ABSTRACT

THE ENDURING IRRATIONALITY OF RATIONALIZATION: THE UNCHANGEABLE WORK OF PHARMACY WORKERS DURING A GLOBAL PANDEMIC

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The notion of 'making a living' has transformed how society thinks about *work* and how institutions and organizations shape how work is performed; not simply through the physical elements, but also through the social, cultural, and economic implications of work (Watson 2008). Modern work structures are highly bureaucratic, rationalized, and driven by capitalistic pursuits. This study aims to investigate how bureaucratization, capitalism, and rationalization or its modern take, *McDonaldization*, determine work structures and work experiences in retail pharmacies before and during the COVID-19 pandemic. Retail pharmacies exist at the intersection of capitalist and non-capitalist pursuits (healthcare) and thus are especially insightful spaces for understating modern work structures and experiences. To do so, I conducted field observations of retail pharmacies and 14 semi-structured in-depth interviews with pharmacy workers (4 pharmacists, 7 certified pharmacy technicians, 2 non-certified pharmacy

technicians/trainees, and 1 pharmacy intern) at three of the biggest retail pharmacy chains in the country. This research was supplemented by my eight years of work history with multiple retail pharmacies. Findings suggest that the increasing bureaucratization, rationalization (or *McDonaldization*), and drive for profit significantly impact work structures and experiences of retail pharmacy workers. Results also indicate that the arrival of the global pandemic only temporarily slowed down these effects, which picked back up immediately along with a boost from new pandemic-related processes, operating procedures, and services. Further, increasing bureaucratization and rationalization has led to rampant irrationalities in pharmacy work such as inefficient and unpredictable bureaucracies, poor quality services, and loss of human and practical control. As a result, pharmacy workers are leaving retail pharmacies for other fields and non-retail pharmacy jobs. Pharmacy workers leaving retail pharmacies can significantly affect communities. Further research on similar work structures and organizational institutions is needed to bring attention to and address the irrationalities of highly bureaucratized and rationalized healthcare systems with the expanding profit-driven capitalist approach.

CHAPTER ONE | INTRODUCTION

This project investigates the recent lived experiences of retail pharmacy[1] workers—who work in a unique space where profit-seeking and health-seeking practices coexist—with a goal of understanding how highly rationalized structures influence pharmacy work and the experience of pharmacy workers, as well as how the COVID-19 pandemic has impacted these experiences.

Work is a social and economic phenomenon. Sociologists who study work, occupations, and organizations argue that to understand the way people live in any form of society, we must consider the conditions of work activities and the institutions associated with both workers and work processes (Watson 2008). People do not simply make a living by producing material goods and services. We try to find meaning in the things we do; thus, our shared beliefs and norms shape our work environment as much as it shapes the way we work.

Work structures in society today are highly bureaucratic, rationalized, and driven by capitalistic pursuits. Aspects of what sociologists have characterized as the rationalization or McDonaldization of society are rooted in the workplace. George

[1] The term "retail community pharmacy" means an independent pharmacy, a chain pharmacy, a supermarket pharmacy, or a mass merchandiser pharmacy that is licensed as a pharmacy by the state and that dispenses medications to the general public at retail prices. Such term does not include a pharmacy that dispenses prescription medications to patients primarily through the mail, nursing home pharmacies, long-term care facility pharmacies, hospital pharmacies, clinics, charitable or not-for-profit pharmacies, government pharmacies, or pharmacy benefit managers (Legal Information Institute 2021).

Ritzer's McDonaldization theory (1996), derived from Weber's rationalization theory (1978), presents four elements of a McDonaldized capitalist industry; these include efficiency, predictability, calculability, and control. The push for profit, bureaucracy, and efficiency (through rationalization or McDonaldization) has a pervasive reach in our society (Hartley 1995; Weaver 2005; Ritzer 2019) even spreading to areas that seem counterintuitive to efficiency such as healthcare where there are also high expectations of individualized service and patient care (Ritzer and Walczak 1988; Martinbiancho et al. 2011; Yee et al. 2013; Dorsey and Ritzer 2016; Cain 2019).

Despite the push for individual service and patient-first care, retail pharmacies have also been highly bureaucratized and rationalized. But research on retail pharmacy processes and pharmacy workers is very limited. While some researchers have investigated the important ways pharmacies have filled health gaps to improve public health outcomes during the pandemic (Weaver 2015; Bukhari et al. 2020; Hess et al. 2020; Herzik and Bethishou 2021), none have investigated the pandemic's impact on retail pharmacy work and workers, nor the broader issue of how pharmacy workers navigate conflicting demands of prioritizing both patients and profit. As the pandemic has shown, pharmacy workers are essential in maintaining community health, and thus their experiences merit further exploration.

The consequences of bureaucratization, rationalization/McDonaldization, and the capitalist avarice in society is well documented and overwhelmingly limiting to workers in general. A major concern that was highlighted by Karl Marx and continues to persevere in today's capitalist society is alienation in the workplace, leading to emotional

exhaustion and oppressive practices (Yuill 2005; Shantz et al. 2014). Others include declining job quality (Howell and Kalleberg 2019), strategic worker resistance (Hodson 1995; Waring and Bishop 2013), and precarious work that lead to greater economic inequality, insecurity, and instability (Kalleberg 2008). The rise of corporate capitalism, an even greater form of "private ownership of the means of production, increased participation of the state in the political economy, centralization of the major institutions, imperialism, efficiency, and functionalism" (Smith 1965:401), re-ignites the bureaucratization and rationalization of work. That is why despite the negative outcomes, these institutions prevail to dominate modern work structures.

The success of corporate capitalism can be seen with the increasing chain of retail pharmacies. Corporate chain retail pharmacies all over the country are driving the persistent demand for market competition, encouraging more bureaucratized and rationalized processes for efficiency, control, and profit. For instance, retail pharmacies are becoming more and more similar to the McDonald's model. The convenient drive-through window and the conveyor belt-like process of filling and dispensing prescriptions are the most obvious comparisons. Some of the pharmacy workstations are also marked for customers, forcing them to follow the same rationalized process of obtaining their prescriptions. The standard appearance and utility of their infrastructures, products, and services are learned and internalized by both workers and customers.

The McDonaldization of the pharmacy industry, including hospital, retail/community, and other settings, has been broadly discussed by Taylor and colleagues (2003), who determined that the rationalization of pharmacies is most evident

in retail/community settings, and is accomplished by streamlining procedures with the aid of technological advances to standardize outcomes, emphasize quantity over quality, and deskill workers. However, their data was limited and did not include the first-hand experience of pharmacy workers who can describe the nuances of pharmacy work processes. Additionally, since there is a lack of research that centers on retail pharmacy work during the pandemic, this project attempts to address what has changed since the pre-pandemic times. The current global pandemic has upended nearly all facets of life. In a time of social, political, and economic upheaval, it makes sense to question whether these rational and capitalistic work structures are also changing. On one hand, such broad social change suggests all facets of society will change to accommodate, including profit seeking corporations. On the other hand, bureaucratic efficiencies and their exploitation of workers are so entrenched in our society that even something as monumental as a global pandemic may not alter their core functioning.

Broadly speaking, this project seeks to understand how, if at all, highly rationalized work influences pharmacy work and the experience of pharmacy workers, as well as the impact COVID is having on individual workers. To answer this broader question, I turn to the lived experience of retail pharmacy workers captured through both observational and interview data. Retail pharmacies are capitalist driven, highly routinized and regulated spaces that at the same time have been on the frontlines of the global pandemic. In answering the specific questions ‘How do institutions and processes (specifically bureaucratization, capitalism, and McDonaldization) determine the work structure and work experiences at retail pharmacies?’ and ‘How have these work

experiences been impacted by Covid?' I will not only add to the limited body of knowledge on pharmacy work experience, but also shed light on the ways rationalized work structures change, or do not, in the face of external pressures and the impact of such institutions (bureaucratization, capitalism, and McDonaldization) have on workers.

Chapter 2 first provides an overview of how bureaucratization, capitalism, and McDonaldization shape work and organizational research in sociology. Second, it presents examples from previous research on how these institutions affect other institutions such as education and healthcare. Third, the chapter offers an overview of how the institutional role of retail pharmacies is expanding through the new services and programs they adopt, as well as the horizontal acquisition of major companies seeking more business opportunities. Then, it demonstrates irrationalities rationalized systems pose, especially when highly controlled organizations strip control away from and trap humans without letting them use their humanness within it. Finally, the chapter concludes with the current changes in the institution of work, as well as how retail pharmacies are handling changes caused by the pandemic.

Chapter 3 presents the study design and methodology used in this research. Followed by a discussion of the study limitations and ethical considerations, it concludes with a description of how the qualitative data was coded and analyzed. Chapter 4 presents the results of the impacts of bureaucratization, capitalism, McDonaldization, and the pandemic on retail pharmacy work processes and how the workers adapt with the demands and changes in the workplace. Chapter 5 discusses how the research findings help to answer the research questions and aims, that includes giving emphasis to the

experience of pharmacy workers, and how these findings compare to previous research. It then concludes with examples and recommendations for future research that can expand on the topic and help address the lack of work and organizational research, especially those that combine healthcare and business.

> "Institutions fulfill societal needs, or 'functional prerequisites.' Society must reproduce itself in and through individual behavior and relies on institutions for this purpose. Resources must be allocated and cooperation enacted to maintain stratification systems. In reproducing themselves and the social system of which they are part, institutions train the young in the ways of the old and compel potential deviants to conform" (Oberschall and Leifer 1986).

CHAPTER TWO | LITERATURE REVIEW

Sociologists who study work and organizations argue that to be able to understand the way people live in any form of society, we must take into account the conditions of work activities and the institutions associated with the workers and processes involved in these activities (Pettinger et al. 2006; Watson 2008). Work is found in varying degrees, types, and settings. Thus, the definition of work can be remarkably broad and is contingent upon the meanings of human societies where the work is performed. "Each society has its own set of economic and legal arrangements and dominant values, and its members are often pressed to share a degree of communality of identity. Each society also has its own pattern of power and inequality" (Watson 2008:3).

On an economic basis, particularly in a modern industrialized society, work may be defined as task-oriented activities fulfilled for monetary return from employers or clients. The other aspect of work considers the social and cultural aspects of carrying out tasks to 'make a living.' As social beings, people do not simply make a living by producing material goods and services. Our shared beliefs and identities shape the environment where we perform work as much as this environment shapes the way we conceptualize work. Work then is not only a set of tasks performed for financial gain but is socially and culturally influenced by other institutions we construct.

In modern sociological thought, there are two frames of reference in studying work, through the *voluntarist* and *structural* frames. These two lenses can be used to examine the relationship between individuals and work, the *voluntarist* model that highlights the creative and active role of social agents, and the *structural* model that focuses on institutions and processes which restrict and govern their actions (Swingewood 2000). By highlighting the work experiences of retail pharmacy workers and how they manage their tasks, I will later display how they cope and direct work procedures with their own techniques in managing their tasks through the voluntarist perspective. Their accounts on how retail pharmacy is organized by rational internal and external systems will underline how the structural perspective can help determine the effects of these systems on pharmacy work. While this study accounts some of the ways pharmacy workers actively engage in shaping their work experiences, it mainly uses the structural lens to explore pharmacy work experiences. For instance, pharmacy laws and company policies systematically dictate standard operating procedures (SOPs) for retail pharmacies that are highly bureaucratized and rationalized to achieve goals that are important to the company and their customers. Since the biggest chains of retail pharmacies have taken on the corporate form, their capitalist goal is centered in the maximization of profit. The McDonaldization theory offers four principles—efficiency, calculability, predictability, and control—which function to rationalize the process of profit pursuit.

In order to examine the ways institutions and processes work to constrain and determine the procedures within retail pharmacies, this study aims to answer how

capitalism, bureaucratization, and McDonaldization, specifically, influence retail pharmacy work. Additionally, I will conclude with a discussion on the implications of COVID-19—how retail pharmacies modified their services and work procedures and how these actions are linked to capitalism, bureaucratization, and McDonaldization.

Capitalism, Corporations, and Bureaucratic Rationalization

Marx and Weber's definitions of capitalism differed in approach but were similarly centered on the accounting of capital to generate profit. Weber emphasized the rationality in the development of the capitalist process – that is, *any* profit-making enterprise, leading to the rise of a capitalist economy, while Marx insists that capitalism is "the recreation of the capitalist enterprise itself" (Smith 2017:2). For the purpose of this study, capitalism is defined as the dominant economic system in modern society, in which "large-scale or complex machinery and associated technique is widely applied to the pursuit of economic efficiency on a basis whereby the capacity for work of the members of some groups is sold to others who control and organize it in such a way that the latter groups maintain relative advantage with regard to those resources which are scarce and generally valued" (Watson 2008:322-323). Sociologists have been mainly interested in capitalism's *social* effects and "how it has led to class struggle, anomie, inequality, and social problems in general" (Swedberg 2003:4). Similarly, I highlight the experiences of pharmacy workers within an enterprise that is increasingly becoming more rationalized and bureaucratized, as healthcare and capitalism converge.

Today, the most influential agents of capitalism are corporations. A *corporation* can be briefly defined as a rationalized institution that is publicly available for investors

who can buy and sell shares with limited liability in pursuit of one goal—to make profit (Bakan 2004). More specifically, the concept of corporation used in this paper will follow the elements of the large-scale enterprise described by Bakan as the 'Anglo-American model' (2004). Due to their size and goal of efficiently maximizing profit, Anglo-American corporations separate ownership from management and are highly bureaucratized. This is the model that embodies the characteristics of the three companies selected for this project. At the core of the corporation is bureaucratization, in which "modern mass-production is not based on raw materials or gadgets but on principles of organization" (Drucker 2017:21). Weber claims that among bureaucratic institutions, only the state can rival the large corporation in the process of rationalization (Gerth and Mills 1946).

Weber saw bureaucracies as the most efficient form of organization (1978). As the *rational-legal* form of authority, "[b]ureaucracies are governed by a set of impersonal rules and procedures that are applied universally, without regard to the personal characteristics of particular individuals, and rationally designed to serve some broader purpose" (Handel 2003:6). In bureaucracies a hierarchy of technically qualified experts are hired or elected to perform assigned tasks and take on specific responsibilities that are logically divided, hence, an established division of labor. Additionally, bureaucracies' systematic recordkeeping and a rigid hierarchy provide reliable, consistent, and detailed task performance guided by predetermined standards toward a collective goal.

One key way capitalism makes use of bureaucratization is through the process of *rationalization,* where traditional motives and behaviors are cast aside for 'purely

objective considerations' that are set according to calculable rules and without regard for emotional elements (Weber 1978). The application of objective methods, especially for highly complex tasks, was first developed by Frederick Taylor in the late nineteenth century through what he called *Scientific Management* or *Taylorism* (1947). What set Taylorism apart from previous forms of work and management is that a list of tasks is prepared by the management without the participation of the worker, prior to the execution of labor. This task list is also prescribed to be intensely detailed, from what it is that is required to be done, to how it must be done, and the exact time the worker is allowed to get the task done. While such a practice maintains order, thus rationalizing the process, Weber argues that these bureaucratic practices lead to "depersonalization and an oppressive routine" that is also dehumanizing (Gerth and Mills 1946:50).

Weber's "iron cage of rationalization" directly and inflexibly dictates work processes by limiting the occupational choice of the common worker in an organizationally analogous system, that is under capitalism (DiMaggio and Powell 2003) which Marx claims, intrinsically takes away economic power from workers as efficiency and proceeds increase (Walsh and Zacharias-Walsh 2011). The Marxist perspective on the production of surplus value views labor power as a special commodity, for it is the only type to produce more worth than its own (Herman 1982). Extending the workday to extract the maximum surplus labor value (Walsh and Zacharias-Walsh 2011) is not enough. The expanding industry of retail pharmacies fall under the graces of such institutions and processes—bureaucratization and rationalization—but how these affect retail pharmacy work has not been systematically explored.

McDonaldization: Putting the 'Retail' in Retail Pharmacy

A particularly pervasive form of rationalization within the retail industry is *McDonaldization.* Derived from Weber's rationalization theory, the McDonaldization of society theory argues that society is becoming increasingly rationalized based on the principles of the McDonald's business model (Ritzer 1996). This model utilizes four key principles: efficiency, calculability, predictability, and control. Within capitalist enterprises, these principles systematically organize and improve the process of production. They prioritize optimum means to given ends *(efficiency*), quantity over quality (*calculability*), predictable services and products (*predictability*), and non-human technologies that dictate procedures for workers and customers (*control*). Ritzer claims that the McDonald's model gains control through technologies, and not only through the machines and tools, but also the "materials, skills, knowledge, rules, regulations, procedures, and techniques" (1996:101).

Within the workplace, Ritzer provided several examples illustrating how the McDonaldization principles have "optimized" work processes (2019). For instance, the success of the fast-food chain's drive-through windows was organized in the "predesigned, well-choreographed" step-by-step process of food ordering (drive-through lanes), paying (window 1), and receiving (window 2). This allowed customers to obtain their orders without getting out of the car, walking up to the register, and having to find a seat inside the restaurant, optimizing the process for all customers despite their purpose for visit—whether it's for a full meal or a quick snack, to dine in or to go. For workers, following strict operating procedures and scripts that have been established is crucial in

providing the ideal and now, *expected* results to customers and the company. Other workplaces that have utilized the drive-through concept outside of the fast-food industry, include banks, car services, legal services, petting zoos, supermarkets, voting booths, libraries, and pharmacies.

"McDonaldized institutions combine the emphases on time and money" (Ritzer 2019:21) in order to measure the calculability of the processes involved in obtaining and providing services, especially in the workplace. A prime example are pizza parlors that promise timely deliveries of under half an hour, or the pizza is free. Prioritizing quantity over quality forces workers to accomplish tasks as quickly as possible, squeezing in multiple tasks within the allotted time to beat the clock. Today, calculability's importance in what Ritzer calls "computational culture" reveals hidden consumption patterns that businesses incorporate in their work processes and services to attract more consumers (Ritzer 2019).

Moreover, predictability in McDonaldized institutions provides mind-numbing work to workers, a sense of security (knowing what to expect in every visit) to customers, and control to employers. The predictability of chain stores in offering the same products and services provide comfort for consumers and keeps them coming back. Corporate-owned supermarkets like Walmart and Target offer similar store layouts, products, and services to deliver the same shopping experience despite the location their customers visit. Their computer systems are well connected technologically so that customers can bring items they want to return at any store locations or request order transfers to locations that do not carry certain products. Thus, training workers also generally do not

vary from one store to another. The policies and procedures dictate what job-specific tasks a worker is qualified to do, strictly how, when, and for how long to engage in each. This is a form of control that "is reinforced by the technologies used and the way organization is set up" (Ritzer 2019:22).

By controlling the standardization and routinization of the production and consumption processes, the fast-food model fulfills its goals of recreating capitalist processes to keep generating financial gains for the company while putting forth an illusion that their workers and consumers are also fulfilling theirs. For customers, that may be obtaining high-quality services and products in the most efficient way; and for workers, that their hard work is compensated fairly on their paychecks. Ritzer claims that consumerism exploded due to the feelings of control, security, and predictability the McDonald's procedures provided customers in each visit. The work appeals to the unexperienced labor force, which can then be molded into what will remain an unskilled labor force with experience on "mind-numbing routines," susceptible to social and economic exploitation. With the success of the McDonald's model, Ritzer argues that the American society and the rest of the world are increasingly being dominated by the principles of the fast-food restaurant. Its application has reached virtually every aspect of society, including education, healthcare, leisure, and politics (1996; 2019).

Indeed, several studies have applied the McDonaldization theory in describing a variety of organizational restructuring. In the case of higher education in Scotland, Hartley argues that it is becoming more and more McDonaldized through the state government involvement and predicts the developing culture of post-modernism to take

ownership of the pedagogic process further. Scotland's reformation and bureaucratization of higher education was meant to address the high levels of youth unemployment through re-packaged, easily consumed academic courses and user-friendly learner-centered pedagogy. More specifically, the efficient standardization of mass educational access was afforded through standardized virtual education and governing bodies and regulations that oversee "access, courses, and certification across universities" (1995:416). Calculating means and ends in higher education involve quality assessment committees that establish and maintain numerical-point scales to generate ratings or grades. Product predictability is realized in national curricula or profession-specific core requirements, systems of credit transfers between universities, and teaching competence assessments.

False fraternization, what Ritzer (2019) refers to as fake emotions, connections, and discretion in the workplace due to non-human technological control is seen in higher education through the formal assessment of not only broad quality control arrangements (i.e., scrutiny of pass rates, direct observations of teaching facilities), but also "the very quality of teaching itself" (Hartley 1995:419). As educational institutions become highly unstable economically and culturally due to the "fiscal overload of the welfare state and post-modernism" (Hartley 1995:420), control over the academic choices of students and the pedagogic process fall into the hands of "assessors," all under the argument of increasing the quality of education (Hartley 1995). The McDonaldization of education, in general, does not only prepare workers but also consumers for a market society, teaching them what to expect and what is expected of them. The education system is where we

first learn about rational-legal systems that direct sources of knowledge accessible to us, measure our competencies based on pre-established standards, and predict our future.

Healthcare in the United States is also increasingly rationalized and bureaucratized (Scott et al. 2000; Berwick et al. 2008; Light 2010). Industrial and business management concepts have been applied to patient care due to the increased pressure to improve their operations. Standardized practices in the workplace are highly bureaucratized and rationalized to provide organization and consistency to processes that minimize discrepancies and ensure patient safety. In prioritizing patient safety, standardization offers predictable and calculable results every time. Healthcare providers adopt evidence-based medicine (EBM) through clinical practice standardization (CPS) and operational process standardization (OPS) to avoid "divergent patterns of care" using protocols and checklists to improve the quality of care (De Regge et al. 2019). Although the application of CPS and OPS to the standardization of hospital processes across multiple facilities was proven to support EBM, De Regge and colleagues found that operational processes must be managed on a "hospital and policy level" to improve resource and efficiency, especially in more complex and disparate care processes (2019:1161). While De Regge's study addresses the crucial role of standardization to deliver efficient, calculable, and predictable outcomes in medicine through non-human technological control over healthcare workers, it also shows the inadequacy and limitations of these practices to respond to diversity.

One of the front lines of healthcare that is geared to cater to consumer demands or "patient care" while managing the clinical aspects of the profession is the retail

pharmacy. While the pharmaceutical industry plays a major role in the healthcare field (Conrad 2005), there has been an inadequate attention concerning the progressing bureaucratization and standardization of retail pharmacies, the public face of the industry and the final stage of delivering medications and treatments to communities. This study aims to contribute to initiating the coverage of this knowledge gap.

The Retail Pharmacy

Retail pharmacies deliver provider-prescribed medications and other healthcare services such as immunizations, mini clinics, and general consultations; and now, COVID testing and vaccinations to communities. The process of fulfilling prescription orders and dispensing them to customers have become greatly bureaucratized and rationalized by federal and state drug laws, professional licensing and certification programs, and company protocols and standardized operating procedures. In comparison to other pharmacy settings such as hospital pharmacies and specialty pharmacies, retail pharmacies are the most open and accessible to the public. Some pharmacy stores are even open 24 hours, 7 days a week. Although specific health insurance companies have contracts with their "preferred" pharmacies, covering more of the financial costs, customers are free to bring their prescriptions to any retail pharmacy they choose. The accessibility of retail pharmacy chains has also expanded to other products and services. Today, we see retail pharmacies located inside supermarkets and pharmacy stores offering a variety of products, from groceries to cosmetics and school supplies.

The "extended role" of retail pharmacies in communities is shared by the pharmacy workers. Traditionally, pharmacy workers merely manufactured and packaged

medications for medical establishments and doctors to distribute as necessary. The modern-day practice of pharmacy now involves the regular direct interactions of pharmacy workers with patients. According to social scientists, the

> "[p]harmacy practice is an all-embracing term which describes a wide range of activities involved in the provision of pharmaceutical services. Consequently, it incorporates not only clinical pharmacy and the legal aspects of practice, but also various perspectives which assist in our understanding of the wider social context in which pharmaceutical services are delivered" (Taylor et al. 2003).

The increasing social interactions with customers have become a central part of pharmacy work, putting a "patient-centered approach" that is similar in other healthcare practices, at the core of the training and education of pharmacists and their assistants. In the United States, the patient-centered approach that is driving the pharmacy industry to address components of healthcare that contribute to quality service amongst diverse populations revolves around improving communication between healthcare providers and patients. In 2006, the Accreditation Council for Pharmacy Education (ACPE) began requiring a cultural competency component in its accreditation standards and guidelines (Okoro et al. 2015). Social science research in pharmacy practice is also typically focused on the profession and the academic curricula (Sorensen et al. 2003; Ryan et al. 2007; Broedel-Zaugg et al. 2008), in hopes to improve education and training of pharmacists, most specifically, to handle the complex processes of drug dispensing, as well as social interactions with diverse populations. Even with the realization that pharmacy work is no longer only subject to procedural management and technical work, the mere production and sale of goods, but also social management from the sale of services directly to

customers in retail pharmacy settings, the social institutions and work procedures that dictate the processes of pharmacy practice have not garnered attention.

The institutional role of the pharmacy practice in health care has also expanded in a variety of ways. Kelly and colleagues (2013) found a strong interest of both pharmacists and physicians on collaborative work for insurance approvals, patient counselling, and medication management and therapy. In Japan, pharmacy insurance claims have been used to determine medication adherence in large population-based sample for health promotion and disease prevention (Fujita et al. 2015). Prior to the pandemic, pharmacists have reported barriers in the delivery of some public health services, which included lack of time and space and consumer demand; while consumers had mixed views on the pharmacists' ability to perform such services (Eades et al. 2011). However, the unremitting success of the top retail pharmacy giants, that are maintaining and increasingly pursuing the adaptation of public health services (i.e., immunizations, patient consultation, medication therapy management, and health screening programs) suggests that they have eventually gained broad consumer support. Today, retail pharmacies are thriving, offering a wide range of healthcare services, as well as other products that were traditionally offered at specific healthcare facilities and grocery or department stores. These extended business spaces put the 'retail' in retail pharmacy.

Studies on the pharmacy practice have been limited. A small number of social scientists have explored the organizational developments in pharmacy and argued that, as with other healthcare sectors, the pharmacy practice is largely influenced by institutional changes in social organization, technological innovations, division of labor, and external

structures that dictate financing of services and medications (Birenbaum 1982; Bush et al. 2009). Some have also applied classical and contemporary sociological theories to explain the growing rationalization of pharmacy work, as well as the rise of multiple chains of retail pharmacies (Taylor et al. 2003). Research to "build a tool" in the form of risk scores for hospitalized patients in order to rationalize the work processes of clinical pharmacy has been the most recent exploration in the pharmacy practice (Martinbiancho et al. 2011). Recent advances in exploring retail pharmacies as the front line of the pharmacy practice, however, is lacking.

A growing surge of chains of retail pharmacies have entered our communities, much like the fast-food restaurant chain McDonald's. By 2019, over half of the pharmacies in the United States belong to a corporate chain, while 90 percent of the total U.S. pharmacies are classified as retail (IQVIA 2019). Retail or community pharmacies include independent, chain, supermarket, and mass merchandise pharmacy settings that are licensed to directly dispense medications to the public at retail costs. In the U.S. alone, the retail drug industry sales almost quadrupled from 1992 (77.79 billion dollars) to 2020 (300.86 billion dollars) (Statista 2021). CVS Health Corporation leads the retail pharmacy race with almost ten thousand stores (Statista 2021) and 115 billion dollars just in prescription revenue in 2020 (Mikulic 2021), well after its acquisition of the supermarket chain pharmacies inside Target stores in 2015 (Statista 2021). The next two competitors, Walgreens Boots Alliance and Wal-Mart Stores Inc., are not falling that much behind, especially after Rite Aid Corporation's sale of over two thousand retail stores to Walgreens in 2017 (Rite Aid Corp. 2021). This *horizontal integration* (Schmitz

1993) of major pharmacy retailers, coupled with other relentless technological, manufacturing, and diversification innovations they apply in their organizational models reproduces their power and dominance in the industry.

By 2019, about half of practicing pharmacists in the U.S. are employed in retail pharmacy settings, with increasing employments from small chain, large chain, and mass merchandiser pharmacies since 2014 (Doucette et al. 2020). Large corporations are progressively dominating the pharmacy market, taking pharmacists with them who are both controlled and controlling (supervising) capitalist and bureaucratic practices in the workplace. Corporate-owned chain pharmacies have standardized employee training, similar to any retail chain stores. This entails the same standard operating procedures (SOPs) across all chain stores, prescribed by the company employer no matter what school or training program the pharmacy worker graduated from. Varying terminologies are used in each company but are shared across their different locations. These are shaped by the technologies they use through computer applications, handheld devices, and specific company protocols. SOPs and a central network to which all company-related systems are connected make it easier for employees to transfer jobs or cover work shifts at other chain locations without having to re-apply or re-train. The standardization of pharmacy work across a network of pharmacies under a large corporation may vary a little from another large chain corporation, but the pharmacy practice as a whole is also governed by federal and state laws, the education and licensing of professional organizations, and other external factors such as health insurance companies, drug manufacturers, and consumer demands. The accessibility of retail pharmacies to

communities forces them to take into consideration these other bureaucratic and rationalizing powers for them to stay in business, making retail pharmacies, despite what corporation they belong to, look and function alike.

Taylor and colleagues (2003) piloted the theoretical application of the McDonaldization theory on the organizational dimensions of the pharmacy practice. They cite the growing resemblance of the assembly line of car manufacturing with the process of filling prescriptions by pharmacy technicians, each taking on small tasks to complete the collective goal of delivering prescription orders to patients. Moreover, the growing pharmaceutical manufacturing industry that supplies retail pharmacies with prepackaged medications mobilized to increase speed and efficiency of filling prescriptions (Taylor et al. 2003:26). Predictability in retail pharmacies, especially in large chain pharmacies, routinize their services through strict SOPs that dictate work processes and even acquire licenses to manufacture generic versions of medications to sell to customers under their own name brands. Quantification of sales that is used to improve cost-effective strategies to keep expanding the business affect work procedures by minimizing costs and maximizing profits. Technological advances through changes in SOPs and acquisition of devices and robotics continuously intensify corporate control on work processes, pharmacy workers, and even consumers (Taylor et al. 2003:27). This prior data suggests McDonaldization practices throughout the pharmacy practice; thus, I expect these practices (efficiency, calculability, predictability, and control) to have similar implications in retail pharmacy work.

The Irrationalities: The Iron Cage of Pharmacy

Among the three interrelated causes of bureaucratization: "competition among capitalist firms in the marketplace; competition among states, increasing rulers' needs to control their staff and citizenry; and bourgeois demands for equal protection under the law" (DiMaggio and Powell 2003:243), Weber saw the competitive marketplace as the most important and irreversible, which he called 'the iron cage of rationality' (1978). DiMaggio and Powell argue that since Weber's time, the bureaucratization of the state and the rise of corporations signaled the completion of rationalization central to the marketplace. That even though homogeneity and bureaucratization remain common in organizations, institutional changes occur from processes that make them more similar, rather than efficient, through what they called *institutional isomorphism* (2003). In examining the social organization of work in healthcare, Allen and Pilnick (2005) argues for the considerable emphasis on ecological imperatives as culturally valuable as economic ones. "[O]rganizations are required to adopt certain forms and processes less as a matter of technical rationality or increased efficiency than as a means of meeting the expectations of significant actors in the environment" (Allen and Pilnick 2005:687). A few of the most successful retail pharmacy chains, following the top four mentioned earlier (CVS, Walgreens, Wal-Mart, and Rite Aid), include The Kroger Company, Publix Supermarkets Inc., and Costco Wholesale Corporation (IQVIA 2019). As more retail pharmacy chains compete against each other, we can see the rise of the same business model that is limited by external bureaucratic institutions that govern the practice.

Kelly and colleagues' research (2013) across community pharmacies and physician offices, in which 86 percent of the pharmacies are classified as retail, institutional isomorphism is evident in the shared interest for collaborative work attempts with fellow health care providers as more and more of their procedures intersect and overlap with each other's. However, the majority of pharmacists (78.6 percent) and some physicians (7.1 percent) did not see this as an efficient process. Rather, they cited lack of time, space, and remuneration for services that are not covered by most health insurances, making these efforts impractical to commit to while trying to improve patient health outcomes (Kelly et al. 2013). The pervasive rationalizing push to do more with less that has taken the retail pharmacy business to a new level does not allow for work activities, such as the desired collaborative work between healthcare providers that do not yield the desired numbers for the company. The discrepancy between pharmacists and physicians distinguishing the "inefficiency" of collaborative work may be rooted in the nature of their work environments. While according to the American Medical Association (2021), more and more physicians are working outside of physician-owned medical practices, which is now at 49.1 percent, most pharmacists are employed by large companies with only 8.9 percent working for independent pharmacies (Douchette et al. 2020) where they have more professional discretion and freedom. Consequently, more pharmacists realistically deny the feasibility of collaborative work with physicians that are not included in their company-issued SOPs.

The most consistent evidence of institutional isomorphism may point to the bureaucratization of health insurance markets and their impact on the negotiation of

health care coverage and costs (Gaynor and Town 2011). With this powerful external factor, retail pharmacies are required to make procedural and structural changes that shape pharmacy processes, such as adapting the pharmacy inventory to newly covered drugs and new services to certain groups with these health insurance coverages. In order to compete with other retail pharmacies, companies engage in their own negotiations with the health insurance sector. Scott's overview of the U.S. healthcare system through the pharmacy perspective provides intricate details on the role of pharmacy workers in prescription drug distribution and their concerns toward "pricing structures, reimbursement, and lack of transparency in contract negotiations" (2016:313). Most specifically the adjudication of prescription claims for most of the U.S. population by pharmacy benefit managers (or PBMs, such as Express Scripts, CVS Health, United Health, etc.). These are organizations that "do not only administer prescription claims, but also design pharmaceutical benefits such as formularies, plan designs, mail order pharmacies, manufacturer discounts, and clinical management" (Scott 2016:313). By controlling what insurance companies will pay for, PBMs control what providers prescribe, what pharmacists dispense, and what customers receive. In this regard, institutional isomorphism extends outside of the pharmacy practice to all other institutions involved.

Another bureaucratizing and rationalizing factor to the pharmacy practice is the implementation of drug laws. The U.S. government mobilized pharmacies to become stewards of the complex demands of regulating opioids, which resulted to new federal and state laws that alter company protocols and procedures on controlled substances

(Compton et al. 2019). The dispensing of opioids is the most highly controlled procedure within retail pharmacies. Prescribers must be knowledgeable about the guidelines that will allow pharmacists to fill the prescriptions they give to their patients. Pharmacy workers must also follow the legal handling, approving, and selling of controlled substances based on these guidelines and their employer protocols. SOPs dictate the division of labor among pharmacists and their assistants, who, where, and how to count certain drugs must strictly be followed to avoid government fines and other legal charges. In addition to insurance companies and drug laws, retail pharmacies employment of other services such as immunizations and mini clinics before the pandemic, and COVID testing and vaccinations during, took the attention away from the concerns of the workers in the field.

Recent research studies focus merely on program evaluation research, emphasizing on the increasing responsibilities of pharmacy workers and what *more* they can do for their communities (Weaver 2015; Bukhari et al. 2020; Hess et al. 2020; Herzik and Bethishou 2021). However, worker concerns such as low compensation, reduced hours, shortage of staffing, work-related burnout, etc. are continuously overlooked. Zgarrick and colleagues (2020) looked at the relative growth of pharmacy technician wages with the consumer price index (CPI) from 1997 to 2018. They found that while most pharmacy technician jobs in the U.S. were created after the early 2000s, the growth of their wages failed to keep up with the rising CPI starting in 2007, as is the case with "all occupations" in the U.S. economy. The capitalist model of rationalization breeds the

widespread creation of low-paying jobs to increase financial gains while decreasing costs of labor.

New services, programs, and protocols are squeezed into the workday while compensation is left unaddressed. As the leading retail pharmacy giants continue to dominate the industry by driving their revenues up (statistics available in Mikulic 2021), pharmacy wages stagnate and become negatively correlated to the rising CPI (Zgarrick et al. 2020). In fact, according to the 2015 National Certified Pharmacy Technician Workforce Survey, over one in four pharmacy technicians conveyed being 'highly dissatisfied' with their wages (Desselle and Holmes 2017). Further, the reported collective experience of pharmacy workers and feelings of stress and burnout from emotional exhaustion, depersonalization, and reduced personal accomplishment in the job (Gaither et al. 2008; Durham et al. 2018; Jacobs et al. 2018) may not only be due to the rationalization or *McDonaldization* of the practice. These feelings are influenced or are resulting to what Karl Marx called *alienation* (Marx 1844:122). Traditionally, workers invest labor to create products that has economic value and are later bought and sold on the market.

Feelings of alienation stem from the diminished connection between the laborer who creates the product and the final object that is commodified (Marx 1844; Shantz et al. 2014). Ollman claims that "capitalist conditions determine a psychological and ideological superstructure which is practically the same for all men caught up in a given set of material circumstances" (1976:120). The pharmacy technician's detachment from the services and products sold in pharmacies may be rooted in negative feelings toward

stagnant wages, long working hours, and shortage in workers—examples that Walsh and Zacharias-Walsh mentioned when describing how corporate America increased productivity, consolidating power while "workers are, by all indicators, worse off for it" (2011). In addition, the lack of agency in providing other types of assistance to their communities and making decisions to improve the workplace may also be contributing to feelings of being trapped, in Weber's terms, within an iron cage of bureaucracy (1978).

In Virginia, although new licenses are constantly being issued to both pharmacists and technicians, 5 percent of pharmacists and 15 percent of technicians who were licensed in the previous year did not renew their licenses in 2019 (Healthcare Workforce Data Center 2020). Accounting for retirement, pharmacy technicians also aspire for higher occupational status and wages. This is evident in the same survey, in which about 43 percent of pharmacy technicians reported to have attained a college degree (Healthcare Workforce Data Center 2020). As economists determined, no matter if the economy is doing well or not, there are relatively high rates of unemployment and underemployment among new college graduates (Abel et al. 2014). Underemployed college graduates were not only seen in the low-paying service sector, like restaurants and grocery stores, they are also employed in what Abel and colleagues called 'good non-college jobs.' About half of underemployed college graduates find employment in fields such as in health care and skilled trades (Abel et al. 2014). In Virginia, the median age for employed pharmacy technicians in 2019 is thirty-five, while 12 per cent of them owe $30k or more in student loans (Healthcare Workforce Data Center 2020). The longer pharmacy technicians who are highly educated and aspirational towards higher

occupational status and wages (with direct daily comparison to their pharmacist coworkers) stay in the pharmacy practice or as *just* technicians, the higher the likelihood they may hold negative feelings toward the practice.

Although pharmacists may receive more reasonable compensation compared to pharmacy technicians and cashiers, they tend to report higher levels of workload. According to the 2019 National Pharmacist Workforce Survey (NPWS), 70 percent of pharmacists working full-time expressed 'high' or 'excessively high' levels of workload that have been constantly reported to have 'increased' or 'greatly increased' from the previous years. Based on the pharmacists' primary employments, the highest proportions of full-time pharmacists (91 percent) reporting 'high' or 'extremely high' workloads were employed in retail pharmacy chain setting. Additionally, pharmacists reported over a 50 percent mean increase in student loan debts from the previous decade (Doucette et al. 2020). The excessive workload and the increasing educational debt may weigh on the average pharmacists' feelings and perceptions about the practice.

One of the aims of this project is to demonstrate the endurance of the relentless alienating nature of retail pharmacy work despite a global pandemic. The 11th of March 2020 was marked by the official announcement of the World Health Organization (WHO) that the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has spread as a global pandemic (WHO 2020). More commonly referred to as COVID-19 or the Coronavirus Disease 2019 pandemic, the number of confirmed related deaths in the U.S. has reached 594,430, with cases totaling over 33.2 million by the end of May 2021 (JHU 2021). As the government and the healthcare system attempt to contain the viral

spread by increasing organizational regulation and providing public health guidelines, the effects of the pandemic on all facets of modern life have been unprecedented.

Life with COVID-19 and Retail Pharmacies

Unbelievable advances in technology have made online education a possibility for students after the government-issued shutdowns of schools and most businesses. The transformation of education, work, and social life shifting to the online form affected not only students and teachers, but the rest of society (Klaiber et al. 2021). While issues in technology access and use were prevalent in education, everyone was suddenly forced to obtain skills and competency to access devices, applications, and the internet to socially function (Iivari et al. 2020). In the workplace, conversations around organizational changes are being conducted. By the early months after the official declaration of the pandemic, an estimated 62 percent of employed Americans worked from home, while 80 percent (of those questioned) reported that they have enjoyed the greater flexibility on work-life balance and the freedom from long commutes (Boland et al. 2020). Organizational restructuring conversations have focused on the acquisition of bigger pools of talents with fewer geographical constraints, stimulating productivity through incorporating innovative processes, and reducing real estate costs.

An extensive study on the success of corporate firms concluded that their pre-2020 financial stance, pandemic-related international exposure, pre-pandemic strength of corporate social responsibility (CSR), flexibility of executives, and the type of ownership were the five indicators of corporate resilience to the pandemic (Ding et al. 2021). Retail pharmacies under corporate ownership have had consistently thriving financial conditions

(Statista 2021). As they try to cater to increase their CSR influence, adopting new services and programs was what they have done and do best (Herzik and Bethishou 2021; Nadeem et al. 2021). With increased bureaucratization from pandemic-related protocols and regulations, specifically from the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA), retail pharmacies had taken on more responsibilities in patient care, including transition care services, mail-order and other contactless delivery services, and COVID-19 testing and vaccinations (Parkhurst et al. 2020; Herzik and Bethishou 2021; Nadeem et al. 2021).

Thus, retail pharmacies have been struggling with the arrival of COVID-related services, modifications, and challenges. During the early months of the pandemic, the biggest challenge was the lack of personal protective equipment (PPE) while appeasing crowds of anxious, stressed, and scared people rushing to their local pharmacies to stockpile on medications and medical supplies and to seek the pharmacist for medical advice when their doctors remained unavailable (Parkhurst et al. 2020). Consumer awareness of the U.S.' reliance on overseas manufacturing stimulated panic about potential interruptions on the global drug supply chain (Alexander and Qato 2020). But this isn't the only drug distribution concern. More than 85 percent of U.S. prescription medications in 2018 were dispensed by retail pharmacies (Aitken and Kleinrock 2019). But we must consider, retail pharmacies are still run by people who are also susceptible to the virus. If a pharmacy worker gets sick, especially because of the close proximity of pharmacy work that does not allow for social distancing among workers, pharmacies may be forced to temporarily close for the recovery of multiple sick workers and the deep

cleaning of the facility. These pharmacy closings were seen in the early stages of the pandemic (Parkhurst et al. 2020), but reoccurrence is not impossible if customers remain unvaccinated.

After the realization that pharmacy workers are not easily replaceable in the occasion that they may be required to miss work from self-quarantine guidelines (Parkhurst et al. 2020) or other reasons, recommendations to address issues of care and procedures still do not include those of pharmacy workers. In fact, proposals to address prescription-related issues lean toward adding more services (home deliveries, mail-orders, curbside options, rapid testing, etc.), "essential medicines" preparedness strategies—creating another list of pharmacy procedures, recommended to the FDA to standardize retail pharmacies further (Alexander and Qato 2020)—and expanding "refill windows" to guarantee that patients can buy their medications early (Alexander and Qato 2020; Nadeem et al. 2021). Discussions about retail pharmacy support due to the limited workforce, lack of expertise on newly adopted services and programs, and financial reimbursement only exist to criticize the unwillingness of retail pharmacies "to avail the opportunities rather than moaning about existing issues" (Nadeem et al. 2021:2046). While the use of robotics and computers has been widely utilized by the pharmacy industry, medication dispensing as well as the additional public health services (centered on direct care) added onto the list of retail pharmacy procedures are conducted by humans to other humans. This invariability aspect of the "patient-centered" approach being pushed to retail pharmacies need more social support, because unlike filling

prescriptions, helping other humans (who have different illnesses and social conditions) may not be as easily standardized.

Pharmacy workers being in the frontline of a global pandemic have experienced increased patient interactions (from medication dispensing and patient screening and triage), responsibility to disseminate medication and COVID-related information, accountability to manage medication shortages, and workplace harassment from patients (Elbeddini et al. 2020). The consequence of both increased workload and risk of infection on pharmacists result to feelings of stress, burnout, anxiety, depression, frustration, and anger (Elbeddini et al. 2020). According to the Canadian Pharmacists Association (CPhA 2021), pharmacists report mental health to be one of their top concerns during the pandemic. Healthcare workers' mental health directly impact their decision-making ability, attention to tasks, and the overall quality of care (Kang et al. 2020). The vulnerability of retail pharmacies to both external and internal structural challenges directly affect not only the workers' work-lives and well-being, but also patients and their communities.

This project set out to answer two main questions: 1) How do institutions and processes (specifically bureaucratization, capitalism, and McDonaldization) determine the work structure and work experiences at retail pharmacies? and 2) How have these work experiences been impacted by Covid? Based on what I have outlined above, I expect to find similar trends on increased work responsibilities from new services and programs and irrationalities in the processes that are being proposed by corporate and bureaucratic structures that do not value the involvement of field workers.

CHAPTER THREE | METHODOLOGY

As the nature of modern work becomes increasingly bureaucratized and rationalized, even jobs in the healthcare sector cannot remain undisturbed, especially those that are corporatizing (Schmitz 1993). The success of retail pharmacies is evident in the sheer number of corporate chain stores that are being built in our communities (IQVIA 2019). This project set out to answer two main questions: 1) How do institutions and processes (specifically bureaucratization, capitalism, and McDonaldization) determine the work structure and work experiences at retail pharmacies? and 2) How have these work experiences been impacted by Covid? As discussed in the literature, similar organizational processes are being adopted by other sectors that embody a capitalist structure. Retail pharmacies are largely capitalistic, in that their goal is to maximize profits while minimizing the costs of their operations.

A qualitative approach is ideal to closely examine how corporate-own retail pharmacies are coping with the implications of a global pandemic directly from the people in the field who must take on the additional work, responsibilities, and accountability. To answer the broader questions I started with: what are the work processes pharmacy workers are navigating and how has COVID impacted their work-lives, I turned to qualitative methodology due to its systematic "attention to the fluid and interactive nature of the phenomenon […] in every step of the research" (Marvasti

2004:11). Although the focus of this research is to bring to attention the influence of bureaucratic structures on the pharmacy practice, the reality of having humans in direct contact with other humans during retail pharmacy operations involves both social and organizational processes and limitations. For a while, the account of their experiences has only been presented in numbers (Doucette et al. 2020; Healthcare Workforce Data Center 2020). This project attempts to "make explicit the implicit structure and meaning of human experiences" (Sanders 1982:354).

Qualitative research acknowledges purposive sampling, fluid and observational techniques, analysis that is focused on context-specific meanings and social practices, and the use of theory and methods collaboratively (Marvasti 2004). Within qualitative inquiries, case study research allows the researcher to focus on a culture-sharing group, similar to ethnographic research. According to Creswell and Poth, a case study research "explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving *multiple sources of information* (i.e., observations and interviews) and reports a *case description* and *case themes*" (2018:153). Case study methods appeared to be the most beneficial in documenting the complexities of retail pharmacies and disentangling intricate context-specific interactions and processes. With this in mind, I designed this study to include observations within three preselected retail pharmacies during varying work shifts and in-depth interviews from pharmacy workers who are currently employed by these pharmacies. The purpose of this variability was to explore the similarities and differences on how successful corporations are adapting to new organizational and social changes

before and during the pandemic across multiple retail pharmacies. Therefore, even with the use of multiple physical sites, this study centers on the *instrumental case* (Stake 1995) of retail pharmacy.

Research Setting/Background

Drawing from the list of the top 25 corporations that own the most retail pharmacy stores in the United States (IQVIA 2019), I selected three companies based on personal connections, familiarity, and convenience. I believe that these three companies represent the key principles that I am attempting to examine. Their business models represent the ability of corporations to succeed in balancing the influences of external and internal organizational changes (i.e., bureaucratization, rationalization, and McDonaldization) in the field. All pharmacy stores associated with this project are located in the state of Virginia.

The first corporate company selected in this project was pseudonymized as Bluefield, with over thousands of retail pharmacy stores and hundreds of thousands of employees in the United States and United Kingdom. Its website boasts a global portfolio that includes investments in healthcare, pharmacy, and other retail and business brands. The specific store I observed appeared very much like other Bluefield chain pharmacies I have visited in the past, externally and internally. The directions to their drive-through are well marked for customers to easily see when entering the parking lot. Cash registers line the right side of the store while the cosmetics section welcomes customers through the front door. The grocery and pharmacy aisles stretch from the front registers to the back where the pharmacy is located. The pharmacy has two windows, one for

consultation with the pharmacist and another for the cash registers where customers pick up and drop off prescriptions. Three cash registers line the counter with no walls or dividers in between. However, adjustable plexiglass stands are set in front of each register. Next to the pharmacy is an immunization room and a lobby where customers can sit and wait for their prescriptions. The lobby is well-decorated like a living room area of a home, with a television, a coffee table with magazines, potted plastic plants, and leather-covered seats.

The second corporate company included in this study was pseudonymized as Prime Rx. With its expanding corporate size, the Prime Rx website claims to provide "total health" services to millions of its customers. Prime Rx owns one of the major retail pharmacies with thousands of branches in the United States. The primary site I requested to observe also has the standard store layout of the chain, without the mini urgent care clinics some have. Walking in, customers are greeted by beauty products of the cosmetics department while grocery items stretch across the store from the front registers. This store had three front cash registers and two self-checkout counters. The pharmacy is located all the way in the back, primed by the over-the-counter pharmacy department. Black stanchion posts form a twisting line in front of the three pharmacy cash registers that share one counter space with no walls or dividers to separate multiple customers being served. The store management, however, put up similar adjustable plexiglass stands between the workers and customers at the checkout counter. Unlike the Bluefield pharmacy, this Prime Rx pharmacy's checkout line is structured similarly as the front checkout lines. Products typically known as 'impulse buys,' such as magazines and candy

bars, are lined up next to where customers wait in line. There are two entrances to the pharmacy, a locked door in the back and an unlocked low swivel door at the front, that also serves as a consultation window (similar to the bottom half of a Dutch door). Further down to the left of the pharmacy is the drop-off window where patients initiate their prescription orders. To the right backside of the pharmacy is the drive-through window. This store did not have a waiting area nor chairs for waiting customers.

Lastly, the third corporate company chosen for this project was pseudonymized as Star Market, another global corporation with retail pharmacies inside its supermarkets. In competition with Bluefield and Prime Rx, Star Market has a wider business platform though it has fewer retail pharmacies. Star Market stores are known for building 'super' stores with a diverse variety of goods, extending from groceries to tech products. Star Market pharmacies are located either next to the main entrance or at the center of the stores. Typically found next to beauty and personal care departments, the pharmacy is surrounded by aisles of over-the-counter medications and other wellness products. The specific store I requested to observe has a drop-off window separate from the other windows, a consultation window, three windows with cash registers along with the computer system that is standard to all windows, and a mobile pick-up window that looks like the other register windows with a sign that is differently colored. Each window has a low wall divider that Star Market extended with unmovable plexiglass, as well as fastened plexiglass in front of the registers, between the workers and customers. In front of the registers, black stanchion posts direct a straight line of customers and a gray metal bench receives customers waiting for their prescriptions. To the left of the pharmacy, a

wellness kiosk is located, in which customers can self-check their blood pressure and BMI (body mass index) while sitting down in front of a screen and answering each computer prompt.

Limited Observations and Denied Access

The Health Insurance Portability and Accountability Act (HIPAA), Public Law 104-191, was established to set national standards to protect the confidentiality, integrity, and availability of protected health information (PHI) (USDHHS 1996). Although this project is in compliance with George Mason University Institutional Review Board (IRB) and as a HIPAA-certified healthcare provider with up-to-date continuing education credits and national and state licenses, my observation proposal was turned down multiple times. “For HIPAA reasons” (quoted from a potential gatekeeper Bluefield pharmacist via a text message), I was turned away from observing two Bluefield retail pharmacies. Waiting about a month after messaging, calling, and emailing documents to two Bluefield pharmacists, I was informed that my project was not approved by the district supervisor. Similarly, HIPAA limitations have been reported to negatively impact health research, “often adding uncertainty, cost, and delay” to epidemiological and clinical research (Ness 2007:2164). Fortunately, a third Bluefield pharmacist from another chain store was able to get me the approval to observe or ‘shadow’ from the store manager of the branch.

To consider the variability of work responsibilities, services offered, and the busy hours during different shifts, I planned to conduct observations during the morning, midday, evening, weekday, and weekend shifts. The first shift that I was welcomed to

was during a Saturday midday shift, from 10 AM to 5 PM. I began my jottings after I introduced myself to the staff, went over the consent form before asking for signatures, and answered any questions the staff had about my project. I documented as many details as possible through jottings to accurately account for the pharmacy procedures, social interactions, and new policies and services, that may appear too trivial otherwise (Becker 1998:108). I came back the next day for four hours during the closing part of the work shift, which was from 2 PM to 6 PM. Aware of my plan to observe different work shifts, the pharmacist invited me to observe during one of her Wednesday morning shifts next, from 9 AM to 12 PM. This shift concluded my observations with Bluefield pharmacy due to several reasons I will discuss later.

During the three shifts, I stood quietly close to the staff while ensuring that I was out of their way and out of the customers' view. Occasionally, when they were not in front of customers, they briefly explained to me what they were doing or began friendly conversations. I applied techniques of unstructured ethnographic interviewing (Marvasti 2004:56-57) to build rapport and consider the social context that influence people in the field. I expanded the jottings and other memos into field notes following the observation sessions (Luker 2008:200).

In order to observe inside a Star Market pharmacy, I asked two potential gatekeepers, one pharmacy manager and one staff pharmacist. While the pharmacy manager did not directly respond to my messages, the staff pharmacist referred me back to the manager with a warning that my proposal to observe is highly unlikely to be approved, for even the chief store manager does not easily set foot into the pharmacy.

After weeks of waiting for replies that I did not receive, I decided not to pursue this store for three reasons. First, since I worked for Star Market pharmacies (a total of 7 different locations) for over five years and remained in contact with several of my previous coworkers, I am particularly familiar with their work processes and some of the recent COVID-related changes I inquired about during the interviews. Second, due to their stricter operating procedures, I did not wish to add more pressure or induce anxiety on any of the staff. Third, when the pharmacy manager offered to employ me to potentially do participant observation (which was also highly likely to be declined), I was not in the position to commit to another part-time employment. I was already interviewing for a part-time job with my third potential observation site at the time, in addition to my current job and thesis project.

I initially planned to utilize my work connections with previous and current employments to observe inside a Prime Rx pharmacy. After several failed attempts, I resorted to apply for a technician job with the purpose of asking for participant observation approval during the job interview. I was contacted by pharmacy managers within 24 hours from applying. I interviewed with two different locations which also failed after months of waiting for their promised job offers. The second manager claimed that the delay was due to "corporate approval" on the additional dollar she promised after I tried to negotiate my 8 years of pharmacy experience to be considered. A month passed while other job offers from the same company (different locations) continued to flood my email inbox. I decided to accept one of these offers and aimed to get my research approval later. A few days after I accepted one of the Vaccination Support Technician

positions from Prime Rx, I was able to start my pre-employment process online, as well as order my scrubs. About a week after, I was scheduled for my orientation at the store where I learned that the online hiring was done through a third-party company. The store manager did not have all of my paperwork, was not aware of how I was going to get paid since I was not in the payroll yet, nor how they were going to give me workable hours since my job was to vaccinate when they still had no vaccine deliveries. Nonetheless, I went through the orientation and scheduled a couple of days to finish my online training. The pharmacy manager contacted me after a couple of weeks to ask me to cover a 4-hour and an 8-hour regular pharmacy technician shift. I was not called in again to do any immunizations, nor did I get the chance to build rapport with the workers to obtain permission to observe.

I planned to complete a total minimum of 24 observation hours per retail pharmacy, dividing the time amongst different work shifts. However, due to several limitations, I was not able to fully complete my proposed observation sessions. Instead, I was only able to complete a total of 13 observation hours within a Bluefield pharmacy. Nevertheless, the limited observations I conducted supplemented written data to the lived experience and knowledge I have from working in retail pharmacies.

Semistructured In-depth Interviews

While trying to gain access to the three retail pharmacies through 'gatekeepers' (Lofland and Lofland 1995) and the 'rapport' (Marvasti 2004:47) I have established working alongside pharmacy workers for years, that is, contacting pharmacy workers I have worked or work with, I conducted 14 semistructured in-depth interviews with

pharmacy workers, including pharmacists, a pharmacy intern, and both certified and non-certified pharmacy technicians, who are currently employed by the three selected companies. The lived experiences and perceptions of pharmacy workers in the retail setting under different corporate management yielded variability and commonality in areas of their work.

The interview participants were recruited from the observation site, through previous and current work connections, and referrals. They were first contacted through an email message, a text message, or an inquiry in person. While the participants were informed that there is no time restriction, they were also made aware that there will be a set of questions prepared prior to the interview which may take approximately 30 minutes to answer, though they are not required to answer all of them. Some asked for a copy of the questions to be forwarded to them prior to the interview appointment which was sent via email or text message on the same day. Most participants received an electronic copy of the consent form to sign and return before or after the interview.

Face-to-face interviews are favored by social scientists for their strengths in clarifying responses and if needed, explaining the questions further for participants who are unsure or confused by the language used (Carr et al. 2018). Due to the current state concerning the pandemic, the majority of the participants elected for the Zoom interview over the in-person interview, that is 13 out of the 14. The interview conducted in person took place at a local restaurant that was compliant to the state pandemic guidelines. Although the Zoom video option was not required, 8 out of the 14 participants turned their video cameras on during the interview. The interview was recorded through Zoom

but only the audio recording (no video) was kept for transcription purposes. A second application was used to record the interview, called Voice Recorder, in case the Zoom recording malfunctioned. The consent to record was requested from the participants before or during the interview appointment prior to recording and was also presented in the consent form they signed or electronically signed.

All Zoom interviews were conducted in a private room in my residence, while I recommended that participants attend the online interview in a private and comfortable space as well. The Zoom link were provided to the participants at least 24 hours before the interview. During the interviews, I jotted down notes for follow-up questions or observations on visual changes in behavior or tone of voice by the participants, which were all integrated in the transcription files. All electronic data were saved in a password-protected computer, including interview recordings, transcriptions, field notes, and identification key. The transcriptions and field notes were analyzed through a qualitative data analysis computer software package called NVivo 12.

An in-depth semistructured format for the interviews was used to provide open-ended and mindful follow-up questions that avail respondents space and time to think through their thoughts and recall experiences or examples related to the subject. Semistructured interviews have been used to generate flexible questions (Merriam and Tisdell 2016), while in-depth interviewing techniques aim to reveal the deeper self of the respondent, as well as multiple perspectives that are conflicting at times, to uncover suppressed feelings toward a topic (Johnson 2002). This format is ideal to make participants feel comfortable and flexible to the way they want to answer (or not answer)

the questions, particularly if and when talking about company policies that they do not agree with or relaying feelings about how these policies impact their work-lives and well-being. An aspect of in-depth interviewing, in which the interviewers also freely express their opinions on the topic during the interview to encourage 'mutual self-disclosure' (Douglas 1985; Marvasti 2004:22), was not used until the end of the intended interview questions. In this case, although the participants and I may share similar work experiences, I tried to minimize my influence on the conversation by giving them time to think through their examples and explanations to reveal the variables that are most significant or problematic to them.

Taking on features of less structured interviews where participant interests lead the exchange, with fewer general questions, and flexible time (Morgan 2002), the preparation included 13 main questions and no restriction on time. I began each interview with general and neutral questions about the job to build trust and give participants an open space to voice out different positions without judgment or fear of repercussions (Taylor and Bogdan 1984; Rubin and Rubin 2012). I included prompts that start with *"Tell me about your…"* and *"Think of a time when…"* to encourage them to elaborate on their daily experiences in the workplace in an open and adaptable manner, following up as needed on details that shape these experiences and their feelings about work. Questions that contrast the changes and conditions of work before and during the pandemic was also inquired about. Furthermore, I asked about personal questions such as their perceptions on work-life balance or quality and their relationships and interactions

with coworkers and the communities they serve (see Appendix for the prepared interview questions).

Ethical Considerations

Participants and employers were assigned pseudonyms to protect their identities. All state and federal COVID-19 guidelines were followed during the observations. All data, both electronic and paper, were handled in a confidential manner. The coded identifiable data did not include any participants' names nor the employers' names. Instead, pseudonyms were matched with participant initials and listed in an identification key. All digital files were stored in password-protected equipment within password-locked folders. Although complete anonymity cannot be guaranteed with these research procedures, I attempted to maximize the privacy of participants by reducing public exposure of the observation and interview processes. During the observations, I tried to avoid being seen by customers and shop-floor personnel to prevent explaining my presence. Offering the Zoom interview option with or without video, I also recommended that participants sign on from a private location, while ensuring that I conduct the interviews from a private location as well (and semi-private for the in-person interview). While the Zoom option increased participation outcomes, it was not without limitations. The online link to Zoom's full privacy statement was provided to the participants through the informed consent form. Any questions or inquiries related to the project were encouraged and addressed. Further, I provided the participants my contact information, as well as my committee chair's and the IRB board's contact information for future inquiries. Finally, due to the justifiably strong influence of company policies to keep

outsiders out of the pharmacy, I decided not to pursue the observation attempts to avoid causing potential stress and/or anxiety to the pharmacy workers involved.

Data and Analysis

The three different shifts at Bluefield pharmacy provided a total of 13 observation hours, fulfilling the naturalistic approach inherent to case studies (Stake 1995). The jottings generated from the observation shifts were expanded into 3 different files of field notes. Fourteen pharmacy workers agreed to participate in an interview. There were four pharmacists, seven certified pharmacy technicians, two non-certified technicians (at the time of interview), and one pharmacy intern interviewed. Initially, twelve were conducted online through the Zoom application and two were in-person. A technical malfunction required the first in-person interview to be repeated. However, the participant could not make another in-person appointment, resolving to an online interview instead.

Charmaz (2006) suggests that broad, open-ended, and non-judgmental questions are effective in stimulating the emergence of narratives. Thus, the interview questions were structured into 4 broad themes: 1) participant job description, 2) work situations before the pandemic, 3) work situations after the pandemic, and 4) personal relationships and perspectives related to work. The interviews ranged from 30 minutes to 2 hours. A few additional minutes were spent noting supplementary data on each participant's background and other shared information that were part of the conversation prior and after the interview recording. Although this information cannot be formally reported in this project, they may present some key elements for the contextual analysis of this case study.

The field notes from the observations and completed transcription files were uploaded into the qualitative software NVivo 12. A pilot analysis was conducted on the first 6 interviews and the 3 field notes from the observations to inspect for preliminary patterns and to improve the overall structure of the interview questions (i.e., wording, flow of questions). *Initial coding* (Charmaz 2002) was used on the pilot set as well as the completed 14 transcription files and 3 field notes to distinguish meaningful themes. The interview transcripts and field notes included in the pilot study generated 46 initial codes. While the transcription and coding process also gave hints on how to improve the wording of some questions based on what confused some participants. For example, participants needed clarification on the last set of questions, which were "How do you feel about connecting with patients? What are some ways your job lets you think about the state of the community it's in?" This was then replaced with, "Do you feel that you have a good relationship with the community your pharmacy is in? Is having a good relationship with community members/patients important to you as a pharmacy worker? Why or why not?" By changing this question, the participants easily connected work processes to the customer service part of the job. This part of the analysis generated initial codes that are included in *work expectations/goals, customer-centered approach, feelings about the community,* and *feelings toward customers.* Some of the other initial codes related to work processes include *division of labor, job responsibilities, company policies, external help, government-issued policies, insurance and pharmaceutical companies, management of workflow, teamwork and multitasking, technological advances and challenges,* and *COVID-related changes and challenges.*

Two analytic features of NVivo 12, generating a Word Tree (Columbia University 2021) and a Codebook (Alfasoft 2021), were used to help with the next step in coding. The more common codes were applied to all interview transcriptions, providing 35 initial codes. *Focused coding* (Charmaz 2002) was then applied to extract more general, manageable categories (Marvasti 2004:86-87). Using the primary themes that the study was designed for such as *bureaucratization*, *capitalism*, and *McDonaldization*, the interview transcriptions were recoded into these new focused codes. The parts coded under McDonaldization were again recoded into the theory's four principles, *efficiency*, *calculability*, *predictability,* and *control*. Additionally, the overwhelming patterns of procedural and structural challenges were deemed deserving of its own focused code under *irrationalities*, as well as the specific changes and challenges pharmacy workers are navigating during the pandemic under *COVID-related changes and challenges.* Extracted themes and categorized patterns were labelled and expanded into more detailed notes on Microsoft Word documents to aid in analysis and writing.

The following chapter presents the study findings in answering the questions, 'How do institutions and processes (specifically bureaucratization, capitalism, and McDonaldization) determine the work structure and work experiences at retail pharmacies?' and 'How have these work experiences been impacted by Covid?'

CHAPTER FOUR | FINDINGS

Retail Pharmacy: The Great Bureaucracy

The Hierarchy

Drucker's claim on the corporate form of capitalism and bureaucratization being primarily shaped by principles of organization (1993) is embodied in the professional hierarchy within the retail pharmacy. Observational and interview data found a bureaucratic hierarchy of technically qualified individuals whose responsibilities are divided depending on their skills, education, and position within the pharmacy team and an external management team that directly supports the functions of the pharmacy. According to a Prime Rx pharmacy intern Herman,

> "Pharmacy is teamwork from your technicians, if you have a cashier, if you have pharmacy technician in training, your lead techs, your interns, your pharmacists, your pharmacist manager, they all have to be synchronized on how well you can work to make sure the job is evenly distributed so everybody can do their tasks, concentrating during their tasks, and moving forward."

Herman emphasizes the importance of work management by knowing where each worker is supposed to be and what tasks they are assigned to do. Additionally, an external management team that is not regularly present in the pharmacy includes a district manager, a retail store or branch manager, and the store department managers (i.e., cosmetics, groceries, over-the-counter pharmacy) who oversee and supervise pharmacy functions remotely and at times, locally.

Further data clearly indicated that the type of professional license, education, and job-related experience determine the position and compensation each pharmacy worker receives, as well as the complex division of labor across different job positions that dictate each's job-specific duties and shared responsibilities. The licensing of pharmacy positions is where government and corporate bureaucracies intersect, "governed by a set of impersonal rules and procedures that are applied universally, without regard to the personal characteristics of particular individuals, and rationally designed to serve some broader purpose" (Handel 2003). In this case, that broader purpose is the certification of qualified individuals to perform highly complex tasks which maintains a rigid hierarchy within the pharmacy.

As the most educated and trained healthcare provider with an average of six years of higher education, the pharmacist is at the top of the hierarchy; thus, they are given full authority to make decisions and perform any tasks that concern the dispensing of medications and other services offered by the pharmacy, including those of their assistants. Although pharmacists have flexible authority on domestic tasks, they typically prioritize the responsibilities that only pharmacists can complete such as: verifying prescriptions entered by technicians, physically verifying filled prescription orders, immunizing, taking verbal prescription orders and transfers over the phone, and counselling patients. This is the case because retail pharmacies typically only have one pharmacist on duty during one work shift that is usually eight to twelve hours long.

Certified pharmacy technicians must also complete a technical program that is offered through employment or through community colleges and vocational schools.

Regardless of training, all pharmacy technicians must pass the state and/or federal certification exam (depending on state requirements) to obtain a license. Despite this certification, technicians are limited to customer service, typing prescriptions, preparing medications, and other tasks that assist the pharmacists with pharmacy functions. The prescribed technician roles are determined by guidelines from government and professional licensing authorities that shape company policies.

Pharmacy interns need to be currently enrolled or to be graduates from state board-approved pharmacy schools and to have completed certain courses to work in retail pharmacies. They gradually train to complete pharmacist tasks but only under the direct supervision of licensed pharmacists until they pass the board exam, obtain their licenses, and are officially hired by the company as pharmacists. Certified pharmacy technicians and (uncertified) pharmacy technician trainees have mostly similar duties. However, due to the trainees' limited knowledge and experience, they require the guidance and training of more experienced certified technicians consistently, even though they are assigned mostly the same work. At Bluefield, the only technician responsibility trainees are not allowed to do are preparing controlled substance orders and completing some inventory tasks such as ordering certain medications or pharmacy supplies and processing drug recalls and returns. Accordingly, this hierarchy of tasks is contingent upon the experience and credentials of the pharmacy workers and are explicitly cited on company procedure manuals intended to provide reliable, consistent, and detailed task performance that are guided by predetermined operating standards.

The lowest in the pharmacy hierarchy are cashiers. In addition to specific company policy training, the only requirement to become trainees and cashiers is the Health Insurance Portability and Accountability Act or HIPAA policy training, along with the standard company training. If the pharmacy affords to hire pharmacy cashiers, they are only responsible for the pick-up station duties, some maintenance tasks, and other minor errands that assist technicians.

Because the observed pharmacies were in a retail setting, there was an emphasis on customer service, particularly with reducing customer wait time. At Bluefield Pharmacy, for example, other members of Bluefield's local management team are required to be HIPAA trained and to help the pharmacy with pick-up tasks. They are called *Designated Hitters* (DHs). According to Bluefield pharmacist Sienna, depending on the district's allotted budget for the store and the number of pharmacy staff hours, non-pharmacy associates may also be trained to become DHs. These DH's solely help dispense and sell prescription orders until the pick-up line finishes and they are then required to return to their regular store assignments. At Prime Rx pharmacy, store employees can also help technicians with the pick-up station. Certified pharmacy technician Aida says, "…all they do is with the customers, in checking them out, and if they have any questions or if there's something that they don't know, then we would just go there once a while to help them, but yeah, they don't do insurance and other stuff, no." While DHs perform tasks that efficiently alleviate some of the work from pharmacy assistants (technicians, trainees, interns, and cashiers), they are particularly limited to what they can do. Due to their lack of certification and pharmacy-related experience, they

are extremely restricted to the simplest tasks, which include pulling patient orders up and ringing them out.

In general, company policies control work processes of retail pharmacies through job-specific tasks. For instance, only Bluefield certified technicians and pharmacists are allowed to count and prepare Class-II (CII) prescriptions in their chains. CIIs are the highest categorized drugs dispensed in retail pharmacies "according to the drug's potential for abuse that may lead to psychological or physical dependence" (US DOJ 2021). Even though pharmacists have the most authority inside the pharmacy, the existing division of labor between them and their assistants is critical in the daily operations of the pharmacy and are also influenced by other external factors. This is seen on the flexible unilateral authority of pharmacists. An example of a pharmacist-specific task that cannot be done by pharmacy assistants is taking verbal prescription orders over the phone. When doctors call in prescriptions, they occasionally make use of the pharmacists' expertise in pharmaceuticals and experience with insurance formularies. Even though pharmacy assistants gain experience and exposure to different insurance formularies and drug treatments daily, they lack the knowledge and clinical training to assist other medical professionals during such consultations. In this example, external factors such as drug laws, company policies, licensing boards, and insurance companies influence job-specific tasks, creating a strict division of labor between pharmacists and their assistants.

Lastly, hierarchical divisions were also observed in the form of compensation. While most pharmacists and members of management tend to be paid in fixed biweekly

or monthly salaries, technicians, trainees, and cashiers are paid hourly. The hierarchical divisions of labor within the pharmacy based on type of professional license, education, and job-related experience determines the position and compensation each pharmacy worker receives, as well as the complex division of labor across different job positions that dictate each's job-specific duties and shared responsibilities.

Pharmacy Workstations and Procedures

Taylorism or the application of objective broken-down steps to complete highly complex tasks (1947) is embedded in pharmacy procedures. Retail pharmacies are divided by workstations to organize the process of preparing and dispensing prescriptions, as well as the provision of other pharmacy services. Pharmacist workstations are typically located in the middle of retail pharmacies to provide pharmacists easy access to all other workstations. However, as mentioned earlier, pharmacists must prioritize their job-specific tasks. Their workstations are used for verifying prescriptions and taking/making phone calls, especially from and to other healthcare professionals. Technicians are responsible for a wider variety of tasks that include running most pharmacy workstations such as: drop off, filling or production, pick up, drive-through, and new COVID-related pharmacy services. They are either assigned specific stations during their shifts or they multitask several stations if there's limited staffing.

The drop-off station is where technicians receive in-person order requests such as paper prescriptions, refills, and transfer requests. This is typically where technicians type prescriptions into the system while answering phone calls, troubleshooting insurance

issues, performing customer service, updating patient profiles, and completing other administrative tasks like faxing doctors and scanning paper prescriptions. The filling and production area are where prescription orders are counted, labeled, and prepared, usually with a tray and spatula, pill counters, handheld devices, and robotic dispensing machines. Prescription orders and other pharmacy items are then processed out or 'dispensed' and sold at the pick-up station. Traditionally, the pharmacy drive-through was used for pick-up or drop-off tasks. Nowadays, COVID testing and pick-up procedures are also done through drive-through and/or curbside service. Other workstations include pharmacist stations, consultation windows, and immunization rooms. These are reserved for the pharmacists although cleaning and maintenance are also done by assistants. Systematic recordkeeping through computer applications and paperwork filing are shared and maintained by all personnel. These procedures are highly bureaucratized and routinized since pharmacies have a specific list of services they offer, and insurance companies dictate which medications, treatments, and services are covered.

To break down the pharmacy functions further, a common theme in Taylorism, pharmacies divide workstations among technicians and other assistants for a specific amount of time. During my observations at Bluefield pharmacy, one technician stayed at drive-through while the other attended the pick-up and filling stations. After coming back from their lunch breaks, they switched station assignments, occasionally helping each other out when one is free or when the other falls behind. Since Sienna was the only pharmacist during this entire Saturday shift, she helps her team by answering most of the phone calls while multitasking her pharmacist-specific tasks. When she went on her 30-

minute lunch, some of the pharmacy procedures halted, such as immunizations and verifying prescriptions. The customers who came during Sienna's lunch break were asked to come back at a later time or sit and wait in a well-lit lobby right across the pharmacy. While waiting for Sienna, the two technicians made sure all technician tasks were completed so that she can complete the pharmacist-specific tasks of finalizing prescriptions and administering the immunizations as soon as she comes back. Although the technicians could not perform Sienna's tasks, their duties continued. The work is structured so that although the technicians cannot switch stations or tasks with the pharmacists, other parts of the process can be broken down and performed with minimal interruptions.

The general task assignments within each workstation by work queue order are briefly described below:

Table 1 | Task Assignments per Workstation

Drop Off Prescription receipt and entry into the computer system	**Pharmacist** Prescription entry and validity verification	**Filling – Production** Prescription preparation and labelling	**Pharmacist** Visual verification of filled prescriptions	**Pick-Up (Register, Curbside, or Mail Order)** Bagging and selling of prescriptions and other items	**Consultation/ Immunization** Pharmacist discusses drug information or administers immunizations

Other technician duties include returning stocks or prescriptions that were not sold, pulling 'out-of-dates' (expiring medications or items) off pharmacy shelves, billing and

calling insurance companies for prescription and service claims, inventory and shipment orders, filing paper prescriptions, proper storage of medications, cleaning and maintenance, etc. Nowadays, some technicians have also been trained to administer COVID vaccines. Pharmacists are also required to immunize, provide drug consultation and education to patients and other healthcare professionals, transfer prescriptions from external pharmacies, manage technician schedules, and update all staff about new company policies, drug laws, and dispensing regulations issued by the company and the government. Pharmacy work is meticulously divided down to the simplest tasks. The explicit micromanagement of work processes in retail pharmacies are listed in training modules and official company SOPs, and are maintained by the workers themselves, especially the pharmacists who are responsible for the supervision of their assistants.

Company Policies, Laws, and Regulations

The bureaucratic world of pharmacy work is shaped not only by company policies but also government-issued laws and regulations on prescription medications and other healthcare services. In addition to workstation assignments and rotations, some of the common company policies that are regularly applied as mentioned by the interview participants are listed below:

Table 2 | Common Company Policies Governing Pharmacy Work

Pharmacists	Pharmacy Assistants (Technicians, Trainees, Interns, and Cashiers)	All Pharmacy Staff
When the pharmacy manager is unavailable, staff pharmacists on duty are in charge. Pharmacy manager and/or staff pharmacists are responsible for technician scheduling and training. Only pharmacists can engage in consultation and administer immunizations (except COVID vaccines). Only pharmacists can receive phone-in prescription orders from providers and transfer prescriptions over the phone from external pharmacies.	Multitask the varied responsibilities of each technician workstation at high accuracy and speed. Only interrupt pharmacists with questions or needed support when other technicians cannot provide answers or assistance. Technician trainees are responsible for finishing their online courses and passing the certification examination within 9 months from hire date. Pharmacy students or interns must always be under the pharmacist's direct supervision when completing pharmacist-specific tasks. COVID services are now mostly completed by technicians, which include processing mail deliveries, test appointments, curbside pick-up, and vaccinations.	Introduce general procedures to new patients and explain protocol and law changes to all patients. Regularly update patient profiles and drug inventories. Perform adherence program tasks (i.e., calling patients and prescribers as needed). Complete recurring and new training modules and quizzes on SOPs. Finish prescriptions within prescribed time (about 15 to 20 minutes for patients waiting in the store for prescriptions or immunizations). Paid breaks are for 15 minutes while unpaid lunch breaks are 30 minutes. Employees must provide monthly feedback to corporate headquarters. Staff must adhere to performance expectations.

Fulfilling a managerial position, retail pharmacists supervise all pharmacy assistants to ensure that they always follow company SOPs. Despite the division of labor, overlaps on their duties do occur, especially when there is a shortage in staffing. Pharmacists then are required to help their assistants and multitask whenever possible, as well as ensure that

they are properly updated, trained, and compliant on new procedures and laws concerning the pharmacy practice.

Some of the laws and regulations that directly affect retail pharmacies and were frequently referred to by the interviewees are listed in Table 3.

Table 3 | Government Regulations and Drug Laws

Opioid Stewardship Program	Class-II Drug Inventory and Audit
Insurance Prior Authorizations	Medicaid and Medicare Coverage
Health Insurance Portability and Accountability Act (HIPAA)	Professional Accreditation Guidelines

The opioid stewardship program sets limits on filling and dispensing controlled substances depending on the type of pain, the length of treatment, the quantity of medication, and the patient's medication history. Pharmacists follow the CDC guidelines on morphine milligram equivalent (MME) calculations, so they must obtain all necessary information to evaluate prescriptions for controlled substances, especially when patients may be at risk for overdose. Additionally, prescriptions for CII medications must now be sent to retail pharmacies electronically. The Electronic Prescriptions for Controlled Substances (ECPS) policy requires medical practitioners to register with the Drug Enforcement Administration (DEA) in order to transmit electronic prescriptions to retail pharmacies. This process began in 2012 (Gallagher 2012) but is now required in the state of Virginia since July of 2020 (Virginia LIS 2021). This highly bureaucratic process must be followed in the dispensing of controlled substances, no matter the patient's situation.

The growing political effort to fight the 'war on drugs' has been extremely influential on the pharmacy practice. Evidently, public policies on controlled medications do not only shape the guidelines on the dispensing of medications to patients, but also the pharmacy work within and outside of operating hours.

Medicare, Medicaid, and other health insurance companies in contract with retail pharmacies have 'formularies' (the list of covered medications/services) and limitations on the medications and services they cover. According to Star Market pharmacist Maryam, Medicare recently put a limit on their durable medical equipment (DME) coverage. Specifically, Maryam says,

> "…now Medicare has put a limit on number of (diabetic) testing. So, if you're using insulin, you can [test] maximum only three times a day, well you can use more than that, you can use test strips more than that, but they would pay only for maximum if you're testing three times a day."

Medicare patients who need to test their insulin levels more than three times a day must wait for a prior authorization (PA) to be filed directly by the prescriber and approved by the insurance. PAs can be a long and complicated process, involving constant communication between doctors, pharmacies, patients, and insurance representatives. Similarly, the Medicaid program has its own formulary and coverage limitations that pharmacy workers are exposed to regularly. Bureaucratic changes that are negotiated between governments, insurance companies, and retail pharmacy corporations significantly affect the workflow for workers. These dictate local company changes that affect pharmacy functions and the population the workers can serve, no matter the kind of communal relationship they've built over years of regular interactions.

Accredited professional pharmacy boards (i.e., National Association of Boards of Pharmacy, Virginia Board of Pharmacy, Pharmacy Technician Certification Board) work with state and federal governments in determining specific tasks pharmacy workers can perform. For instance, in 2015, all fifty states, the District of Columbia, and Puerto Rico began training and authorizing licensed pharmacists to administer immunizations (Weaver 2015). Insurance companies supported this change as well. Retail pharmacies immediately provided immunization training to their pharmacists and modified their operating procedures accordingly to enable immunization services in their facilities. The formal authorization for pharmacists to take on immunizations in retail pharmacies were supported by insurance companies that began covering them and retail pharmacies that extensively adapted the new service. These bureaucratic institutions work with each other to significantly mold pharmacy procedures and induce changes.

Finally, the Health Insurance Portability and Accountability Act of 1996 or HIPAA has arguably been the most influential law in shaping the work procedures of retail pharmacies. According to Red, "everything […] is based around that (the HIPAA policy), that's a very big deal in the pharmacy." Everybody who enters the pharmacy has to be HIPAA trained, including DHs. Every paperwork, label, and computer system that may potentially contain identifiable patient information must be handled according to company protocols that are shaped by this government policy. When calling or leaving voicemail for patients, for example, pharmacy workers must not provide medication names and other information other than the patient's name until they verify that they are in fact speaking with the patient. Even automated reminders, text messages, and recorded

robocalls do not contain the names of medications. These reminders, however, can become burdensome when the influx of patients calling back to verify what the call or message is about overwhelms the staff. Computer applications and work procedures force workers to check for accuracy multiple times to ensure that they are dispensing the appropriate medications to the correct patients. Depending on the severity of the violation against the HIPAA law, penalties may range from $100 to $1.5 million per year and up to a 10-year sentence in jail (AMA 2021). Thus, within each pharmacy procedure, patient privacy is central and treated with critical care for it may result to financial losses for the company and serious repercussions for the workers. Evidently, profit-seeking companies such as the retail pharmacies included in this study give utmost importance to this policy, dictating pharmacy functions and programing computer applications around it, without regard to the human aspects of the job.

To summarize, retail pharmacy workers are hierarchically divided while the procedures are highly bureaucratized and routinized by company protocols, laws, and regulations that are rationally designed to uphold certain standards and accomplish a common purpose, that is, to ensure patient safety and privacy when dispensing prescription medications and delivering other services. Another purpose that structures retail pharmacy work is the capitalist goal of obtaining and regenerating profit. After all, retail pharmacies are business oriented. Due to their corporate form, Bluefield, Prime Rx, and Star Market pharmacies operate via a top-down system, in which corporate leaders dictate company policies and procedural changes that fall onto pharmacy workers in the receiving end, who are regularly experiencing and managing the consequences.

Recently, the global pandemic has altered pharmacy procedures drastically. The guidelines from the CDC included wearing PPEs, setting up the pharmacy to follow social distancing recommendations (at least for patients), and scheduling test and vaccine appointments online through a state-mandated website. Other services such as curbside pick-up and mail and home deliveries were also offered to avoid big crowds inside the stores. Mail and home deliveries greatly changed pharmacy work procedures. For instance, Star Market introduced a new application in their handheld devices that allow technicians to scan prescription orders and print shipping labels instantaneously. Local home deliveries required certain technicians with clean driving records and full auto insurance coverage to transport prescriptions to patients' doorsteps. Curbside pick-up procedures did not differ much from in-store pick-up, though payments and verification processes (i.e., identification procedures) were done over the phone while patients wait in their cars. For pharmacies without drive-through windows, curbside pick-up has become a very popular alternative to obtain prescriptions while limiting contact with others.

Star Market pharmacies with no drive-through windows provide at-home COVID test kits while Prime Market and Bluefield pharmacies have technicians give COVID testing instructions to patients behind the drive-through window. Although Star Market provides the test kits, they do not collect nor ship the collected samples. Prime Market and Bluefield pharmacies do collect and deliver the completed kits, if not picked up by local clinical laboratories. By May of 2021, the local Bluefield pharmacy I observed obtained their own Polymerase Chain Reaction (PCR) machine to test for the virus. This initiated *rapid* testing that is done within the store and can provide results to patients

within 24 hours. These new services are made up of new procedures, computer applications, and other technological advances that are constantly changing retail pharmacies' conventional processes.

Capitalism and McDonaldization: "Let's Keep It Running"

The process of rationalization allows capitalism to make use of bureaucratization on implementing calculable rules without regard for emotional elements (Weber 1978) to accomplish a broader purpose (Handel 2003) — the recreation of capital or profit. Ritzer's McDonaldization principles of rationalization characterize how retail pharmacy work is organized. With companies prioritizing "optimum means to given ends" while addressing other bureaucratic processes involved in the pharmacy practice, retail pharmacies persist to succeed in exemplifying the McDonald's model of efficiency, calculability, predictability, and control.

Efficiency

The McDonaldization of retail pharmacies based on the efficiency principle is evident in their daily standard operating procedures (SOPs), use of specialized technology, and the requirement to constantly multi-task work activities.

Perhaps the most visible way retail pharmacies compare to the McDonald's model is through the SOPs of the pharmacy drive-throughs. Similar to the fast-food drive-through, technicians receive and sell prescription orders at the pharmacy drive-through. Serving as either the drop-off or pick-up window, the drive-through station also allows technicians to perform other tasks there, such as answering the phone, filing paperwork, and typing prescriptions into the computer system. This efficient system was

demonstrated by McDonald's drive-through employees who are required to multitask drive-through duties while also helping the order assembly or washing dishes in between customers (Ritzer 1996). During my observations at Bluefield pharmacy, the technician attending the drive-through was able to help type new prescriptions into the system while waiting for the drive-through customer to send in their payment or finish getting ready to leave. When the drive-through was not busy, the technician also helped with the pick-up and filling stations. The availability of a drive-through helps alleviate some of the work from other stations, including drop off and pick-up. By offering an option that can save customers time and effort, the drive-through serves as an efficient alternative for customers as well.

Today, retail pharmacies also use the drive-through to perform COVID testing procedures. Typically assisted by technicians, patients who have set up an appointment for a COVID test must come through the drive-through or curbside service instead of entering and waiting inside the store to avoid public exposure. The technician will send a test kit out and verbally instruct the patient on collecting the sample when done at drive-through. For Bluefield pharmacy, the completed kit must be dropped off by the patient into a locked bin toward the end of the drive-through lane. This will later be picked up by a representative from a local clinical laboratory that works in collaboration with Bluefield pharmacy. While retail pharmacies have gained new tasks in an attempt to lighten the work of conventional testing facilities amidst the pandemic, by requiring customers to do some of the work themselves, pharmacies work to maintain efficiency.

Another efficient way of providing COVID tests is through at-home test kits delivered curbside. Star Market's distribution of at-home test kits at curbside maintained the goal of keeping potentially sick patients out of the store while continuing to aid clinical laboratories and keep pharmacy workers mostly to their traditional tasks. Keeping the workers mostly inside the store meant that they could work on multiple tasks or stations, not only the testing procedures, and that the company will not need to hire more people for the new services. Additionally, by requiring the customers to do more work such as reading the instructions to conduct the specimen collection and mailing the kits out themselves, the work pharmacy workers are involved in becomes significantly reduced. This efficient task redistribution from employee to customer maintains the minimal labor cost while the addition of new services yields new sources of profit.

Pharmacy work efficiency is also largely shaped by computer programs, electronic devices, and applications. These are constantly updated to improve the efficiency of the work. For instance, Star Market eliminated their bagging station, in which an application was specifically created into their handheld devices. However, technicians who are bagging must stay in one place, the designated station where metal racks held prescription bags. This did not allow them to multitask other activities efficiently. Thus, Star Market incorporated their bagging procedures into the pick-up station. To improve the bagging process, Star Market released a computer update and changed their SOPs to allow technicians to print the paperwork and bag medications while checking customers out at the register. According to a certified pharmacy technician, Nicole, "It (the new bagging procedure) has helped speed up things […] so

we have more time to do other things." In addition to what was described to me as an efficient process, this new bagging system also eliminated a significant amount of paper waste. The company can save money on printing supplies when patients elect for paperless transactions, as well as from 'return-to-stocks' (prescriptions that were not picked up during the ten days they were ready). When processing these returns, technicians do not have to spend time shredding piles of paperwork anymore. The bagging update did not only eliminate a workstation, allowing technicians to increase multitasking, but also helped the company minimize some operational costs.

Similarly, Bluefield pharmacy received a new filling or scanning system for their production. During my observations, their pharmacy technicians showed me how they used the new computer tablets. Although they still use trays, spatulas, scales, and pill counters, their computerized scanning system was updated. While the old system scans the Universal Product Code (UPC) on medication bottles and packages, the new system scans another barcode that most manufacturers have adopted, called 2-dimensional (2D) barcodes or more commonly known as Quick Response (QR) codes. A 2D barcode does not only provide the UPC (similar to NDCs or National Drug Codes) that was used to fill a prescription, but also logs the lot number and expiration date of the bottle or package into the system. By using 2D barcodes, the computer system will efficiently track prescriptions that are expiring and those that are recalled by manufacturers through the expiration dates and lot numbers respectively. By adopting such technology, Bluefield made other tasks more efficient. Pulling expired/expiring and recalled drugs off

pharmacy shelves meant improving patient's health and safety, as well as speed up the work.

My data also captured ways technology was used to make communication more efficient. At Prime Rx, register prompts direct the pick-up station process while also recommending other available services to patients. These register prompts are tailored to each patient's profile and history. Prime Rx's computer applications generate several questions to help technicians offer additional services to customers as they are picking up their prescription orders. Some may include signing up for automatic refills, transferring refills to the same location, or offering customized immunization recommendations. This system efficiently manages patient pharmacy communication, according to lead technician Hailey,

> "If they say yes to… like oh you want your prescriptions transferred in? Yes. That'd be great. Thank you so much. Alright. I click yes, click enter, it will ask me, do they want it as a waiter, do they want it tomorrow, or do they want it in two days? […] people just tell you, yeah transfer it in, I'll get it tomorrow. OK, tomorrow, and move on."

During COVID, Prime Rx released a new computer update on *adherence call* procedures. In addition to reminding patients to pick up or refill their prescriptions, the new update includes inquiries on mail orders. Prior to the update, the computer displayed limited information about the patient's fill history. This meant that some of the medications that technicians are calling the patients about are the same ones they may have already recently picked up. This typically happens, especially because new or renewed prescriptions are not linked to the previous ones even if they are for the same medications. To improve the efficiency of this process and avoid wasting time on

duplicate calls, the update made it easy for technicians to discern if the call is necessary and document why they did not call certain patients on the lists. The register prompts and adherence call system updates efficiently promote the increase in prescription sales and other pharmacy services.

Other mechanisms of efficiency observed include pulling in non-pharmacy workers to help. Certified pharmacy technician Aida works at another Prime Rx pharmacy and claims that non-pharmacy employees such as front register cashiers are required to help with the pharmacy pick-up station and ring customers out whenever they need help.

> "I would say that per the company policy, especially at where I work, if we need help, we call for help. So that's mandatory for where I work, so it doesn't matter who it is, but they have to be HIPAA-trained. If let's say somebody calls out or if there's like anything, there is an issue, there's a long line, and then there's somebody who is HIPAA-trained, they have to, that's the company policy," Aida says.

Similarly, Bluefield pharmacies make use of non-pharmacy employees (DHs) and managers to help retrieve prescription orders and ring customers out at the pick-up station. Relieving technicians at the pick-up station allows them to tackle other tasks that require technician credentials and experience, including billing insurances and preparing medications, tasks that non-pharmacy employees are not trained to do. By minimizing the time that pharmacists or pharmacy techs are away from their 'hierarchy specified duties', the use of the non-pharmacy employees to do lower-level tasks maximizes efficiency within the retail pharmacy.

Lastly, data clearly demonstrated how experienced pharmacy workers honed individual techniques to increase efficiency through multitasking and prioritizing. When

overwhelmed with several pharmacist-specific tasks, Star Market pharmacist Cristina weighs them by how much time and attention each task may potentially take,

> "…let's just say someone asks you to [physically verify a filled script], someone asks you to counsel, someone asks you to [check a prescription entry] at the same time. [Checking the prescription entry], I'll make that the last priority. [Because that's], you're checking for accuracy. That's the one thing that you really, you can't miss. So for that example that I gave, since it was only antibiotic [to physically verify], I'll [verify] first, so that way they can help that person on quickly, then I'll go to counseling and then [check the prescription entry] last."

Cristina's foundation for individually designing a rational system to prioritize certain tasks over others was gained through years of work experience, knowledge of the company's computer systems, and the need to balance the ever-growing demand to get as much done in as little time. Certified pharmacy technician Camila does the same with technician tasks. With years of experience, Camila can quickly put together a logical plan to tackle several tasks at the same time. She says,

> "…well, my technique is if I'm over there near the fill station and I'm waiting, I put it (phone) on speaker and I do something else to multitask while I'm waiting till somebody answers so I can do something else. You know, if I'm filling or if I'm on the computer, I'm [typing new prescriptions into the system] while waiting on the phone so you kinda have to learn to multitask, doing other things that you could just do while near the phone…"

In order to manage the multiplying demands of pharmacy work, individual workers have to have or develop skills in multitasking. I had observed that in order to efficiently multitask several activities and stations without making errors, pharmacy workers require skills and experience, which then significantly increases the work output.

In their constant attempts to rationalize work procedures, retail pharmacies' SOPs and adoption of technologies shape the workplace and individual work experiences. Pharmacy workers have internalized these efficient practices to such a degree that they

themselves find ways and techniques to increase their individual productivity by multitasking, learning computer systems by heart, and strategizing action plans. These individual strategies, coupled with the pharmacy procedures, make efficiency one of the key factors driving pharmacy work experiences.

Calculability

Managing work based on quantifiable factors has greatly influenced pharmacy work. By applying technological advances on updating and upgrading computer applications and devices, retail pharmacies do not only improve efficiency but also the calculability of the work procedures that prioritize quantity over quality. For example, the primary computer application at Star Market lists the number of tasks per workstation on each computer screen. In chronological order, the left side of the screen lists drop off, prescription entry check, filling, verification, bagging, counselling, fax, etc. Under each tab, one will find numbers that indicate how many prescriptions belong to customers who are waiting in the store (typically prioritized and assigned a 15 to 20-minute wait), how many are due in the next hour, and how many are due later that day. On the bottom of the screen, the total number of completed prescriptions for the day is displayed. Similar applications are used at Bluefield and Prime Rx pharmacies. These systems help pharmacy workers direct their attention to the tasks that must receive priority, as well as improve work management by estimating how much one can spend completing other tasks external to the queue, such as stocking new inventory or filing paperwork. However, without comparable tackers for quality, these mechanisms exemplify the emphasis on time and quantity rather than quality work.

Other calculable aspects of the job mentioned by the interview participants include the worker's 'Yes' percentage and the number of adherence calls they are required to make regularly. These scores are considered by employers when looking at job performance. Each worker's 'Yes' percentage at Prime Rx is generated through the number of additional services (mostly) pharmacy assistants get customers to say yes to. Lead technician Hailey summarizes,

> "Looks like a bunch of seemingly random questions […] it'll ask if you want to transfer a medicine from a different Prime Rx location so I can get it filled for you today, and so stuff like that, and YOU HAVE to get as many yes's as possible." […] They expect, they do it by percentage. So, within a week for a lot of the prompts, I have to have 80% yes's. There are some that are a little bit lower, I think the vaccine one, I think you have to have like 50% because of course not everyone has that much time. Corporate understands at least that much, and some are like 50% but for most of them, it's between 80 and 90% of yes's in a week."

By quantifying customer-worker interactions through the number of additional services customers say yes to, the measure of job performance at this workstation merely relies on a robot-like customer service from technicians asking customers AI-generated questions.

Adherence calls can range from five to over eighty phone calls, depending on the nature of the call. Typically, the adherence calls pharmacists make involve counselling. Pharmacist-facilitated calls are not as many as those by technicians because they involve lengthier discussions with patients and may require pharmacists to contact the prescribers. The goal for these calls is to increase medication adherence, especially on common maintenance medications such as those for hypertension, high cholesterol, and diabetes. Adherence calls completed by technicians are typically short. These include reminding patients to pick up their prescriptions that have been ready for a certain number of days (day 5 *and* 7 for Star Market), inquiring about refills that are due to

initiate the refill process for patients. Additionally, during the pandemic, Prime Rx started adherence calls to offer free shipping for mail orders as an incentive to lessen in-store pick-ups. According to Prime Rx lead tech Hailey,

> "Corporate has made those calls almost as serious as, they're basically on the same level as the register prompts. We have been threatened to be written up if we don't finish the calls. I haven't seen how many there are with the new system, but I know that before they set up the new system, it would be anywhere between 5 to 8 pages of calls. Every page would have 15 on them, so it was quite a few calls to get through."

Adherence calls are critical not only in promoting necessary maintenance treatment for patients, but also in promoting the business. Through generating a certain number of calls for workers to do regularly, companies increase the chances that customers come back to their stores. The focus on numbers is marked by the constant pressure put on workers. Hailey added,

> "…you have to call all of them (patients) on Saturday, and then on Sunday, you have to call the people who didn't pick up or didn't answer, didn't respond. On Sunday, you have to call them twice to get a response and then they (Prime Rx) do the same thing where they total it up. You got this percentage of yes's, this percentage of no's. If it's not enough yes's, then you're getting a phone call (from corporate) 'cause they're going to assume that you're just letting it ring and hanging up, and just putting that they said no. So that's gotten a lot more intense…"

Retail pharmacies' emphasis on prioritizing quantity over the quality of their services and products using strict SOPs and advanced technologies, as well as persistently pushing to sell additional services to patients. Quantifiable measures such as time goals and performance quotas are decided at the corporate level and reinforced by computer applications that direct pharmacy processes. Although pharmacy workers see the value of their work by promoting medication adherence and offering services that

may improve their patients' health and well-being, the incessant pressure to reach the numbers their companies set is always present. This does not only cause stress and anxiety about the risk of losing one's job, but it also affects the quality of services and goods offered when workers are constrained to follow computer prompts while trying to get more tasks done in less time.

Predictability

According to Ritzer, predictability provides "effortless and mindless" work to workers, "peace of mind" to consumers, and "control" to management personnel over consumers, workers, and other business demands (1996:79). While all the McDonaldization principles work together simultaneously, predictability critically prioritizes the repetition of anticipated outcomes, for the workers, the consumers, and the companies. The rationalization of breaking down complex tasks to more calculated, efficient, and simpler tasks can yield predictable results. Repeatable processes and interconnected computer systems become more efficient across multiple locations, a key in chain pharmacies, and are easily accessible for anyone to navigate. Workers retain muscle memory from "mind-numbing routines" while customers expect feelings of security and convenience, knowing exactly what they are getting in every visit. Moreover, companies and their management teams shape the desirable outcomes of what must be premeditated.

Taylorist principles are utilized to require employees to uniformly perform tasks through SOPs and technologies. Breaking down complex tasks to simpler steps indicate a detailed course of action that must be done unvaryingly. For instance, Bluefield

pharmacy's filling procedures must begin with the worker obtaining the medication bottle from the shelf, scanning the barcode on the bottle, counting the ordered amount through a tray and spatula or an automatic pill counter, printing and labeling a new medication vial, and placing it in a basket right next to the pharmacist station. Unlike the timely requirement of flipping burgers at McDonald's, critical errors that risk the customers' lives may occur if one or two of these steps were skipped or switched. Thus, retail pharmacies promote extremely strict SOPs and provide new technological updates that lessen this risk. In fact, all three pharmacies included in this study make use of scanning systems that reject wrong medication bottles and attempts to print labels until the correct medication bottle has been scanned. These scanning systems also do not allow filling multiple patients' orders at once. Thus, workers need to only glance at their computer screens to see what medication they need to scan next and how many bottles they will need to grab without the need to look at other information such as who it is for or what the medication treats. They scan, count, label, and put away prescription orders repeatedly all day without much effort.

Ritzer claims that "some workers prefer predictable, repetitive work" (1996:79). Indeed, some technicians may find production or filling their preferred workstation because as Star Market certified tech Red claims, "I don't mind the physical thing, like I prefer the physicalness of it. If there's a lot in fill, that's not really a problem for us we're like, oh yeah we see it as a challenge." The simple filling process aided by advanced scanning systems and regarded as just a "physical thing" is favored over other procedures that induce unpredictability. An example of unpredictability that Red also mentioned had

to do with customer service; “you don't know what they're (customers) gonna say or how they're gonna react to something […] It’s harder to control others,” she claims. The lack of control over interactions with customers are typically caused by unpredictable events such as drug recalls, non-formulary treatment plans, manufacturer backorders, etc. that impede workers from completing prescription orders. Because customers expect predictable outcomes—timely access to their medication—when these do not occur, they can become unpredictable.

Prime Rx’s register prompts at the pick-up station direct workers’ interactions with customers, specifically with what to say and how to offer additional services. Since these services are limited and the register prompts are directly read from computer screens, these customer-worker interactions are highly scripted. Scripts are routinized to provide reliable and speedier service while ensuring the equal treatment of customers (Ritzer 1996). When picking up phone calls, pharmacy workers often use professional greetings found in the workplace such as “Thank you for calling (retail pharmacy), how may I help you?” and an inquiry about the patient’s name and date of birth at the pick-up station following their greetings. These greetings and identity confirmation is also part of company SOPs, not only to ensure quality customer service but also to verify the prescription order they are about to dispense as part of the pick-up procedures.

Using routinized scripts have other positive functions such as empowering workers and enabling them to control interactions with customers, especially when rejecting noncompliant or unusual demands (Ritzer 1996). In retail pharmacy, drug laws, insurance formularies, manufacturer dealings, and company protocols shape these scripts.

Star Market certified tech Camila apologizes first before giving the reason for the rejection, “I’m sorry about this, we’re sorry about that, but we are following the rules and regulations. It’s against the law to do this so…” These scripts are used according to official terminologies that may sound like jargon to customers, thus requiring a simpler explanation to follow. Since these work processes tend to be repetitive and are routinized because of common insurance formularies, the widespread knowledge of drug laws, loyal regular customers, and other factors, workers and customers become more familiar with shared terminologies and “establish a floor of civility and competence” (Ritzer 1996).

The familiarity customers gain from using retail pharmacies gives them the advantage to know what to expect during their visits. Even though customers do not necessarily follow certain scripts in their interactions with pharmacy workers, there are certain cues used by McDonaldized systems to encourage predictable behaviors from them. According to Ritzer (1996), there are three factors that lead customers to act predictably, physical cues, structural constraints, and some taken-for-granted internalized norms. Physical cues include obvious physical signs such as Pick Up and Drop Off, as well as the presence of black stanchion posts in front of pharmacy registers that direct customers to line up for service. Structural constraints are found on the limited list of services that retail pharmacies offer, drug laws that provide dispensing guidelines, and insurance formularies that restrict covered medications and services. Some taken for granted norms include customers calling in their refills instead of requesting them online and coming into the store to wait in the pick-up line instead of going through the drive-

through, curbside, or mobile pickup window. The sense of "peace of mind" lies in knowing what to expect during these interactions with others.

This sense of security is also maintained by the uniformity of chain pharmacies. Chain pharmacies do not only offer the same major services, but they also use the same labels and terms for their stores, services, procedures, and other commodities. Familiar feelings and expectations are replicated in store symbols, colors, and designs that are easily identifiable to the company brand. Regular customers of a Bluefield pharmacy can go to another Bluefield store and expect the same process of obtaining their prescription orders, the same medication vials with labels that follow the same layout (patient's full name, Rx number, medication name, quantity, directions, number of refills, and prescriber's name), the same paperwork and packaging, the same insurance copays, and store departments. The Star Market symbol has become so influential and widespread that customers may feel at home while travelling and passing through one of their stores to pick up food and supplies, or even to transfer their prescriptions in case of emergencies (i.e., loss of medication or for vacation supply). The familiar stores and procedures need not be relearned by, nor confuse another chain customer.

The predictability of work established by the same interconnected computer systems and corporate-issued SOPs also provide advantages for workers and their employers. Workers who need to relocate or pick up more shifts from other stores do not need to spend days or weeks to be retrained. Some of the workers I interviewed, as well as myself, were able to pick up additional shifts from other chain stores that are short-staffed. Consequently, companies benefit from the standardization of work procedures

that customers and workers become familiar with. This allows them to manage workers to maintain standardized practices and customer expectations to preserve their loyalty. Although predictability provides security, convenience, effortless work, and manageable outcomes, the mind-numbing routines, scripts, symbols, and internalized norms it also produces limit the creative and active role of social agents, resulting to robot-like meaningless interactions.

Control

The most coded McDonaldization principle in this study was control. Ritzer claims that the McDonald's model gains control through technologies, and not only through the machines and tools, but also the "materials, skills, knowledge, rules, regulations, procedures, and techniques" (1996:101). In retail pharmacy, control is found in company SOPs, pharmacy laws and government regulations, insurance formularies and manufacturing processes, technological advances through computer system updates and other machinery upgrades, and finally, the work management techniques acquired by the pharmacy workers navigating these. Below is a list of factors that affect pharmacy work mentioned by the study participants according to their classifications:

Table 4 | Control Factors That Affect Retail Pharmacy Work

Standard Operating Procedures (SOPs)	Pharmacy Laws and Government Regulations	Insurance and Manufacturer Procedures	Technological Advances	Worker-Learned Techniques	COVID-Related Changes
workstation assignment, task hierarchy and training	pharmacy training and licensing	formularies and coverage	online access for services	CII inventory done in small portions throughout the day	tests and vaccinations
inventory returns, out-of-dates, and orders	HIPAA policy	billing and claims	mail-order scanning system	multitasking workstations/tasks	mail/home delivery
Designated Hitters (DHs) and other help	opioid stewardship program (Narc Scare Score; MME)	Prior Authorizations (PAs)	rapid PCR machine	calculating how long tasks take to predict multitasking potential	curbside services
medication storage and pharmacy maintenance	CII inventory and audit	federal/state-funded insurance (Medicaid and Medicare)	adherence call system update	learning call prompts of insurance companies, doctors' offices, etc.	personal protective equipment (PPEs)
systematic recordkeeping	ephedrine sales and limits	global supply chain	paperless option for patients	familiarity with insurance billing and overrides	social distancing
SOP updates and recurring training	Electronic Prescriptions for Controlled Substances (ECPS) policy	drug backorders and recalls	2D/QR barcode filling scanner	building relationships with patients/customers	mask mandate
pharmacist consultations			register prompt AI		rapid PCR testing
multitasking and quotas			computer queue, scanning, and printing systems		at-home test kits
technician training program			order-in-site and other ordering system Ais		
drug/treatment adherence program			express pick-up and other contactless options		
company-prescribed wait time			electronic prescription transmission		
paid and unpaid breaks			Automated survey requests via text		
customer and worker surveys					

SOPs or company-issued protocols have the greatest effect on pharmacy work because it directs the worker's every step in processing prescriptions and maintaining pharmacy procedures. These protocols are greatly shaped by external bureaucratic forces, such as government policies, drug laws, insurance contracts, and manufacturer issues. Government regulations and drug laws make up a fixed system that is not easily amendable with serious consequences when violated. Insurance companies, manufacturers, and retail pharmacy companies negotiate contracts and approve what most insurances cover, thus impacting what doctors write for and what pharmacies dispense to patients. Insurance formularies determine what medications and services are covered. Thus, additional steps are taken to process claims that are not covered, with some that are specific to the insurer such as Medicaid and Medicare. In fact, Star Market created an external team to handle Medicare durable medical equipment (DME) claims. According to Maryam, this new team just "started last month" (which would be December of 2020), after the overwhelming requirements for DME supplies. Manufacturer delays, backorders, and recalls significantly impact work procedures by adding more steps to the filling process, requiring pharmacy workers to contact providers to discuss alternative treatments or transfer prescriptions to other pharmacies. Retail pharmacies consider these external factors and modify their SOPs, even creating new external labor forces to adapt to changes in drug regulations, insurance requirements, and manufacturer issues.

Technological updates and upgrades in pharmacy have been proven to increase productivity, accuracy, and profit while reducing costs. An example that has been cited

earlier are the Prime Rx register prompts that force pharmacy workers to recommend additional services to patients who are picking up their prescriptions. Hailey describes and gives some examples of register prompts,

> "Prime Rx is really a stickler for register prompts. So when you're cashing out people, it'll pop up saying, "do you want this automatically filled forever? do you want to automatically fill just one time, or not at all?" And then it'll say, what's another one, there's a vaccine one, it'll ask if they've had, do they want to get a TDAP like *right now*, just click yes and you can get a TDAP shot *right now* if you want to." No one ever wants that. [laughs] Everyone's like, please don't (do) anything, I just want my stuff and leave, thank you. [laughs]

Ritzer foresaw non-human technologies replacing humans in McDonaldized systems (1996). Even though pharmacy workers can just skip or click no on these register prompts without actually asking customers, especially when they can see that some customers are in a rush or are not feeling well, it is not without a great risk. As quoted earlier, Hailey emphasized the importance of getting certain 'Yes' scores, for which low scores can result to termination. Additionally, they can lead to customer frustration ad Hailey further explains,

> "…it just takes a lot longer at the register 'cause people aren't prepared for 'em, normally, so it can be frustrating, customer wise, when you're like, I just want to get my stuff and skidaddle and I'm sitting here asking you questions about medicines you didn't even come here for…"

Prime Rx's computer-generated register prompts are an exceptional example of technology controlling customer service interactions.

The pharmacy team works and competes with new technologies that help increase productivity but also has the potential to take away aspects of their jobs, risking work hours available for them. For example, when Star Market launched a new computer application they called 'order-in-site', a system update that uses the pharmacy inventory

and artificial intelligence (AI) to order out-of-stock medications and sustain inventory supplies so that technicians do not have to physically check and manually put in the orders, pharmacy workers were required to learn and assist the newly acquired AI to fully operate. According to Cristina,

> "it's supposed to be an AI that analyzes everything. So, in order for the AI thing to work, what added to that, to make it accurate, we have to do [the cycled] counts every day. You're doing perpetual inventory of everything in the pharmacy that will give you 15 drugs to count every day, [they (the AI) rotate it]."

Although order-in-site removed the manual work of typing inventory orders into the computer, technicians must complete "cycle counts" or an inventory of medications that the AI systematically generates every day. This AI program learns what medications are often dispensed at the pharmacy and predicts the supplies necessary to support timely deliveries for the community the pharmacy serves. It does not only increase the predictability of ordering medications on schedule in case of human error (i.e., forgetting to manually put in the order for a medication), but it also eliminates overordering or hoarding of supplies, especially of commonly used medications. Prime Rx has been using the same AI technology for years now. According to lead tech Hailey, "[The ordering system is] mostly automated unless there's an issue with a back order or a manufacturer preferred." Soon, it will not be surprising to see Star Market pharmacies' order-in-site program to fully take over their ordering system similarly, with the occasional need for manual ordering and without the generated regular inventory counts.

While manufacturer backorders have been more common because of the pandemic and a halt to the global supply chain (what the public was most concerned about according to Prime Rx certified tech Oliver), overordering and/or hoarding by

certain pharmacies may reduce backorders by distributing warehouse supplies to several stores until the manufacturer can ship more. Additionally, although technicians are familiar with commonly used medications and discover those that go on backorder later in the filling process, the prescriptions that are not in stock or are not available to be ordered right away expend work time. This AI-mediated update improves inventory sustainability. None of the interview participants explicitly drew a connection between system updates and upgrades as such to the increasing reduction of technician hours, but constant attempts to eliminate human aspects of the job, such as human errors and unpredictable and incalculable results, seem to be rooted in technological advances. This dehumanization of labor through the use of advanced technology is also seen with the rise of contactless alternatives during the pandemic.

System and procedure updates that are meant to limit human inconsistencies and errors are implemented to control outcomes. According to certified tech Nicole, when Star Market introduced their mail-order service, technicians "had to go on the FedEx website and fill out this whole page and all these information" for each patient order. Typographical errors and other human inconsistencies in filling out online forms were eliminated by releasing a new computer application on handheld devices that let technicians generate and scan package barcodes to automatically fill in customer information and print shipping labels instantaneously. Similarly, Prime Rx updated their call system to promote offering their mail-order service to patients. Contactless pharmacy services even before the pandemic, included express pick-ups, where customers are required to do some of the work that typically requires technological versality, were

encouraged. Consequently, social interactions between workers and customers decrease with the presence of machines (sometimes literally) standing between them. SOPs and technological advancements that attempt to control how workers do their work is now also applied to how customers use their services. The use of non-human technologies to control both workers and customers work by eliminating (as much as) possible inconsistencies and errors along with other human elements (such as human interactions) within pharmacy procedures.

Worker-learned techniques from years of experience in pharmacy aid in further refining the McDonaldized process. In more conventional terms, I believe this is where control becomes extremely evident. When workers start to embody the corporation's ultimate goal—to increase profit and minimize financial losses—that is when they tend to bend more flexible rules to cater to the business demands. For instance, they may skip a couple of minor steps or override company policies to get a prescription out or appease an upset customer as soon as possible. An example of minimizing losses is pharmacists micromanaging their assistants' schedules and reprimanding those who go a few minutes over their paid breaks, calling it "stealing from the company." The embodiment of the company's financial goals for the workers is not without a good reason. As cited by the examples earlier, the quantification of their work determines the amount of help or the number of staff hours corporate assigns to their stores. Upper management does not care if their workers had been on their feet all day, or whatever else is aching from running multiple workstations at the same time, and they needed a few more minutes to sit down (Interview with Star Market technician Camila). Pharmacists and other workers who

begin to represent the company (without calling it this) prioritize the numbers that their computers generate in hopes that their hours will not get cut and other workdays will become even tougher (Interviews with Star Market pharmacists Maryam and Claire), causing them to micromanage workers and strictly enforce both paid and unpaid breaktimes. This implicit mindset conditioning is also written and practiced through company SOPs, as with team goals and encouraged competition in the workplace (i.e., the white board of Prime Rx workers' 'Yes' scores). The data found worker resistance is never tolerated and failure to achieve fixed quotas result to getting written up or getting fired. The push to "work harder and smarter" is not always enough and does not guarantee long-term employment, as seen with companies' attempts to "crunch numbers" by reducing labor costs and cutting technician hours (Interview with Bluefield technician Leo). Workers are not only set up to compete amongst themselves, but also with nonhuman technologies that are more easily controllable and predictable.

The bureaucratization and rationalization of retail pharmacy processes can indeed yield benefits for companies, their workers, and their customers. Companies can make more money with efficient workers, calculated and predictable processes and outcomes, and satisfied customers. However, the paradox of the capitalist goal, that is to accumulate capital, lies on the progress of efficient processes centered on human consumption while disregarding some of the human components embedded in the process. The irrationality of rationalization is what Weber called the "iron cage" (Weber 1978).

Irrationalities: "When It Breaks Down"

Weber recognized the advantages of bureaucratization while being aware of the "irrationalities of formally rational systems" (Ritzer 2011:49). Based on Ritzer's discussion of irrationalities within McDonaldized systems, irrationalities are defined here as rational systems that have become unreasonable systems, denying "the humanity, the human reason, of the people who work within them or are served by them" (Ritzer 1996:121). Rational systems that are implemented to increase efficiency become inefficient when bureaucracies result to unpredictability, poor quality work due to focus on quantity, and losing control over workers and the processes or services expected by constituents (Ritzer 2011). In the data, this was evident through inefficient and unpredictable bureaucracies, when the focus on quantity lead to poor quality, and in the loss or practical and human control.

Inefficient and Unpredictable Bureaucracies

While bureaucracies are intended to be efficient, data suggested multiple ways this was not the case in the pharmacy setting, instead finding that the strict labor hierarchy in retail pharmacies causes impediments to work processes by limiting what certain workers can do. The lack of training of non-pharmacy employees who are required to help with pharmacy pick-up procedures limit their abilities to merely pulling up patient orders and ringing them up at the cash registers. Thus, even simple questions about insurance coverage or the common uses for their prescriptions must be answered by technicians or pharmacists, requiring such employees to constantly ask for help from pharmacy workers. Due to limited pharmacist staffing, when the (usually) lone

pharmacist is unavailable, all pharmacist-specific tasks halt work procedures. While pharmacists hold the most authority within the workplace, they are still limited by federal regulations, enforced by company policies that prohibit them from modifying prescriptions that may be changed to help improve the patients' treatments and/or costs. Despite having their doctorate degrees (PharmD), retail pharmacists hold no power regarding the prescribing process, unless the prescribers ask for their advice. As a result, customers are subject to delays and costly prescriptions while employers and pharmacists do not fully use their specialized education and training.

In addition to hierarchical inefficiencies, strict pharmacy policies and protocols take so much time to follow that they lead to unpredictable schedules and frustration for staff. Complex laws and government programs such as the opioid stewardship program, the Electronic Prescriptions for Controlled Substances (ECPS) policy, and HIPAA policy are extremely complicated and a have huge impact on pharmacy work. For instance, the opioid stewardship program has directed the limitations not only on prescribing opioids by doctors, but also the dispensing of opioids by pharmacists. Pharmacists have a strict checklist to follow before dispensing opioids. Bluefield pharmacist Sienna mentioned her desperation to multitask the inventory count with her overloaded duties as the only pharmacist during her shift, so that she wouldn't have to come in early or stay after. Meanwhile, Star Market pharmacist Cristina described the arduous audit process for the highest controlled substances stocked in pharmacies (C-IIs) that typically have her stay past her shifts,

> "…every week there's something. They will audit you. […] They look for patterns; did this pharmacist have a conversation with the patient, [did you know

> the reason] for acute pain, chronic pain? We have to document that now. If you can't get that information from the patient, you have to get it from the doctor."

Star Market pharmacist Cristina (when acting as the Person-In-Charge while the pharmacy manager was on leave) had to spend hours after her shifts to do weekly audits, checking pharmacist notes on the dispensing of opioid medications. Additionally, during her shifts, she struggled to keep up with the workload and other pharmacy services while also complying with the requirements of the opioid stewardship program as the only pharmacist on duty. She states,

> "…if you add the time between analyzing, [maybe] 20 minutes, and for 20 minutes on one person is a long time. You get backed up. And it's hard, [for example, especially], during flu season, you don't have the luxury to do 20 minutes when you're doing vaccines."

Juggling pharmacist-specific tasks from the general drug dispensing processes as well as other pharmacy services alone for an entire ten-hour shift was not only exhausting for Cristina, but it also put her pharmacist license and job in jeopardy. Multitasking complex tasks as such could have also been dangerous for patients who were picking up the prescriptions or receiving their vaccines. Pharmacists are overworked and constantly distracted by pharmacist-specific responsibilities their assistants cannot help them with. Since pharmacists have very limited overlap in schedule, they typically work alone. According to Bluefield pharmacist Sienna, "So it's too much stress in making sure things are done in the right manner, it's just, yeah, a lot of stress." Rushing complicated processes to try to keep up with the work pace comes with high levels of stress and anxiety in avoiding life-threatening mistakes.

Lastly, while intending to streamline efficiencies, highly regulated processes sometimes led to prescriptions not getting filled or delayed. This could be seen when observing the strict procedures on how pharmacists interact with insurance companies. The irrationalities arise when insurance coverage does not accommodate the prescribers' medication treatments. Prior Authorizations (PAs) on medications and services that are not covered by insurance must be settled by the prescriber and insurance company. Even though there may be medications that are comparable to what the prescriber wrote, pharmacists, despite having the knowledge and expertise, are not legally allowed to change or alter prescriptions without the prescriber's approval. This can lead to long wait times and high costs for patients, as well as the lack of treatment from not being able to obtain their prescriptions altogether. This process does not only affect the pharmacy's dispensing process, but more critically, the patient's health. Consequently, Leo says

> "…some patients will bite the bullet for it (a diabetic medication worth thousands of dollars)…, 'cause if we're waiting on their insurance and they need their medication now, obviously they're going to try to get it in any way, shape, fashion […], even if it's expensive."

Pharmacists do not usually contact prescribers to discuss PAs due to a specific company protocol (and because they are always overwhelmed with other tasks). Star Market and Bluefield SOPs require pharmacy workers to inform the prescriber that the prescription is not covered and wait for the prescriber to change the medication or contact the patient's insurance company. In addition to this protocol, government regulations related to changing prescriptions to similar alternatives by pharmacists have not been officially authorized. This is perhaps due to the lack of professional trust on pharmacists, according to pharmacy intern Herman, that is still observed in some patients not knowing that most

pharmacists today have doctorate degrees and prescribers maintaining their superior status over pharmacists.

The observed unpredictability that came from issues of insurance weren't limited to pharmacists' tasks. Leo also mentions Medicaid and Bluefield's recent pharmacy contract restructuring that resulted to patients being turned away for having certain Medicaid plans that are not accepted at Bluefield pharmacies any longer. Leo adds,

> "…we used to take Medicaid plans for Anthem Better Health, United Healthcare, [unintelligible] those Medicaid plans, we stopped taking them since September because we lost contract with them. […] There's only a couple of Medicaid plans that we do take ...."

Now, the majority of Leo's Medicaid patients, those living in the surrounding communities, must go to their competition, a Prime Rx pharmacy that is located approximately ten minutes away. In other words, the only way for patients to obtain their necessary medications *from their preferred pharmacies* is to pay the out-of-pocket costs, especially if they do not want to gamble on an expensive trip to the emergency room while waiting for non-formulary medications or non-preferred pharmacies to follow certain protocols. The irrationality of protocols that limit highly trained professionals to mere operators of new technologies and patients not receiving the services and treatments they need in a timely manner cause efficient processes to become inefficient, and even harmful for patients who cannot obtain their medications right away.

Focus on Quantity Equals Poor Quality

An additional observed issue was when the concern for measured quantities overrode the quality of service, relationships between pharmacy workers and customers,

or the sense of job security among workers. For example, as Hailey pointed out, a low 'Yes' score may risk one's job. "If people just aren't saying yes to you, then corporate will assume you're not asking, and then you'll get written up, to the point where you could be fired […] No one ever wants that (immunizations). Everyone's like, please don't [do] anything. I just want my stuff and leave. Thank you," Hailey added. Instead of connecting with their patients to establish rapport, especially with local regular customers, pharmacy workers are obligated to offer more services even when they personally believe (and have observed) that customers do not want such services. Depersonalization, in this regard, extends from pharmacy work to the social interactions between workers and customers.

In addition to regular reminders about workers' 'Yes' score quotas, Hailey continues,

> "We have a little white board in the back (of the pharmacy) that has everyone's names and their percentages, that you can see you and then you compare it to other people, so it gets competitive. It's definitely a heavy weight that's put on."

Worker 'Yes' scores turn certified and licensed healthcare professionals into salespersons. The goals or quotas are not set and enforced based on customer needs and the demands of the job. For example, if the pharmacy is already short-staffed, recommending a customer to process an immunization request at the drop-off window without anyone being able to help him/her there is not efficient nor sensible, only adding work to a short-staffed pharmacy.

The emphasis on numbers has become more visible during the pandemic. Although most of the participants only observed their pharmacies slow down for a few

months after the shutdown in March of 2020, some retail pharmacies like Bluefield are still cutting technician hours. Bluefield pharmacist Sienna states,

> "I don't know what metrics they (corporate and management) look at to be honest with you, I have no idea what metrics they look at when they're deciding on the [hours]… I think they think if we're doing okay with the kind of load that we're handling, they probably think that we could do okay if they cut down a few hours here and there. I don't know what their logic is to be honest with you. They have no… whoever is doing the budgeting and stuff, they have no idea what ground reality is. It's hard [pauses] because yeah, like sometimes working with one tech in the evening and that tech, poor thing, they're like rotating like a pendulum from front end to drive-thru. That is just one person…"

Calculating the budget for technician hours based on the store's performance or revenue directly affects the tasks that can be divided among the technicians. This rationalized decision-making process only considers factors that can be measured by numbers, thus, its effects on pharmacy work does not equate a rational reality. This Bluefield pharmacy is understaffed despite the number of prescriptions they dispense and the new COVID-related services they began offering. It is not clear to Sienna as to why her company would cut hours despite the business sales they maintain in her store. Perhaps what they are trying to do is similar to what they attempted with COVID test appointments. Overscheduling appointments due to cancellations hit the pharmacy hard when patients began actually showing up. According to technician trainee Leo,

> "…they (corporate) kind of sprung the double amount, like we originally only had 25 at a time at first, but then suddenly corporate was like *oh well you're not filling as many of these because so many people don't even show up so we're just going to double your stuff on Christmas Eve and not tell you*, […] There was no prior warning to this happening, and it happened on Christmas Eve, which was not fun at all."

The number game is played by one player only—the employers. It seems that the push is to see how much more their workers can manage. Pharmacy workers nor customers do

not get to give their input on what their stores need, such as technician hours and service appointments. Consequently, panic and confusion are bestowed upon patients and workers. When workers are overwhelmed and the work is disorganized, the quality of goods and services decline. The most irrational part is that when the quality goes down, customers tend to leave. So, to echo Ritzer, *who is this rational for* (1996:123)?

Losing Human and Practical Control

As Weber predicted, bureaucratic processes would lead to losing control over workers and the processes or services expected by constituents (Ritzer 2011). Observational and interview data clearly indicated pharmacies did not have control of workers, pharmacy workers did not have control of hours or tasks, and the retail aspect of retail pharmacies meant limited control in terms of customer-pharmacist interactions.

Based on interviews with pharmacists and pharmacy techs, it was clear that employee turnover was an issue among all pharmacies in the study. The widespread adaptation of new technologies that increase the efficiency and predictability of work procedures, along with technician experience and skills, force workers to do more with less. Interview participants observed that experienced technicians are quitting and leaving retail for non-retail pharmacy jobs or even other fields. In fact, most of the technicians interviewed in this study have current plans to leave their retail pharmacy job. Some trainees interviewed had already left pharmacy work. For example, technician trainee Sophia claims that before COVID, she had always worked as the only technician during her 8-hour shifts at Prime Rx. With no certified technician help, she eventually quit prior to getting her technician license and decided to pursue dental school instead of pharmacy

school in the future. Losing experienced technicians due to issues that could be addressed is largely irrational and clearly indicates a breakdown in the system. Further, it impacts other workers who were forced to adjust their schedules to accommodate. For example, Mimi, who became a Star Market technician trainee before COVID was forced to work overtime to cover regular technician shifts to the detriment of her own mental health. She states,

> "Back I used to work 9 AM to 9 PM because a lot of people quit and they, some of them were fired because of calling out too much, and that's, it was difficult you know, you're so stressed out, you come in, you're working the next day, you're not ready for it but you have to do it."

Clearly, retail pharmacies have been taking advantage of uncertified (trainees) and non-pharmacy workers to aid the shortage in experienced and certified technicians that is caused by unreasonable work expectations and low compensation.

While pharmacies lost control over their employees, Mimi's example highlights how the bureaucratic system of the pharmacy has also led to pharmacy workers themselves losing control of their own schedules and tasks. Because Mimi had to cover the tasks of employees who left, she did not finish all of her training requirements and was not given an extension by the company. She was then demoted back to the front cash registers where she was initially recruited by the pharmacy. Had the pharmacy been able to go outside standard protocol and offer her an extension on her training, they might have had a new and experienced certified pharmacy tech. Instead, they must use resources to recruit and train a new hire.

In addition to the ways SOP's limited worker control over tasks, new COVID protocols also led to work and task uncertainty. For example, when insurance overrides

were issued to provide early refills during the pandemic, as well as longer medication supplies on covered drugs, extending the coverage from a 30-day supply to a 90-day supply, the pharmacy workload expanded significantly. As Oliver puts it,

> "we really got backed up with that because people, like I said, just panicking and they wanted to get all their medications at one time, trying to get overrides, even though it was something that wasn't due, they still wanna get an override from the insurance company, just so they were sure they have medications 'cause they don't know how long it would be before, you know with the uncertainty of the pandemic, they weren't sure how long it's gonna be and just not sure about the medications. So that really, on top of the regular daily activities, that really ramped it up."

While this was a desired change from insurance companies, retail pharmacies experienced a lot of shipment delays and manufacturer backorders to fulfill prescription orders due to the sudden increased demand for the most common medications. Though flexibility was introduced to the highly bureaucratized insurance claim process because of the pandemic, pharmacies had no control over other elements of the process (i.e., manufacturing companies and shipping) and thus, had to deal with the customer backlash of backorders and recalls that halted supplies.

The last observed break down in the ways bureaucratization worked against pharmacy workers was how 'customer first' protocols, common in retail setting, led to unreasonable expectations from customers in a pharmacy setting. Pharmacies do not just sell medications and interview participants frequently mentioned the difficulty in explaining complex laws and company or insurance policies to patients when they demanded their medications. Aida says, "they do not understand," while Camila points out that,

> "[e]ven I didn't know about pharmacy before I started working there. I didn't realize how much work everyone does behind that counter. You think they just okay you just fill my prescription, that's it, just put it in a bottle right, here's my prescription, put it in a bottle."

Slapping a label on a bottle that can either save or take someone's life is already justifiably complex. But when taking into account the cost of what's being put into that bottle, then it becomes even more complicated. Along with laws and regulations are processes to get prescriptions paid for; copays, deductibles, the Medicare "donut hole" (Medicare 2021), and prior authorizations (PAs) are some insurance-related terminologies pharmacy workers must explain to customers regarding their insurance coverage. Retail pharmacists may be "obligated, not just morally but by law, to make sure that the patient is safe" (interview with Herman), but they still have no power to override insurance formularies, nor federal policies. However, customers do not understand these processes and the skills and training required of pharmacy workers, especially technicians, often treating them like retail salespeople. According to Camila,

> "I feel like the patients, when they hear manager or the pharmacist speak to them, they're, it's a different attitude than if it was just a tech talking to them. They don't really take us seriously."

Housing pharmacies in retail spaces means that retail expectations frame workers experiences and interactions with pharmacy customers.

COVID-19: "What Now?"

Worker exposure to COVID-positive patients incite fear, anxiety, and more stress. They are more overworked with the added cleaning procedures in between patients while being short-staffed from the increasing technician turnover or coworkers getting sick. Additionally, new services and training are taking time away from their conventional

duties. According to the study participants, the new services' (i.e., curbside service, mail-order, COVID testing and vaccinations) experimental phase, including worker training, are not properly introduced and implemented. When workers are not properly trained, they are not equipped to educate their patients on processes that they themselves are not familiar with. This results in more misunderstandings and mistakes.

In order to compensate for shortening their operating hours, limiting the store capacity for customers, and the decreased financial gains, retail pharmacies similarly pushed out more responsibilities on workers through these new services. Increased drug adherence calls, curbside parking spots, and technicians physically delivering patient prescriptions to their homes were incorporated into pharmacy procedures. All the while, companies remain oblivious to the work issues that cause technicians to leave their retail jobs, such as low compensation. Instead of increasing technician wages or hiring more certified help to alleviate the work on their staff, they cut technician hours using the reason that the company is losing money due to the pandemic-related decline in prescription dispensing. All the while, companies increasingly use non-certified workers to assist with new services. For instance, the Bluefield store included in this project and its acquisition of a PCR machine for COVID testing required front-store cashiers and other store employees to obtain their company-issued computer training to operate it, instead of pharmacists and certified technicians.

Other examples on the irrationality of pursuing new COVID-related services include not being provided enough resources. One Star Market pharmacy in this study had only one phone that receives curbside service calls when five parking spots were

designated for the new pick-up alternative. This required customers to remain on-hold on the phone when multiple cars show up at the same time. Mail-order delays occur not only from the backed-up postal service but is also caused by the lack of technician help in preparing the orders in the pharmacy. Finally, the stress and anxiety on workers to continue doing their jobs unprotected from people who refuse to wear masks or follow CDC guidelines, are not firmly addressed by management. At Star Market, pharmacy workers worry about customers coming to the pharmacy without wearing masks or practicing social distancing. Additionally, they are blamed by other customers for not enforcing these regulations during their shifts while the company protocol does not allow them to confront such patients and decline them service if they do not comply.

Being at the frontline of a global pandemic, retail pharmacy workers need help and support. Data overwhelmingly showed that corporations like Star Market, Bluefield, and Prime Rx rationalize their procedures as directed by financial gains. This was exemplified in the clear bureaucratic elements of hierarchy, task-oriented workstations and procedures, and rigid company policies and government regulations. Further, principles of McDonaldization (efficiency, calculability, predictability, and control) were also evident as mechanisms influencing work structure and worker experiences. And as Weber (1978) predicted, the heavily bureaucratized structure of the pharmacy has led to irrationalities and loss of control. Among the data it was evident in the ways bureaucratic systems became inefficient and unpredictable, in the lack of control pharmacies had over workers, workers had of their tasks and interactions, and in the ways quality was usurped

by quantity. Lastly, it was seen that COVID has largely worked to exacerbate the negative outcomes of the rigid bureaucratic systems retail pharmacies have become.

CHAPTER FIVE | DISCUSSION AND CONCLUSION

The aim of this study is to demonstrate how institutions and processes determine the work structure and experiences in retail pharmacies, and how these have been impacted by the COVID pandemic. More specifically, the institutions and processes explored here include bureaucratization, capitalism, and McDonaldization. These themes were selected to provide a connection between major institutional factors and their effects on retail work. As highlighted by Swingewood (2000), work experiences can be analyzed through a *structural* lens which focuses on institutions and processes that restrict and govern workers actions, or a *voluntarist* one, which highlights the creative and active role of social agents. Despite modern technological advances, the majority of service work in retail are still performed by humans, who with their social and cultural predispositions, receive, navigate, and give meaning to the elements that affect their daily work-lives. By investigating the work experiences of retail pharmacy workers and how they manage their tasks, I found that similar to previous studies in work and organizations, work conditions of retail pharmacies are largely shaped by the institutions found embedded within societies, with only limited space for pharmacy workers to creatively and actively manipulate or change their work conditions. Additionally, the processes and structures that shape pharmacy work are doing so in ways that are increasingly irrational and

alienating to pharmacy workers, and the global pandemic has exacerbated these negative experiences.

Rationally Efficient Humans and Manuals

The bureaucratization of retail pharmacies is seen on the widespread application of the same procedures that rationalize the capitalist process of production (Smith 2017). Internal and external systems work hand in hand to shape work processes. Internally through company manuals containing protocols that must be strictly followed. Some of the examples I found were the step-by-step process of filling and dispensing prescriptions, the division of labor and role hierarchy between pharmacists, assistants, and non-pharmacy workers, work tasks based on assigned workstations, break/lunch time limits, work performance expectations based on numbers, the preset due times to finish processing prescriptions, and the systematic use of technologies for recordkeeping of patient information and inventories. External systems that significantly shape work procedures include government mandates, drug laws, insurance companies and formularies, drug manufacturer issues, and professional licensing organizations. These systems standardize pharmacy work to provide consistent and efficient processes—the rational goal of bureaucracies. Without regard to the personal characteristics of the individuals involved, impersonal rules and procedures are implemented to divide the labor logically while maintaining the ultimate collective goal of the organization (Handel 2003).

The success of retail pharmacies, especially seen with the corporate chains included in this study, illustrate the application of bureaucratization and rationalization

(Weber 1978) in corporate capitalism. These companies' highly efficient procedures that maximize profits and minimize costs, especially labor costs, are rooted in these institutions. Taylor's Scientific Management methods (1947) are still applied today, more so in retail work, which includes retail pharmacies. Retail pharmacies are constantly and increasingly demanding multitasking several workstations in order to increase the efficiency of their workers. The management of tasks is reinforced through company protocols and employee training, and the results reviewed by corporate overseers of the numbers generated by the stores. The measurement of the "good worker" merely relies on her/his numbers (i.e., 'Yes scores' and number of prescriptions processed). The company's standard operating procedures (SOPs) direct what responsibilities belong to which workers, how tasks are completed, and how to respond to external (sometimes unpredictable) factors that are affecting work procedures (i.e., manufacturer delays, insurance denied claims, drug laws). Moreover, systematic recordkeeping through the aid of technological advances is widely adopted to ensure the accuracy and efficiency of work processes.

As healthcare and corporate capitalism converge, the organization of retail pharmacy work is becoming more rationalized and bureaucratized. Corporate capitalism's use of large-scale and complex machineries was demonstrated with the constant adaptation and application of technological advancements of retail pharmacies. Thus, making the organization of workers and procedures more efficient. The rigid hierarchy of field professionals and systematic recordkeeping provide reliable, consistent, and detailed task performance according to a collective goal. By working with

governments and other external bureaucratizing institutions, corporations attain mass production capabilities "not based on materials and gadgets, but on principles of organization" (Drucker 1993:21).

The pharmacy's hierarchy of roles and division of labor ensure that the appropriately trained and experienced professionals are handling the critical work of retail pharmacies for the sake of patient safety and privacy, while those at the bottom of the hierarchy are increasingly dispensable. Their roles and work responsibilities are logically decided according to the education and training of the job positions of pharmacy workers. This evidently makes rational sense, for patients will not take treatment advice from a pharmacy cashier, but most likely will if it came from a pharmacist who has specialized in the field. The work responsibilities between certified and non-certified pharmacy technicians do not vary significantly, while pharmacy cashiers also require very little training to finalize the sale of prescriptions to patients. This suggests the standardized procedures, especially for pharmacy assistants, that require minimal training on how to operate the technologies in retail pharmacies, making them precariously replaceable. As a result, retail pharmacy companies integrate non-pharmacy workers to help with the dispensing of prescriptions and address the shortage of certified pharmacy technicians while lowering labor costs.

The unequal power structure among the workers is created based on their roles and financial compensation. Though some of the pharmacist participants are not satisfied with their current retail jobs, significantly more technicians are leaving and are planning to leave their retail pharmacy jobs. Star Market Camila mentioned the unequal respect

and recognition pharmacists receive from the public compared to how technicians are treated. However, most of the technicians interviewed referred to the unequal and low compensation technicians receive for the amount of work demanded from them. The loss of certified pharmacy workers with years of training and experience is the direct result of the "irrationalities" – the loss of humanness in work processes (Ritzer 1996) – in rationalized processes and the goal of corporations to maximize returns.

Aligned with Weber's claim that rationalized processes cast aside human elements and focuses on objective goals through calculable standards, the retail pharmacy has created an "iron cage" in itself. Rationalizing practices such as Scientific Management (Taylor 1947), in which processes such as insurance prior authorizations require certain steps to be followed, even if the patient is in critical need of treatment. This results to depersonalization and dehumanization in the workplace. Pharmacy workers must always follow strict standardized protocols to keep their jobs secured. Pharmacists cannot override prior authorizations and change prescriptions to other similar drugs. Unlike prescribers, retail pharmacists may not have access to the patient's full medical history, thus, rationally limiting their capabilities to help patients with certain situations. Even as experts in their field, they are strictly bound by company policies and drug regulations. Their failure to comply may result to termination and/or other legal plights. Pharmacy workers have limited personal agency and means to express creativity in their work. For instance, their professional judgment is extremely limited. Even though they are rationally bound by such factors, there is no system that allows them to practice and apply the education and training they received. Referencing Marx's words, pharmacy

workers are reduced to machine operators and generators of surplus value through their labor, which is maximized by the companies they work for that minimize their economic power, by making them work the maximum hours with minimum pay (Walsh and Zacharias-Walsh 2011) while increasingly turning them into an easily replaceable labor force.

The arrival of a global pandemic came with new alterations to retail pharmacy processes. Corporate pharmacy giants, the three here included, successfully adapted to the new demands, proving their resilience to cater to their "corporate social responsibility" (CSR) (Ding et al. 2021; Herzik and Bethishou 2021; Nadeem et al. 2021). These include government guidelines on work procedures and new services to adapt to business demands. Pharmacy workers found themselves in the middle, if not in the front lines of the COVID-19 pandemic. They addressed the gaps created by the pandemic between doctors and their patients.

The efficiency of retail pharmacies in providing immediate services was mentioned by pharmacy intern Herman, "we are the most accessible healthcare provider that is out there". When referring to setting up appointments with their doctors he said, "If you think about patients' time, […] sometimes it can get a little frustrating for patients." Instead of trying to schedule an appointment with a doctor or go straight to the emergency room for a minor ailment, patients can call or visit any retail pharmacy and get a healthcare professional's advice for free. Although pharmacists are not allowed to prescribe prescription medications, Herman argues that through a free consultation, patients may avoid wasting time and money, especially if the pharmacist can recommend

over-the-counter (OTC) medications or treatments that may resolve the issue. Retail pharmacies began offering COVID tests and vaccinations, as well as alternative ways to obtain prescription medications, including mail-orders, home deliveries, and curbside service. Additionally, computer and machinery updates were employed to efficiently help pharmacy workers on these new procedures. Some existing procedures were modified to make room for the new ones, such as incorporating drive-through procedures with testing.

Unfortunately, new SOP modifications and technologies did not significantly alleviate the work pharmacy workers were required to do, they even added to their work. As a consequence, retail pharmacy technicians are quitting their jobs. The "great resignation" phenomenon or the widespread labor shortage in the United States include technician jobs (Harmon 2021; Woods 2021). Even though corporate chains are offering financial incentives, such as sign-on bonuses, referral bonuses, and increased monetary compensation (Jackson Pharmacy Professionals 2021; Medium 2021), technicians are not coming back. Those who stayed are increasingly experiencing constant stress and burnout from the shortage of staff and increased demands both from their conventional procedures and new COVID-related services. Bluefield pharmacist Sienna communicated the challenges in the technician shortage during our recent conversations, and finally turned in her two-week notice. The pandemic provided that last push that finally caused pharmacy workers to say "enough."

Although I previously hypothesized that technicians may experience negative feelings toward the pharmacy practice because of the lack of career growth within it, in

addition to the significantly lower compensation and occupational status their pharmacist coworkers are given, I do not have sufficient data to support this claim. The limited career ladder or the promotion to a lead pharmacy technician came up several times but none of the interview participants communicated any negative feelings about the lack of career mobility. They were well aware that the only way to move up is to become a pharmacist, but the majority of experienced technicians do not aspire for this position. What they do aspire to is a career change, being fully cognizant of the similar fate with other retail pharmacy companies. This 'iron cage' is pushing technicians out of retail pharmacy.

McPharmacy: New and Unimproved

The rationalizing motivator of McDonaldization is the capitalist goal of maximizing returns while minimizing costs through the four principles Ritzer identified, efficiency, calculability, predictability, and control. However, Ritzer also drew on Weber's assessment of the irrationalities of rationalized systems. The main irrationalities found in retail pharmacies align with Ritzer's irrational claims in McDonaldized systems, which include unpredictable results, poor quality products and/or services, and the loss of control over workers and processes. In this section, I discuss a summary of the McDonaldization principles, their rationalizing influence on retail pharmacies, and the irrational consequences that they produce.

The McDonaldization of retail pharmacies based on the efficiency principle is evident in their daily SOPs, use of specialized technology, and the requirement to constantly multitask work activities. SOPs are strictly followed to standardize efficient

processes and are modified at the corporate level with the aim of improving procedures, such as the switch from conducting on-site COVID tests to dispensing at-home test kits. Companies found that updates on technological advances also increase efficiency and productivity, thus are constantly applied. These advances are so "fool-proof" that non-pharmacy workers and new uncertified technicians require very little training to process prescriptions out to patients. Companies attempt to address the lack of certified technician staffing by using non-pharmacy employees (salaried managers or store cashiers) with fixed income and lower hourly rate than technicians meant that the company could keep reducing labor costs while sustaining their operations and keeping the consequences of using untrained and inexperienced workers at bay by limiting their tasks. New technologies, additional services, and alternative options for availing pharmacy services, especially during the pandemic (i.e., testing and vaccinations), were made possible by the capital corporations amassed to adapt to new business demands through restructuring SOPs and updating their equipment and applications.

The pressuring demand to multitask is embedded in SOPs, as well as within the work culture, which can be dangerous. Pharmacy workers strategically come up with ways to efficiently increase their productivity, internalizing the "collective goal" – which to them, is to do the most in the least amount of time. However, the pressure on workers to speed up processes to keep up with the work pace and all their job responsibilities produce irrationalities. To keep up with the increasingly unattainable job demands pharmacists must often risk their jobs and careers, especially when they are the only pharmacists working. For example, Star Market pharmacist Christina did thirty-seven

immunizations within a 12-hour shift by herself while also doing her pharmacist-specific tasks, including checking the work of her technicians, counselling patients, transferring prescriptions, checking MME scores, etc. Such multi-tasking could easily result in errors that would risk her job and patient health. Additionally, when the pandemic began and Star Market technicians call for translation services, instead of having the translator tell the customer to call back through his/her private phone so they do not have to share the same phone (the traditional process that keeps patient information private), to manage the demand for fast services while staring at long lines at the pharmacy, workers resorted to putting the call on speaker so they can manage other tasks as the same time. This disregard of company SOP and exposing patient information may not only result to termination but also the consequences of noncompliance to the HIPAA law, which includes fines and even jail time. It is not known whether managers and other stakeholders are unaware of this routine violation of HIPPA regulation, or if they are simply betting that customers who need translation services are not likely to file legal complaints. Either way, at the time of this writing the issue had yet to be addressed. The work environment in retail pharmacies implicitly encourage these risks to maintain the required work pace and the pandemic has seemed to exacerbate this issue.

Despite the rational application of the labor hierarchy in retail pharmacies, it causes impediments to work processes by limiting what certain workers can do and the pressure that comes with the pharmacist role. Pharmacist-specific tasks halt processes because work shifts typically only have one pharmacist working. The pharmacist role is also limited by government and company policies (i.e., no power to prescribe or change

prescriptions to covered equivalents). Those that they can follow come with complex and demanding tasks that can put their licenses and jobs in jeopardy due to the stress and anxiety of constantly rushing and multitasking to avoid falling behind on their tasks and/or making mistakes. Conversely, even if pharmacy cashiers and non-pharmacy employees are willing to take on more tasks, they are very limited to the pick-up procedures. This results to dispensing delays, the limited application of pharmacists' education and specialized training, and stress and anxiety in the workplace.

Measuring the amount of work by pharmacy workers has been simplified to the quantification of the time they spent in each step of the work process and the total amount of prescriptions they dispense. This parallels Ritzer's claim that McDonaldized institutions emphasize time and money (2019:21). Clearly, quantifying the work and output in retail pharmacy work prioritize quantity over quality. Computer systems dictate work processes in terms of priority, to efficiently direct the workers' attention, maximizing their efforts to complete tasks. Elements that are easily quantifiable provide corporate leaders to work and distribute store budgets remotely. Thus, "doing more with less" has become the mantra for accomplishing quotas and other target figures (i.e., 'Yes' scores), numbers that corporate offices take into account when planning for staff hours and other store budgets.

The undesirable and irrational consequences of relying on numerical metrics were openly expressed by the pharmacy workers, no matter which of the three companies they work for. Cutting technician hours based on the number of prescriptions dispensed by the stores, although lowered by the pandemic, is not rational. Other factors, especially

COVID-related ones that include manufacturer delays and new services and procedures, significantly contribute to the filling and dispensing of prescription medications. Since these factors are not easily quantifiable and does not generate profit, they do not attract attention and effort for change from employers. Consequently, pharmacy workers are always short-staffed and overworked while customers are unhappy with long wait times, unresponsive pharmacies despite of being contacted during their operational hours, and other delays caused by external forces.

Predictable processes and interconnected computer systems provide effortless and simple tasks for workers, feelings of security for customers, and control for employers. Retail pharmacies utilize Scientific Management principles that break down and simplify tasks through technological advances and SOPs that dictate work. Since these tasks are highly predictable, some pharmacy workers prefer them over performing customer service work, which is significantly shaped by unpredictable interactions with customers. In the employers' attempts to also standardize this aspect of the job, they created scripts and computer prompts that routinize the interactions of workers and customers and create equal and fast service to all customers. Predictable behaviors from customers are induced through physical cues, structural constraints, and internalized norms when using pharmacy services. These include service signs, stanchion posts, drug laws, insurance formularies, and certain procedures that customers must follow to obtain their prescriptions in a timely manner, such as requesting their prescriptions online or over-the-phone in advance. Moreover, the interconnectedness of chain pharmacy systems provides efficient and predictable results to workers, customers, and employers. Workers

can pick up shifts or transfer to other locations when necessary while customers can transfer their prescription refills and be able to navigate the same systems and procedures. Employers can save time and money from training new hires who have work history from the same chain store and welcome customers who are used to their brands, products, services without the effort of making the pitch or paying for additional advertisements.

The predictability principle takes work procedures to another level by requiring pharmacy workers and customers to act like the machines they use. The mind-numbing routines, scripts, symbols, and internalized norms that limit the creative role of individuals result to robot-like meaningless interactions. Pharmacy workers "do not have the luxury" to spend time connecting with their patients. The constant demand to move on to the next tasks while complying to the required quotas of the company force workers to strictly follow the scripts and SOPs even in customer service. Similarly, customers get used to pharmacy procedures, that they elect contactless services even before the pandemic (i.e., mobile pick up and mail deliveries). Companies are succeeding in eliminating the humanness embedded in retail pharmacy work.

Control from technologies include machines, tools, skills, rules, procedures, and techniques (Ritzer 1996), that are used in work management and standardization to increase productivity, accuracy, and profit while reducing costs. In retail pharmacies, control is found in SOPs, pharmacy laws and government regulations, insurance and manufacturer procedures, technological advances, worker-learned techniques, and the new changes caused by the pandemic. Changes are introduced by the company to preserve or gain control over processes that overwhelm their existing systems. For

example, Star Market's DME-claims team, order-in-site, and mail-order applications, as well as Prime Rx's register prompts, mail-order adherence system, and the new contactless systems and services. Workers also learn personal techniques to strategize their workdays that is typically aligned with the company's efficiency goals and quotas. The embodiment of the company goals is unescapable, for worker resistance or lack of compliance is met with write-ups and terminations.

The competition between human workers and robots covertly hides behind cooperation and support. As operators of new technologies in pharmacies, workers learn to use them to assist in their tasks. Once efficiency and productivity are achieved to a certain level, these technologies, like the AI ordering system, become less dependent on the workers. And workers are left with less workable hours from "budget cuts." Those who manage to keep their hours are unwittingly controlled by the same technologies. Such an example was the use of register prompts to dictate the interactions between workers and customers at the Prime Rx pick-up station. Since robots are more easily controlled by employers, the application of them on workers prevent hostility between employers and employees (Ritzer 1996). Cutting worker hours while relying on computers continuously removes the human aspects of the job, even the service aspect of it.

Additional irrationality in retail pharmacy work arises when control over pharmacy workers reduce their capabilities and expertise to checking boxes and pushing buttons. For example, insurance formularies significantly influence work procedures. Due to the limited coverage of insurance plans, prior authorizations (PAs or the process of

getting prescription drugs covered that is handled by physicians and insurance representatives) cause treatment delays and possibly more out-of-pocket costs to patients. Although pharmacists specialize in pharmacotherapy and most with years of experience with a variety of prescription medications and treatments, their expertise is sidelined. While prior research suggests there is a desire for both pharmacists and physicians to collaborate (Kelly et al. 2013), the present research demonstrates the systematic ways pharmacist work has been reduced to pushing buttons on computers and handheld devices in processing and selling prescription medications, effectively limiting pathways for pharmacist agency and any real collaboration between pharmacists and physicians.

Retail pharmacies are losing control over the workers who are quitting their jobs. Because of the unreasonable work expectations, low compensation (for pharmacy assistants), and constant cutting of staff hours, a shortage of certified technicians has been a recurrent scene in retail pharmacies. This results not only to poor quality of work, but also the decreasing customer and job satisfaction. Some pharmacists, like Sienna, even consider going back to school after only a few years of paying off student debts for a career in Information Technology. In her attempt to leave the mental burden of weighing professional morality with business, as well as other factors that contribute to her work-related stress, Sienna contemplates on taking on what to her seems like a more sensible option—to leave the pharmacy field completely. The decreasing work satisfaction for workers, resulting to the loss of trained and experienced pharmacists and assistants, cause inefficiency for companies to have to hire and train new workers. Unfortunately, unfamiliar and untrained workers are not trusted by customers, which then can result to

them going to other pharmacies for their prescriptions. Similar to pharmacy workers' dilemma, the prevalent irrationality shared by the same business structure of retail pharmacies has also become inescapable even to customers.

The Alienating Iron Cage

While Weber (1978) claimed the primary cause of bureaucratization was the competitive marketplace, DiMaggio and Powell (2003) argue that even though homogeneity and bureaucratization remain common in organizations, institutional changes occur from processes that make them more similar rather than efficient through what they called *institutional isomorphism*. In healthcare this is most evident in forms and processes organizations adopt "less as a matter of technical rationality or increased efficiency than as a means of meeting the expectations of significant actors in the environment" (Allen and Pilnick 2005:687). The inescapable retail pharmacy business model has been so widely adopted by the most successful retail pharmacy companies that both customers and employees find themselves in the same situations even after transferring to another. Due to the same business model, retail pharmacies take on processes that make them more similar, rather than efficient. The highly bureaucratized pharmacy laws, licensing regulations, and company protocols built the 'iron cage' of retail pharmacies. The corporate form of the biggest retail pharmacies in the United States adapt and take on the same processes, not only to enable them to successfully compete against each other but also because of external guidelines that dictate the professional practice of pharmacy as a whole. The outcome is that all retail pharmacies have become interchangeable and pharmacy workers cannot escape the same work fate

unless they leave retail pharmacies for other pharmacy settings (i.e., hospital, specialty, and nuclear pharmacy) or a completely different field. Something that is already happening, causing retail pharmacies to struggle with their operations that result to long wait times, unhappy customers, and reduced operating hours (Woods 2021).

Weber (1978) saw the competitive marketplace as the most important and irreversible, referring to the iron cage of rationality. The cultural implications of innovation from the constantly advancing technologies and the modern way of life fuels standardized practices and expectations for efficient and cheap products and labor. Thus, retail pharmacies cater to new market demands (like the "one-stop shop" concept) by adopting more services and selling additional products, accumulating more capital through the application of the same motivators – new technologies and standardized practices – a cycle that also reproduces the irrationalities within its design. The iron cage of rationality is created by the "irrationalities" within rationalized systems. Irrationalities are unreasonable systems that deny humanity and human reason to those entangled in the process (Ritzer 1996). The work culture centered on measurable work statistics and highly efficient systems that yield monetary incentives for retail pharmacy companies is very clear to pharmacy workers. Thus, pharmacy workers can foresee what kinds of services and procedures their employers will incorporate into their daily routines. For instance, prior authorizations are passed on to prescribers not only because pharmacies do not have access to full medical patient profiles, but also because they do not receive financial credit from insurance companies in doing so. Pharmacies will, however, get the compensation whether the medication is changed or not to something that is covered by

insurance eventually. Further, procedural and structural changes that did occur at the pharmacy were due to changes in insurance contracts (Gaynor and Town 2011), as seen with Star Market's creation of an external team to cater to changes in Medicare, and not to better care for workers or client health. The discrepancy in addressing improvements concerning patient health is found in what gets paid instead of what will improve healthcare.

Irrational work processes result to poor quality work, as well as decreasing customer and job satisfaction. This is seen with similar examples in other workplaces Ritzer (1996; 2011; 2019) provided. Specifically, those in retail pharmacies include long wait times, long pick-up lines, unfair or overly strict division of labor, animosity toward non-human technologies, abusive work practices (i.e., forced overtime, lack of breaks, low compensation, unreasonable work expectations), lack of trained workers and career mobility, required robot-like social interactions between workers and customers, and worsening work-life balance. Retail pharmacy companies amass and regenerate capital through the exploitation of pharmacy labor. Marx's definition of labor exploitation (Wolff 1999) does not only account for the consequences of unsatisfactory and abusive work practices, but also the massive regeneration of capital through a management model that prioritizes numbers by minimizing wages paid to workers and maximizing the sales of products and services. While workers desperately struggle to leave their current pharmacy employment to find better work environments and higher wages, the most successful retail pharmacy giants' *horizontal integration* (Schmitz 1993) or acquirement of smaller companies and even their *vertical integration* (Schmitz 1993) or the

implementation of other public health services allow them to retain and regenerate more capital to afford competing against other retail pharmacy giants. This growing competitive market within retail pharmacies further cause them to become more alike, taking on aspects of institutional isomorphism (DiMaggio and Powell 2003), which ultimately allows them to dictate changes within the entire practice.

New studies centered on pandemic-related challenges faced by healthcare workers have recently been conducted (Koontalay et al. 2021). However, despite the shortage in pharmacy workers, the lack in research that address general healthcare worker concerns such as low compensation, reduced staff hours, and work-related burnout persists. This study adds to previous research that address the sources of work-related dissatisfaction of pharmacy technicians (Desselle and Holmes 2017), unreasonable levels of workload by pharmacists (Doucette et al. 2019), and the collective feelings of stress and burnout from emotional exhaustion, depersonalization, and reduced personal accomplishment in the job (Gaither et al. 2008; Durham et al. 2018; Jacobs et al. 2018). I argue that these feelings are rooted in Marx's concept of *alienation* (Marx 1844), and that the diminished connection between pharmacy workers and products are maintained and reproduced by highly bureaucratized and rationalized systems that limit agency and the personalization of work to attain efficient and reliable results. The retail pharmacy trap has become an iron cage that strips humanity away from workers, and some of them are now trying to break free.

The pandemic worsened the work conditions and processes in retail pharmacies. Although insurance companies allowed more flexibility in refilling prescription

medications early, retail pharmacies cannot fulfill the increasing demands, especially after they started offering more services. The three companies included here began offering COVID tests and vaccinations, as well as prescription mail-orders, home deliveries, and curbside services. No matter how often they improve their computer systems and buy new robots (i.e., Bluefield's PCR machine for rapid testing), without experienced workers, their procedures cannot continue. Manufacturer delays and backorders also had a huge impact on fulfilling prescription orders. Since pharmacists cannot substitute other generic equivalents, the process is delayed by having to contact prescribers who now also have limited hours and insurance companies to approve prior authorization requests. The outcome is more work for pharmacists and more delays for patients.

Furthermore, retail pharmacy workers are experiencing burnout, fear, stress, and anxiety from constantly being exposed to the community, especially when companies choose not to enforce the CDC guidelines of mask wearing and social distancing (as mentioned by Star Market pharmacy workers). The increase in worker callouts, many interview participants said, is caused by these feelings, as well as acquiring the virus themselves. While stores shortened their operating hours and initially limited the store capacity, the training and implementation of new services were so poorly handled that caused more confusion and misunderstanding between workers and customers. The irrationalities found in retail pharmacy processes continue and are exacerbated by the consequences of the pandemic, causing those at the bottom of the work hierarchy to leave the field while customers lose access to their life-saving medications.

Present and Future Research

While the majority of academic research in retail pharmacies are centered in program evaluations, which focus on the increasing demands for new public health services and how retail pharmacies can address them (Weaver 2015; Bukhari et al. 2020; Hess et al. 2020; Herzik and Bethishou 2021), they fail to address the concerns of the workers trying to keep this institution from crumbling down. This study is meant to address the current lack not only in retail pharmacy research but also healthcare work research. Studying retail pharmacies offer elements of business and healthcare work and organizations, making visible the conflicting nature of capitalist efforts to please market demands and the requirements of complying with highly bureaucratic healthcare-related laws and regulations. Retail pharmacy workers are situated in the crux of these conflicting demands which negatively shape their day-to-day work experiences. Subsequently, this research found few positive experiences among pharmacy workers, suggesting pharmacy worker shortages will continue unless significant structural changes take place within the broader structure of pharmacy work.

Similar study design and methodology can be applied to other healthcare fields that are increasingly privatizing. The rise of urgent care chain clinics, for example, that employ doctors, nurses, and other medical professionals has the same motivating elements. The capitalist drive to pursue profit while complying to government guidelines, as well as medical laws and professional practices, trap medical professionals in conflicting situations while constantly being forced (and rushed) to do more. Emergency rooms and urgent care facilities can cost a fortune even when they merely patch up

patients. Healthcare in the United States is becoming more expensive while the quality seems to be decreasing, as we wait longer to see our doctors and only spend a few minutes with them.

Future research should include other healthcare fields that are increasingly bureaucratizing and rationalizing while being managed by profit-seeking organizations, such as private hospitals and chain emergency medicine clinics. These potential target sites present a wider variety of different healthcare workers, areas in medicine, and bureaucratic and rationalized processes that retail pharmacies do not cover. Due to the strict HIPAA law, observational research may continue to be hindered, unless done by employed healthcare workers. In retail pharmacy research, expanding the demographic to include interviews with non-pharmacy workers, and workers from other chain pharmacies within and outside of Virginia can uncover more layers to the results presented here. It is critical that the concerns of healthcare workers be addressed sooner than later, for the work they do are essential to communities and public health outcomes.

To summarize, despite being community healthcare providers, retail pharmacy work is governed and shaped by bureaucratization, capitalism, and McDonaldization. Through the experience of pharmacy workers, I have demonstrated that retail pharmacy work is largely governed by external structures and processes, resulting to individual workers who have very limited ability to act as creative agentic beings within retail pharmacies. Additionally, as illustrated by previous research, my results support the collective feelings of stress and burnout among pharmacy workers (Gaither et al. 2008; Durham et al. 2018; Jacobs et al. 2018), emotional exhaustion and oppressive practices in

the workplace (Yuill 2005; Shantz et al. 2014), and the declining job quality (Howell and Kalleberg 2019) as consequences of Weber's concept of the iron cage of rationality (1978) and Marx's concept of alienation (1844). The diminished connection between pharmacy workers and products and services are maintained and reproduced by highly bureaucratized and rationalized systems that take away agency and the personalization of work to attain efficient and reliable results.

The data also suggests that even in a time when workers from all sectors are leaving their jobs in droves, workplaces need to move beyond superficial changes, like sign-on bonuses, to entice and maintain employees. Instead, implement meaningful changes for workers, in ways that give them agency over their work tasks and conditions, set realistic expectations of what job duties can be accomplished within certain timeframes without penalizing them for the benefits of technological advances (by cutting staff hours, for example), and truly consider and value the workers' feedback on what can be improved at the local level by applying changes that address their concerns. Without these, retail pharmacies can expect continued and increasing challenges in hiring and retaining trained employees, and customers can expect continued and increasing challenges in getting safe and health-focused care at retail pharmacies.

APPENDIX

Interview Questions

1) What is your job title?
    a. How long have you been in this position?
    b. What are some of your main job responsibilities?
2) *Before the COVID-19 pandemic,* what did a typical day at work look like?
    a. What did a "good" day look like?
    b. Or what were some indicators that you were doing your job well or your team were working well with each other?
3) Before the pandemic, what were the typical parts of your day-to-day tasks that are most challenging, stressful, or annoying? How come?
4) Before the pandemic, please give me an example of a policy/service/program that significantly shaped your daily tasks.
    a. How did this affect the work structure? [How did the process look like?]
5) *During the COVID-19 pandemic,* what does a typical day at work look like?
    a. What's new? How does the pandemic affect your workflow?
6) Nowadays (*during the pandemic*), what are the typical parts of your daily tasks that are most challenging, stressful, or annoying? How come?
7) Nowadays (*during the pandemic*), please give me an example of a policy/service/program that significantly shapes your daily tasks.
    a. How did this affect the work structure? [How does the process look like?]
8) In the past year, did your pharmacy upgrade any new equipment or update computer programs? How did this help or not help with the workload?
9) If there is anything you would like to see change/improve in the workplace, what would that be and why?
10) How do you feel about your relationships with your coworkers?
    a. Do you think your team is equipped to handle the workload and fulfill your employer's expectations? Why or why not?
11) Do you feel like you can effectively communicate concerns to management and discuss changes to improve the workplace?
12) How do you feel about your job as a pharmacy worker?
    a. How do you feel about your overall work-life quality as a pharmacy employee? Why?
    b. Do you see yourself staying in the pharmacy field or do you have plans to leave the field? Why?

13) Do you feel that you have a good relationship with the community your pharmacy is located in?
    a. Is having a good relationship with community members/patients important to you as a pharmacy worker? Why or why not?

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