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Sustaining Dental Practices Longer Than 5 Years

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Walden University

College of Management and Technology

This is to certify that the doctoral study by

David Gagner

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Walden University 2016

Abstract

Sustaining Dental Practices Longer Than 5 Years

by

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MBA, University of Maryland University College, 2012 MS, University of Maryland University College, 2010 BS, University of Maryland, 1987

Doctoral Study Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Business Administration

Walden University

June 2016

Abstract

Dentists graduate dental school ready to practice dentistry, but 85% do not feel prepared by the dental school to open and manage the operations of a general dental practice. General systems theory grounded this multisite case study. The research provides information on 3 solo practitioner dental practices that sustained beyond 5 years in the Washington, DC suburbs. At each operating practice, the dentist who owned the practice and 1 employee that also worked at the practice during the first 5 years were interviewed. The dentist provided marketing documents used during the first 5 years of the practice operations. Data triangulation was used to ensure the trustworthiness of the analysis of the data from the interviews and documents collected. The data collected was analyzed using coding, establishing nodes, and creating mind maps to identify 5 themes. The themes included working hard to provide dental care and relieve pain, marketing to ensure potential patients had the practice contact information when they needed it, learning continuously to improve the practice operations, putting patient's health before practice profits, and minimizing debt. The implications for positive social change for residents of the Washington, DC suburbs include the potential to receive the needed dental care and pain relief they need because dentists who learn from this research will stay late and return to their practice to treat patients who found the dentist's contact information from their marketing. The implications for positive social change for owners of dental practices include building a sustainable dental practice by implementing these research findings that include working hard, marketing, continuous learning, putting patients health first, and minimizing debt.

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Dedication

I have dedicated this paper to my son and daughter. They always found a way to put forward incredible efforts with style, grace, and a sense of humor while consistently completing in the top 1% of everything. The success they continue to achieve goes beyond anyone else's achievements and quietly inspires me to go further than whatever I thought was good enough, even further than great enough. I cannot wait to see what the next round of adventures will bring forward to your lives.

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Thank you to the big guy. You made my doctoral journey interesting and found a way to remind me to remain humble along the way. To anyone reading this far, I encourage you to work to achieve anything you want in life, just focus on what you want, never give up, and implement on a constant and continuous basis. I spent the past 3 years working on my dreams and I was awarded a doctorate, found the woman of my dreams, fixed financial challenges, watched my children grow well beyond self-sufficient, and traveled the world. I am humbled by the battle I had with prostate cancer and appreciate having the resolve to have kicked it to the curb. Wow, it has been an interesting 3-year adventure. Thanks again to the big guy.

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Section 1: Foundation of the Study

Professional practice owners seek to generate a profit (Santos, Pache, & Birkholz, 2015). The objective of a professional relates to "doing things right" (Hartman, 2011). Professional dentists seek to do things right in their dental practices to provide quality dental services and generate income and profit. More than half of new businesses fail in the first 5 years (U.S. Small Business Administration (SBA), 2012) while the remainder succeeds. The goal of the dental practice owner aligns with operating their business to become sustainable beyond 5 years. The foundation of this study gave an acknowledgment that sustainable dental practice owners performed actions that, when duplicated and implemented, can cause dental practices to sustain beyond 5 years.

Background of the Problem

Dentist students took classes to instruct them in dental techniques to prepare them to practice dentistry. Dentists open and manage the operations of a dental practice, but 85% do not feel prepared to do so upon graduation from dental school (Barber, Wiesen, Arnold, Taichman, & Taichman, 2011). Dental students feel confident to work on a dental team after graduation, but 73% expressed reluctance in operating a practice with their management skills (Manakil, Rihani, & George, 2014).

Over half of U.S. small businesses fail in the first 5 years (SBA, 2012). Dentists need to understand how to open and manage a sustainable general dental practice to support the local community. Emulating sustainable dental practices that have operated successfully beyond the 5-year anniversary of its opening would give the new dentists the tools, skills, and confidence they need (Barber et al., 2011). Interviews with sustainable general dental practice owners provided answers as to how a new general dental practice owner could develop a sustainable general dental practice beyond 5 years. The discussion of the background of the problem led to the problem statement.

Problem Statement

Business owners who start a business that fails to sustain itself learn that the failure is due to the owner's lack of sufficient business knowledge (Yazdanfar, 2015). Dentists open and manage the operations of a general dental practice; however, 85% do not feel prepared to do so upon graduation from dental school (Barber et al., 2011). The general business problem was that many dentists opening a general dental practice lacked business strategies, negatively impacting the sustainability of their business. The specific business problem was that some dentists lacked the business strategies needed to sustain a solo practitioner general dental practice longer than 5 years.

Purpose Statement

The purpose of this qualitative multisite case study was to explore possible strategies that dentists used to sustain a solo practitioner general dental practice longer than 5 years in the Washington, DC suburbs. The target population was solo practitioner general practice dentists whose practices in the Washington, DC suburbs existed more than 5 years. General dental practices that survived longer than 5 years provided ongoing jobs to employees. The results from this study may impact businesses and the community and cause positive social change because successful general dental practices provide ongoing jobs, stable supplies of general dental services, and a stable profession for the dentist.

Nature of the Study

I used a qualitative method for my research. Researchers select from qualitative, quantitative, and mixed methods for research exploration purposes (ter Bogt & van Helden, 2012). The qualitative methodology allows a researcher to understand the perceptions of research participants (Leedy & Ormord, 2013). The quantitative methodology allows researchers to focus on numeric and objective relationships between research variables and to describe the numeric nature of variables found in examined issues (Frels & Onwuegbuzie, 2013). I did not select quantitative methodology because I do not have a hypothesis or established thinking processes in the study. I did not consider mixed methodology because no quantitative components or hypotheses exist.

Several design options existed within qualitative research. Qualitative designs include phenomenology, case study research, and ethnography (Petty, Thomson, & Stew, 2012). A qualitative case study design allows the researcher to explore and understand a finite system (Yin, 2014). Yin (2014) noted that the case design approach provides a mechanism to collect data from two or more sources. Developing a description of participants' experience did not fit; therefore, phenomenological design did not fit (Rocha, 2012). I did not use the ethnography approach because my research contains no ethnic considerations like Crede and Borrego (2013) discussed the ethnography approach. I used a qualitative case study to explore how solo, small dental business owners employed business strategies to sustain a business longer than 5 years.

Research Question

For this study, I chose one research question to focus my efforts. The research question was as follows: What business strategies does a dentist use to sustain a solo practitioner dental practice longer than 5 years in the Washington, DC suburbs?

Interview Questions

The interviews consisted of the following semistructured questions:

1. What business skills do you have?

2. How did you learn the skills?

3. What marketing strategies did you use to promote the growth of your practice?

4. How did working on the finances help build your practice?

5. How did you use employees to help your practice?

6. What operational skills did you use?

7. What advice would you give other dentists about opening their practice?

Conceptual Framework

A researcher uses a conceptual framework to explain the nature and purpose of a complex concept and to organize its ideas for simplicity (Shields & Rangarajan, 2013). I used systems theory as the conceptual framework grounding this study. Systems theory began when von Bertalanffy presented his new theory at the University of Chicago in 1937 (Drack & Schwartz, 2010). A system encompasses several smaller components of an integrated system, network, organization, or population (Valentinov, 2012a). Researching the components' capabilities and effects on the system as a whole provides insight into the operations and characteristics of a system as a whole (von Bertalanffy,

1972). As applied to this study, the dental office system contains strategies for financial management, operational areas, human resources, and marketing (Levin, 2014a). The dentist needs to learn and understand how to employ successful business strategies in his or her own business (Harris, 2011). Harris (2011) stated that the dentist operates a sustainable business to continue to provide dental services to patients and generate income for themselves and their employees before the first dental patient appears.

Operational Terms

Caries: Caries is a term for tooth decay (American Dental Association (ADA), 2015).

Centers for Medicare and Medicaid Services (CMS): Centers for Medicare and Medicaid Services is the federal agency responsible for administering Medicare, Medicaid, State Children's Health Insurance Program, Health Insurance Portability and Accountability Act, and the Clinical Laboratory Improvement Amendments programs. CMS is part of the U.S. Department of Health and Human Services (ADA, 2015).

Flexible benefits: Flexible benefits is a benefit program in which an employee has a choice of credits or dollars for distribution among various benefit options, that is, health and disability insurance, dental benefits, childcare, or pension benefits (ADA, 2015).

Radiograph: Radiograph is an image or picture produced on a radiation sensitive film, phosphorous plate, emulsion, or digital sensor by exposure to ionizing radiation (ADA, 2015).

Assumptions, Limitations, and Delimitations

During any research project, the potential exists for assumptions, limitations, and delimitations. I endeavored to recognize these potential issues and mitigated their impact on research and analysis quality. By thinking about these issues before performing research, I discovered how to perform research in a professional manner free from assumptions, limitations, and delimitations.

Assumptions

Assumptions by the researcher signify the things assumed as true and beyond the control of the researcher for conducting research (Bloomberg & Volpe, 2012). The first assumption was that a qualitative methodology provided the best methodology to explore strategies used by a dentist who has sustained a business longer than 5 years. The second assumption was that the case study provided the correct design for the study. The third assumption related to the participants interviewed provided meaningful and truthful data for this case study. The fourth assumption was that the participants participated in the study. The fifth assumption was that the participants provided complete answers and remembered their experiences correctly. The sixth assumption related to how direct observation and documents corroborated the data collect during the interview.

Limitations

Limitations relate to shortcomings of the study that could affect the conclusions as explained by Bloomberg and Volpe (2012). A limitation could have occurred relating to the dentist's actions taken over 5 years ago that may no longer apply to a dentist starting his or her practice in the economy today. Another limitation could have existed, as I may not have comprehended the information the dentists provided to me. A limitation could have occurred if the dentist forgot some of the information related to building his or her business. Both the dentists and I may have introduced bias in their responses and my understanding of their responses.

Delimitations

Delimitations reduce the extent of the research study within boundaries or confinements as explained by Denzin and Lincoln (2011). The first delimitation related to the geographical location of only dentists practicing in the Washington, DC suburbs. Another delimitation happened as the dental practice owner still practiced dentistry after 5 years, and he or she did not produce sufficient information to support my research. A dentist may become uninterested in discussing their previous experiences in building their business, and that may cause a delimitation to occur. Another delimitation could have happened when my questions did not elicit valuable responses, despite the intention and wording of the questions.

Significance of the Study

The owner who started a dental practice must have felt prepared to operate the practice in both dental activities and business activities. The owner of a sustainable dental practice performed actions to make the practice sustainable beyond 5 years. Learning and modeling the strategies of a sustainable dental practice should provide the new dental practice owner the same successful results.

Contribution to Business Practice

The results from this study may provide valuable insights to dentists who desire to develop a sustainable practice. Dentists may feel unprepared to manage a dental practice after graduating from dental school (Barber et al., 2011). As an example, dentists do not hire employees as effectively in the initial phase of their practice compared to experienced dentists with established businesses (Barber et al., 2011). I explored how dentists learned the business strategies needed to develop sustainable practices. Successful business owners achieve success by developing business strategies such as decision-making, management, and business strategies for their practice will duplicate existing sustainable dental practices.

Implications for Social Change

Dentists provide dental services to a community. Communities without sustainable dental practices may not have dental services when needed. Social change comes from the actions of society to bring about a change of the social order within a society (Rosenberg, 2008). The dentist who learned to build a sustainable dental practice provides a benefit to the community through positive social change (Rosenberg, 2008). The results of my research provided strategies dentists used to build sustainable dental practices. Communities with sustainable dental practices do not need to travel to other communities for dental services.

A Review of the Professional and Academic Literature

The literature review I conducted summarizes the major concepts of my research. Dentists need training and expertise in providing dentist services. Dentists must also lead the business aspects of the practice. I viewed the dental practice through the lens of the concepts of general systems theory. Dentists may have felt prepared to perform dental services after attending dental school but felt underprepared to operate a dental practice as a general system. The general systems theory provided a mechanism for me to understand the dental practice by looking at the dental practice as a complete general system. The dental practice as a general system meant that the dental practice had components of the system such as business leadership, finances, operations, human resources, and marketing as well as the dental practice.

Content of the Literature

The literature review provided in depth research into professional and academic literature relating the following search terms: *general systems theory, current applications of general systems theory, general systems theory applied to dental practices, business of dentistry, leadership in dentistry, financial dentists, dental operations, human resources in dentistry,* and *marketing dental practice.* I organized the literature review section by themes. The sources of my research for the literature review came from online sources and libraries from both Google Scholar and Walden University library. The literature review contains peer-reviewed journal articles written between 2012 and 2015 that number 101. The number of peer-reviewed articles in the literature review divided by a total number of literature review articles equals 90.2%. The number of articles that did not come from peer-reviewed journals written from 2012 to 2015 was 15. Walden University requires at least 85% of references come from peer-reviewed articles published within 5 years of anticipated approval by the chief academic officer. I have met this requirement.

I verified the peer-reviewed articles' authenticated status with Ulrich's periodicals directory online to confirm the journals received a peer-reviewed status via the link through Walden University Library. The percentage of peer-reviewed articles published between the year 2012 and 2015, my anticipated graduation year, exceeded the recommendation of 85% when compared to nonpeer-reviewed articles with an earlier publication date. I researched and located relevant articles searching for keyword searches on general systems theory and dentistry, along with variations of keywords to locate as many relevant sources as possible.

Systems Theory

This study related to understanding the components of the system, in this case a dental practice sustaining longer than 5 years, and any impact on the system as a whole. von Bertalanffy (1972) originated general systems theory when he studied the resultant effects on an entire organism or system from the viewpoint of researching to understand the independent components of the system. In organic systems, components continually adapt to their environment in immediate situations defined as open systems affected by internal and external sources (von Bertalanffy, 1972). A system became further identified as a composition of individual necessary components working together to support the system (Valentinov, 2012a). The components of the system do not comprise all the

characteristics of the system and, therefore, the combination of components define the whole system as being more than the sum of its components explained Valentinov (2012a).

To adequately study a general system, a researcher needs to have tools and methods to study smaller systems within systems, called components (Valentinov, 2012a). Systems studied through the lens of general systems theory must remain applicable to the interdisciplinary study (Valentinov, 2012a). Valentivov (2012a) claimed that multiple viewpoints of the systems themselves need to include the study of sustainability within socioeconomic considerations. The study of systems and components need relative comparison with the impact on entities outside the system as well as how the systems affect entities outside the system (Moeller & Valentinov, 2012). Adhering to the system theory principles means the combination of the system components equal more than the system (Kaine & Cowan, 2011). Kaine and Cowen (2011) asserted that research analysis needs to include the impact the system has on its socioeconomic environment and the impact of the socioeconomic environment on the system. The operators of a system compare to the operators of a business. The impact of the system components and the socioeconomic sustainability effect gives rise to business operators comparing the business to socioeconomic sustainability issues (Zenko, Bojan, Mulej, Tatjana, & Nastja, 2013).

Systems theory provides a theory comprised of other theories to understand the components of a system and how they work to support the system (von Bertalanffy, 1972). General systems theory combines three major types of theories: hard systems

relating to simulations, soft systems relating to systems that otherwise do not fit into other categories of systems, and dynamic systems relating to complex social systems (Yawson, 2012). A complex system has interconnected components, which make up the system, and the system has different properties than the individual components continued Yawson (2012). The system may behave differently based on the different components within the general system (Adams, Hestler, Bradley, Meyers, & Keating, 2014). Each component has a role in shaping the characteristic behavior of the general system (Adams et al., 2014).

Business operators think they control the business through planning. Business executives guide the business and instill values to direct the business and its direction and relationships (Moeller & Valentinov, 2012). A business exists in a constant state of unpredictable change; owners and researchers cannot predict the future state and operations of the business (Montgomery & Oladapo, 2014). The business operators affect parts of the business and drive it in a direction, but influencing the outcome of the business activities remains unpredictable as the business environment operates in a state of flux (Montgomery & Oladapo, 2014).

A business owner employing systems theory needs an approach to ordering the randomness of the components of the system (Valentinov, 2012a). System policy instruments provide a means to improve the system functionality (Wieczorek & Hekkert, 2012). The performance of the system in the past does not lend predictability to system performance in the future (Montgomery & Oladapo, 2014). Perception of management's ideas of how to guide a system serves only as a rough guide, and management must remain vigilant to direct the system to produce desired results (Kast & Rosenweig, 1972).

Management's direction of a business system takes into account current system components and outcomes, and the interaction of the people in the business systems need consideration (Moeller & Valentinov, 2012). The people working within the components of a business system generate more capability when they work together to increase their output (DeRue, 2011). Difficulty exists for a business seeking to affect system components to deliver more than the sum of the components efforts (Kast & Rosenzweig, 1972). The dynamic nature of people working in a system provides the opportunity for the people in the system to perform collectively with results beyond the components of the system (Kast & Rosenzweig, 1972).

Having a picture of the end goal helps people understand the effort and steps required to build a business (Moeller & Valentinov, 2012). The relationship of the system as a whole alongside the goal of the efforts to build the business must be known by the people involved (Perhvec, Rebolj, & Sman, 2014). Moeller and Valentinov (2012) explained that people work better to improve the business results when they understand how the business needs to operate instead of just performing their jobs. Different disciplines and ways of thinking of different employees align within the business to make the business more capable than people not working for the best outcomes of the business (Seiler & Kowalsky, 2011). The people of a business relate to the components of a system, and the business relates to the system (Kaine & Cowan, 2011). Civic organizers think of nonprofit businesses as filling a need within a community as opposed to stand-alone business entities or systems (Valentinov, 2012b). The concept of components not having the capability of existing without other components to comprise a system does not apply in the case of more effective societal systems (Valentinov, 2012b). Valentinov (2012b) concluded that an effective system exists as a combination of systems to support the more effective system.

Specialization of components with a system builds more effective systems (von Bertalanffy, 1972). General systems theory opposes overspecialization yet finds the need for component smaller businesses that work together to support the system of government to support the society as a system (Zenko et al., 2013). The diversity of people's thoughtdriven action and business operations leads to supporting the government acting as a general system as long as the people and businesses do not operate at odds with the government (Zenko et al., 2013). The more people and businesses operate to accept and promote the government systems, the better the government system operates to support the people (Zenko et al., 2013). Component operational diversity appears to have a limit of how diverse components of a system operate and still support the system (Valentinov, 2012b).

Some business entities have worked within the boundaries of the business, as described by general systems theory (von Bertalanffy, 1972). Other businesses work to embrace socioeconomic conditions to gain competitive advantages in the marketplace (Zenko et al., 2013). The nonprofit sector has responded to market pressure by adapting and utilizing commercial sector business strategies to deliver their mission (Moeller & Valentinov, 2012). The concept of open systems versus mechanized business operations describes how nonprofit organizations need to view funding and adopt available strategies including commercial strategies (Moeller & Valentinov, 2012). The resistance of the components of a system, such as nonprofit workers, affects the general system (von Bertalanffy, 1972). Moeller and Valentinov (2012) added that the nonprofit business, which changes the way the workers think to include open components of general system theory to gain an advantage over, closed thinking of other organizations.

Farmers have learned to add and adapt the techniques to their farming operations to perceive their business as open systems to deal with issues such as climate change as opposed to closed systems of the past (Kaine & Cowan, 2011). Farmers thought that the operations and systems needed to succeed in the farming business had been discovered and perfected, and therefore no need would exist to apply any new processes or systems (Kaine & Cowan, 2011). When a system has no outside influences, its operators may remain closed to adopting alternative or new processes and systems (Valentinov, 2012b). The addition of new considerations, outside forces, or internal needs for change may cause a system to adopt open system thinking to remain viable, sustainable, and competitive (Kaine & Cowan, 2011).

Business of Dentistry

Dentists have the option of working for themselves by starting their practice or working in larger practices as employees (Barber et al., 2011). Dentists who owned their practices accounted for over 90% of dentists in 1990, and this percentage has lowered to less than 85% (Garcia, 2014). Changes due to changing ethnicity in the demographics of the United States have caused the number of dentists working as employees to increase (Garcia, 2014). More dentists prefer to work as employees to better handle changing demographics. Since approximately 85% of dentists still operate their practice, most dentists need to learn how to operate the practice as an owner and not as an employee (Barber et al., 2011).

Dental practices consist of several components that make a system (Moeller & Valentinov, 2012). From the business perspective, the components of the dental practice system include financial management, operational areas, human resources, and marketing (Levin, 2014a). The basics of the business system needed to ensure success include quality dental care, quality customer service, business acumen for profitability, protecting the most valuable asset known as the customer base, insurance, and financial collections and receivables (Richardson, 2013). Both previously mentioned references offer the components of a successful dental practice as a system and describe the same components (Moeller & Valentinov, 2012). I selected financial, operations, human resources, and marketing for further research into the strategic business components required to make a dental practice sustainable.

Leading a Dental Practice

After dental school, a dentist needs to learn how to operate and lead a dental practice (Taichman, Taichman, Inglehart, & habil, 2014). A dentist needs to include learning about the dental business and becoming a lifelong learner, viewing the practice as a provider of dental services and a place of business, being an active member of dental organizations, and having a strong community presence and obtaining outside expertise

when needed (Levin, 2014a). To succeed in business and to lead the dental practice, dentists must learn to upgrade their business skills and their dentistry skills (Taichman et al., 2014). Continuing to upgrade their skills and knowledge is no longer an option but a necessity (Manakil et al., 2014). Dentists must lead their practices and become lifetime learners as the cornerstone of the dental practice (Levin, 2014a).

Dentists take on more educational debt when certain predictive intensions occur (Iowa Dental Association, 2013). Caucasian, male dentist students took on more debt when one or two parents worked as dentists (Wancheck, Nicholson, Vujicic, Menezes, & Ziebert, 2014). Most working dentists who do not have their own practice assume dentists who open their practice incurred debt to open their practice (Wancheck et al., 2014). Some families of dentists plan on passing the dental practice to siblings, and the practice may pass along three or four generations (Iowa Dental Association, 2013). The student dentist intending to work in the family dental practice understands the value of having a dental practice where he or she works to pay off student debt (Iowa Dental Association, 2013).

Dentists value leadership in the practice and their professional career (Taichman et al., 2014). Dentists ranked leadership in the practice by responding to a survey ranking leadership in the practice as the Number 1 leadership skill averaging 4.65 out of a possible 5-point scale (Forest, Taichman, Inglehart, & habil, 2013). Dentists value leadership activities in the local, state, and national level as an equal value to leadership in the practice (Forest et al., 2013).

A dentist who wants to build a successful business team needs to combine areas relating to creating the right systems, providing training, and working with the right employees (Levin, 2014b). A successful team that combines and implements systems, training, and people causes greater efficiency and reduces stress in the practice (Levin, 2014b). Teams led by the dentist leader need categories to focus their efforts under the direction of the dentist. Within a dental practice team, the team needs to focus their efforts to benefit the practice (Seiler & Kowalsky, 2011). The three categories of dental practice activities requiring continual attention include dentistry expertise, customer service, and profitability, while customer service requires attention to the patient, team, and dentist (Manakil et al., 2014).

Dentists learn the skills needed to provide dental services in dental school but not how to build a dental practice (Barber et al., 2011). Graduates of dental school felt unprepared 76% of the time to operate or lead a dental practice after graduating (Barber et al., 2011). Dental school officials have listened to the graduating dentists and offer optional business classes with few dentist students enrolling (Barber et al., 2011). Barber et al. (2011) concluded that the lack of business training from dental school adds to the need for business acumen to ease dentists' transition from student to dental practice owner to build and retain patients.

Dentists must provide quality dental care and quality business techniques to provide the best experience for the patients (Perhvec et al., 2014). Patients receive ongoing, improving value from advancements in dental issues and oral health and dentists need to continue enhancing the practice's business techniques in an equivalent manner (Levin, 2013a). The challenge the dentist must consider relates to balancing patient experience and helping the patient make the best oral health choice for dental care. The dental practice must have employees providing good service and providing good patient experience and must also operate the business so that the business operates in an effective manner Perhvec et al. (2014).

Owners strive to make their business operating efficiently and provide required services and products (Levin, 2014b). Providing dental services in a cost effective manner, allows the dentist to operate the practice that benefits the dentist, employees, and patients (Levin, 2013a). Reducing or eliminating bottlenecks in the operations within the practice help the dentist increase practice efficiency and reduce stress for the practice employees, the dentist and patients Levin (2013a) explained.

Patients make choices concerning the dental care they receive from multiple sources of information (Taichman et al., 2014). Dentists use "behavioral economics" to "nudge" patients along the path to better health and assist them in managing complex choices relating to dental care (Scarbecz, 2012). The challenge for the dental practice staff pertains to maximizing the practice performance, allowing patients to make their choices, and providing customer service Scarbecz (2012) continued. Employees interacting the most with patients should provide the educational guidance to patients (Christensen, 2012). The interactions between dental staff and the patient give rise to a complex formula balancing customer service, patient desires, and practice business requirements Christensen (2012) continued.

Financial Considerations of a Dental Practice

The dentist must lead the practice in profitability (Taichman et al., 2014). The components of profitability include managing income from patients, insurance payments, managing financial obligations, managing practice and student loans, investing and reinvesting in education and equipment, paying income, paying liabilities, developing personal wealth, and providing balanced lifestyle (Richardson, 2013). Balancing and minimizing the cost components of a practice improves the balance sheet of a dental practice Hartman (2011) noted.

The costs of opening a dental office prove a large obstacle to the dentist opening their first dental practice (Ackerman, Waldman, & Perlman, 2014). The average cost of opening a new dental office equals \$500,000 cash with monthly pay back amounts between \$4,600 and \$7,000 (Shah-Kahn, 2014a). Gross monthly income to service the monthly pay back amounts range from \$14,000 to \$21,200 before the dentist makes any income continued Shah-Kahn (2014a). Having a financial obligation relating to opening the practice seems to pose a challenge to dentists and other costs may occur when opening the practice Ackerman et al. (2014) explained.

A dentist needs to make a decision relating to the financing of the dental practice (Shah-Khan, 2014b). The challenge new dental practice owners face exists as they determine their level of commitment to the field of dentistry when obtaining loans to finance their business (Ackerman et al., 2014). The dentist needs to consider the cost of the opening their dental practice and the cost of operating the business including supplies and operating costs Ackerman et al. (2014) continued. A dentist needs to understand the purchase cost of supplies, material, and equipment for the dental practice (Shah-Khan, 2014b). The larger the volume of purchases, the larger the purchasing power of the dental practice explained Shah-Khan (2014b). The costs vary depending on the application and use of technology and the amount of salespeople interaction needed to complete sales Shah-Kahn (2014b) continued. Determining methods to reduce costs while maintaining operations, customer service, and other business issues give a dental practice a financial edge stated Levin (2014a).

To operate a dental practice more profitably, the dentist controls some dental practice costs through supply costs (Shah-Khan, 2014b). The average cost of supplies to a dental practice range from 6% to 7% of gross receipts (Shah-Khan, 2014a). A \$1 million practice would spend \$60,000 on supplies annually and could save 20% or \$12,000 on the supply costs through the acceptance of technology and minimizing salesperson interactions added Shah-Khan (2014a). The reduced expense of supplies impacts the bottom line of a dental practice concluded Shah-Khan (2014a).

A dentist must focus on improving the net revenue to the practice (Ackerman et al., 2014). A "significant portion" of patient visits to dental practices only require low cost, low profit maintenance fees while rarely, if ever, investing more profitable dollars for dental work (Brocklehurst, Ashley, & Tickle, 2011). The dentist needs to screen out patients who appear to fit the category of never needing additional high-profit dental services so the dentist practices more dental skills and receive higher income stated Brocklehurst et al. (2011). Analyzing higher profit patients gives the dentist the ability to

avoid low profits and gain higher profits generating more revenue for the practice and the dentist (Harris, 2011).

A dentist wishing to set fees without regard to services covered by insurance needs to understand the dilemma of proving optimal dental care and respond to patients requesting only services covered by their insurance (Scarbrough, 2014). The dentist may diagnose dental services costing beyond what the patient has covered by insurance and needs to adhere to both the requirement to do no harm and be truthful with the patient about the need for diagnosed services continued Scarbrough (2014). Dentists should have open and frank discussions with patients to communicate the advantages of the diagnosed dental services and stay with insurance covered dental services while allowing the patient to make the best decision for them, Scarbrough (2014) explained. Patients have learned to receive second opinions to comparison shop services and keep dentists ethically bound to avoid unnecessary treatments (Henner & Esterberg, 2014). The dentist must adhere to the patient's wishes to remain within the insurance covered services in spite of the diagnosed services and the potential profits to the business Henner and Esterberg concluded (2014).

Patients have begun using the value agenda to evaluate their use of dental services (Henner & Esterberg, 2014). Dentists need to understand how patients view the cost and value received for a trip to the dentist (Vujicic, 2015b). Patients look at the complete total of costs and value when multiple dental visits or trips to multiple doctors have to happen before the patient completes their medical needs Vujicic (2015b) concluded. Patients with needs requiring more than one visit have learned to study the value provided.

Young adults visit the dentist less often than older adults, but they need to visit a dentist more often (Anderson, Noar, & Rogers, 2013). Young adults between the ages of 20 and 29 account for the most visits to emergency rooms for toothaches (Lewis, McKinney, Lee, Melbye, & Rue, 2015). Dentists need to prepare to provide dental service to attract young adults continued Lewis et al. (2015).

Dentists need to assist older adults to receive the dental care they need and one of the best ways to do so occurs as the dentist-patient relationship develops (Muirhead, Marcenes, & Wright, 2014). The older adults who received the highest level of dental care included higher-than-average educated, nonpoor females who lived in areas with higher than average dentist-to-population ratio areas (Lee, Seok-Joo, Albert, & Nelson, 2013). Improvements to providing dental care to older patients require comprehensive government intervention policies explained Lee et al. (2013).

The low-income patient population receives dental care because dentists feel pressured to perform low- or below-cost dental services (Wallace & MacEntee, 2012). Low-income patients receive less needed dental care than other income patients due to their perception of the high costs for dental services (Bailit, 2013). The need for financial assistance and the promotion of the financial assistance to provide dental service to low-income patients should come from public sources to strengthen the community and in return helps build a dental practice, Bailit (2013) expounded. Dentists who help low-income patients receive dental care increase their practice and provide a community service concluded Wallace and MacEntee (2012).

Without financial assistance, the dental care gap exists between poor and nonpoor adults (Wallace & MacEntee, 2012). The gap in the reception of dental care service between poor and nonpoor adults grew between 2002 and 2010 as measured at the state level (Nasseh & Vujicic, 2014). The Affordable Care Act gives poor adults the option for dental care, but the result has not decreased the lack of dental care for poor adults and states need to do more to help the poor receive needed dental care, Nasseh and Vujicic (2014) discussed. More financial assistance and implementation of the ACA would help the poor receive the dental care they need Wallace and MacEntee (2012) concluded.

The competitive marketplace caused dentists to lower the amount of dental services supplied to poor patients while government subsidies try to replace the reduced fees to encourage dentists to provide more services to poor patients (Buchmueller, Orzol, Shore-Sheppard, 2015). The impact of increases the Medicaid fees paid to match 70% of marketplace fees caused an increase in children living in Connecticut receiving dental care from 45.9% in 2006 to 71.6% in 2012 (Beazoglou, Douglass, Myne-Joslin, Baker, & Bailit, 2014). The increase in Medicaid expenditures was \$62 million, which equated to less than 1% of 2012 Connecticut Medicaid expenditures. Increasing the amount of Medicaid payments to dentists in Connecticut caused a significant increase in children receiving dental care added Beazoglou et al. (2014). The dentist needs to take precautions to protect the practice after making decisions about accepting insurance and other financial considerations Buchmueller et al. (2015) concluded.

Dentists engage in many financial activities to start and build their dental practices, and they need to make sure to protect their practice (Richardson, 2013). The

dentist must take steps to protect the practice from fraud, theft, and noncompliance without impacting daily practice operations (Kerr, 2014). The correct policies and procedures reduce fraud and theft risk while increasing the dentist's knowledge of practice finances and human resource operations and policies Kerr (2014) continued. With financial matters understood and implemented, the dentist may put attention on the operational concerns of the practice Levin (2014b) stated.

Operational Aspects

Each patient should proceed through several steps of dental care to allow the business to efficiently operate (Murphy, 2005). Dental practice operations include generating new patients, performing dental operations, providing hygiene services, reactivating patients leading to additional dental operations and hygiene services (Richardson, 2013). Through dedication to understanding the steps and correlation of the patients' needs to the proper dental operations assures the practice operates well, added Richardson (2013).

The ability of a dentist to perform excellent dental services does not mean the dentist operates a dental practice well (Levin, 2014b). The dentist needs to develop the three skills to lead a dental practice including clinical, behavioral, and business (Murphy, 2005). While business owners work to build their income, most work in their business instead of on the business resulting in maximizing the dentist hours and maximizing the dentist thoughts of worrying about making money Murphy (2005) continued. The dentist would begin to build more dental practice processes and systems to take the pressure off the dentist (Seiler & Kowalski, 2011).

Dentists receive training in dental school for the base in dentistry knowledge (Iowa Dental Association, 2013). The foundational knowledge of dental principals tends to dominate the dentist's thought of dental care well into their career (Straub-Morarend, Marshall, Holmes, & Finkelstein, 2011). New dentists graduating dental school have more up to date foundational knowledge than older dentists Straub-Morarend, et al. (2011) continued. The ongoing training of dentists does not affect the foundational knowledge of a dentist over time (Manakil et al., 2014). The lack of adopting new knowledge gained by new dental school graduates may hinder older dentists who may compete with newer graduates (Pigliacelli, 2011).

Older dentists have used the same processes and systems for years while newer generations of dentists wish to try newer systems (Straub-Morarend et al., 2011). Younger dentists come from a generation of multitasking, the desire to perform activities faster and more efficiently, and seek out a new method to complete activities (Pigliacelli, 2011). New dentists embrace the concept of saving money and time by off shoring of dental technician tasks instead of trying to keep the tasks in-practice or with local businesses added Straub-Morarend et al. (2011). Off-shoring dental technician tasks provide an example of accepting new processes resulting in a more efficient use of dentist time and cost saving Pigliacelli (2011) noted. The ability of new graduates to embrace new processes and systems allows testing of more processes concluded Pigliacelli . The taking on the risk of new processes yields advantages when the new processes save time or money announced Straub-Morarend et al. (2011).

The dental practice field attracts women to the dental profession and the feminization of the field lowers the average number of weekly hours, increases urbanization of dental services, increases urbanization and reduces entrepreneurship (McKay & Quiñonez, 2012). The result of the increased feminization changes on the dynamics of the dental business make the gross revenue lower, and the services offered less specialized added McKay and Quiñonez (2012). The impact of more dentists working fewer hours and providing more general dental services impacts the industry by lowering the innovation and expectations of the owners of a dental practice concluded McKay and Quiñonez.

The advancement and innovation of dental technology requires a dentist to upgrade equipment and business processes that drive up costs of the dental practice (Levine, 2014a). The costs of opening the practice, funding the ongoing supplies and operations, and funding innovations cause the dentist to plan the business impact of implementation of innovation added Levine (2014a). The planning of the dental business operations and financing impacts the dentist emotionally (Bailit, 2013).

A dentist who was providing dental care to a patient may experience a temptation to provide additional services (Henner & Esterberg, 2014). The challenge of the dentist relates to only providing dental services required by the patient and not overselling services for other issues that could wait until a later time (Naidoo & Du Tiot, 2014). Ethical considerations confuse a dentist during the early years of the dental practice as pressures to provide enough cash flow to keep the business open Naidoo and Du Tiot (2014) concluded. Both ethics and emotional components affect the combination of efforts needed to support a dental practice Bailit (2013) confirmed.

Human Resources

The dentist needs staff to operate the dental practice to allow the dentist to focus on providing dental services while employees take care of other aspects of the business such as administration and patient attention (Garcia, 2014). The dentist may hire family members to provide them with an income and to gain trusted employees (Levine, 2011b). Hiring employees requires the dentist to know the pros and cons of employee capabilities and hiring family member causes emotionally charged issues within the pros and cons Levine (2011b) continued. A dentist needs to understand the benefits and drawbacks of employees and must carefully consider the ramifications of hiring family members as employees (Esterberg, 2011).

Dentists may choose to increase the practice bottom line through the use of auxiliaries to free up the dentist's time to provide higher dollar activities while auxiliary dental staff handle at a lesser cost to the business (Merritt, 2015). The duty of the dentist rests in providing services to serve the patients and the public and remains obliged to protect the health of the patient receiving care from anyone in the practice added Merritt (2015). The dentist must maintain adequate control over auxiliary's activities to comply with state and local laws also to maintaining ethical standards Merritt continued. The dentist should consider using auxiliary dentists the practice and patients benefit from their use (Garcia, 2014). Dentists should ensure all patients and employees work well together to optimize the practice activities and income (Harris, 2011). Customer service means the dentist must consider all aspects of customer interaction with the dentist, staff, and practice (Garcia, 2014). The priorities of customer service must rank patient first, staff second, and the dentist third (Richardson, 2013). To best align with patient's needs, focus practice efforts for customer service to start on time, stay on time, and get out on time Richardson (2013) continued. Keeping customer service focused on the correct priorities and alignments ensures high-quality customer service and patient satisfaction (Levin, 2013a).

Marketing a Dental Practice

Marketing has changed over the past few decades. Dentists opening a practice before the proliferation of the Internet could hang a sign on their office offering dental services, and customers would visit their practice (Levin, 2011a). The advent of the Internet along with more competitive dentists has caused the dentist to learn and adopt good business marketing practices to gain customers continued Levin (2011a). Dentists need to have good business and marketing skills to provide good dental services to operate and lead a dental practice (Bailit, 2013).

While dentists believe they provide dental care to patients and seek to build a caring and lasting relationship, people consider themselves consumers of dental services (Esterburg, 2011). The image of dentists must include portrayal of higher ethics and values to keep the posture of professional dentist instead of a service provider Esterberg (2011) added. The dentist must utilize different subareas of marketing to develop a successful business.

Marketing for a dental practice includes seeking referrals, internal and external marketing, monitoring, acknowledgements, and customer service (Richardson, 2013). The combination of working with another health care providers and working to treat a specific disease gives dentist office a specific advantage in treating more patients and providing better dental care (Berg & Stapleton, 2012). Dentists who does not know how to treat specific, timely diseases will fall behind in business as they will not have the capability to generate joint ventures with other medical professionals added Berg and Stapleton (2012). Dentists gain access to more patients by working with other medical professional to treat specific diseases added Berg and Stapleton. Accessing other medical professional's patients when treating specific diseases increases the number of potential new patients a dentist treats and the potential of additional referrals from the other medical professionals increase the number of patients for the dentist concluded Richardson (2013).

Competition from other dentists providing services in the same area and the same service level creates a demand for entrepreneurial marketing (Willcocks, 2012). Entrepreneurial marketing gives a dentist an edge in outperforming other dentists to gain more patients added Willcocks (2012). A dentist who succeeds in market increases devotes more time to servicing the patients (Richardson, 2013).

Federal application of ACA law provides states with additional funds through incentives to provide medical care to low-income adults (Vujicic, 2015a). Medicaid will provide dental service insurance eligibility to 8.3 million adults under the expanded role of the ACA directed Vujicic (2015a). Dentists who prepare marketing to entice new

patients to their dental practice will gain business due to the change in the ACA concluded Vujicic.

The supply of dentists entering the marketplace has increased without an increase in the need for dental services resulting in dentist average earnings stagnating and in some areas declining (Vujicic, 2014). If patients' dental expenses do not increase to compensate the increasing number of dentist entering the marketplace, income and business will remain flat Vujicic (2014) continued. The general concept of supply and demand affects the dental business in the same manner as other businesses (Adams et al., 2014).

Dentists must ensure they follow ethical standards and guidelines when marketing their professional, dental services (Bailit, 2013). Financial incentives to reward patients for expectantly referring new patients adheres to ethical standards while asking and paying current patients for referrals violates ethical marketing standards (Wentworth, 2011). Marketing with scientific data to convince a patient to return for an office visit adheres to marketing ethics while using questionable scientific data remains unethical Wentworth (2011) continued. Dentists need to use marketing ethically to entice patients for needed dental services based on proven scientific data and not for the best interest of the practice (Naidoo & Du Tiot, 2014).

The use of social media coupons causes the dentist to reevaluate the ethical considerations of their marketing in the area of fee-splitting (Bailit, 2013). Social coupons give the dentist a means to entice customers in an illegal practice of fee splitting because social coupon companies keep a percentage of the fee-for-service expense a

patient pays (Rosato, 2012). Dentists need to ensure they pay for marketing services and not split fees for obtaining patients as the practice of paying for patients crosses ethical boundaries Rosato (2012) explained.

How Dentistry and System Theory Relate

Dentists must lead their dental practice components of systems, training, and employees to accommodate changes needed to enhance the practice (Levin, 2014b). General systems theory explains that system components work together to support the system (Valentinov, 2012a). The categories of dentistry expertise, customer service, profitability, patients, team, and dentist comprise a dental practice and the dental practice must adapt changes to support the practice (Manakil et al., 2014). Systems components adapt to the environment as needed to support the system concluded von Bertalanffy (1972).

The components of a dental system fit into the hard systems, soft systems, and dynamic systems of a general system (Yawson, 2012). Dental practices need to combine the components of financial management, operational areas, human resources, and marketing (Levin, 2014a). The components of a system interrelate as Yawson (2012) concluded.

Dental practices have components to ensure the dentists operate the practice efficiently (Kast & Rosenweig, 1972). A dental practice has components that work together as an organization and its components work together to support the whole (von Bertalanffy, 1972). Inspection of the individual parts without regard to how those parts support the organization as a whole causes the observer to misunderstand the system as a whole (Montgomery & Oladapo, 2014). Researchers found systems included inputs, processes, outputs and outcomes, which exchange data to support the system (Seiler & Kowalsky, 2011). Dental practices consist of system components such as financial management, operational areas, human resources, and marketing (Levin, 2014a).

Dental practices require strategic business components to ensure dentists operate the practice efficiently (Valentinov, 2012a). A dental practice has components that work together as an organization and its components work together to support the whole (von Bertalanffy, 1972). Inspection of the individual parts without regard to how those parts support the organization as a whole causes the observer to misunderstand the system as a whole (Montgomery & Oladapo, 2014). Systems included inputs, processes, outputs and outcomes, which exchange data to support the system (Seiler & Kowalsky, 2011). Dentists should consider their dental practices as systems with components that affect the whole system added Seiler And Kowalski (2011).

The hard, soft, and dynamic components make a system (Yawson, 2012). The hard, soft, and dynamic components individually do not appear or function as a dental practice, but must act together to make a dental practice (Levin, 2014a). The dental practice has the minimal number of components to make it a system (von Bertalanffy, 1972). The dentist leads and operates the dental practice as a system (Moeller & Valentinov, 2012). None of the components by themselves could comprise a system and combine to make the system (Wieczorek & Hekkert, 2012). The employees of a dental practice work together to provide more than the employees could perform individually (DeRue, 2011). The dentist must lead the practice because challenges exist to resist the

combining of employees' efforts to exceed their individual efforts (Kast & Rosenweig, 1972). The dentist must work to improve the components of a dental practice to build a better practice (Zenko et al., 2013). Building and enhancing the components make a dental practice operate.

Dentists need to understand the components of a business to operate the practice with respect to finances (Shah-Khan, 2014b). Dental practice components continually shift to accommodate the needs of the practice (Christensen, 2012). A business system has components that shift continually for the good of the business (Montgomery & Oladapo, 2014). The financial components of a dental practice need attention from the dentist to adjust on an ongoing basis and allow for profitable operations (Brocklehurst et al., 2011).

Dentists balance many financial components of the practice including insurance coverage of a patient, diagnosis of dental needs, and ethical concerns (Scarbrough, 2014). The leader of a general system guides the direction of each component of the system to guide the practice (Moeller & Valentinov, 2012). The employees of components of a system work together to enhance the results of the system to result in a system greater than the sum of the components (DeRue, 2011). A dentist leads the components of the practice Scarbrough (2014) continued.

Dentists acting as managers of the system operate by providing rough guidance to direct the system to the desired results (Kast & Rosenweig, 1972). The operator of a business cannot predict the future performance of a dental practice (Montgomery & Oladapo, 2014). The challenge remains how to operate the dental practice with policy

instruments to improve the practice system functionality (Wieczorek & Hekkert, 2012). The employees of the practice work together to improve the practice by understanding how the practice needs as a whole in addition to the employee's specific job (Perhvec et al., 2014).

The dentist operates the practice to benefit the workers and the patients (Zenko et al., 2013). Systems work to include components owned and operated both within and outside of the system or practice for the betterment of the system (Moeller & Valentinov, 2012). Practices operate as open systems when they adopt components from other systems to work in their system (Kaine & Cowan, 2011). Open systems and practices grow beyond the capabilities of closed systems and practices continued Kaine and Cowan (2011). Dentists lead the practice to adopt new technology, business practices, and training employees to improve the practice (Levin, 2014b).

The components of a dental system studied in this literature review include the business of dentistry, leading a dental practice, financial considerations, operational aspects, human resources, and the marketing of dental practices. Each of the components must exist to comprise the system (von Bertalanffy, 1972) of a dental practice. A person would not consider any individual component of the system a dental practice, but when the components work together to comprise the system as a dental practice (Valentinov, 2012a). Systems such as a dental practice exist together.

Transition and Summary

Dentists operate a dental practice with employees and processes that perform as described by general systems theory that has a system comprised of components. The components of a dental practice include the dental business, the dentist leading the practice, financial considerations, operational aspects, human resources, and the marketing of dental practices. Each of the components of a dental practice and a system works together to exceed the capabilities of all of the components put together. The system cannot have fewer components than the components that make up the system and still operate as a system. The dental practice cannot operate without all the components required for a dental practice and still operate as a dental practice. The dentist must lead the dental practice. The dentist may improve each component of the practice which will in-turn build the practice.

In Section 2, I described how I conducted qualitative research to study general dental practices in Washington, DC suburbs that have successfully operated beyond 5 years. I used semistructured questions to interview dentists and employees until data saturation occurred. The participants responded to provide answers as to what components they used to build the practice. I used a recorder to record the answers participants provide and protect the data for 5 years. I used a case study method. The data collected adhered to data collection standards with data checked for reliability and validity. In Section 3, I discussed the results of the interviews and the analysis of the interviews. Conclusions and potential future research completed this doctoral study.

Section 2: The Project

In the project section, I provide how a case study relates to general dental practices that were sustained beyond 5 years in the Washington DC suburbs. Additionally, I provide details of my role as the researcher and the participants. I explain the research method and design, population and sampling, ethical considerations, data collection, and reliability and validity of the data and analysis process.

Purpose Statement

The purpose of this qualitative multisite case study was to explore possible strategies that dentists used to sustain a solo practitioner general dental practice longer than 5 years in the Washington, DC suburbs. The target population was solo practitioner general practice dentists whose practices in the Washington, DC suburbs existed more than 5 years. General dental practices that survived longer than 5 years provided ongoing jobs to employees. The results from this study may impact businesses and the community and cause positive social change because successful general dental practices provide ongoing jobs, stable supplies of general dental services, and a stable profession for the dentist.

Role of the Researcher

A researcher works to collect the data in a qualitative study (Leedy & Ormrod, 2013). Qualitative researchers perform as the research instrument by collecting data (Pezalla, Pettigrew, & Miller-Day, 2012). I was the researcher and data collection instrument because I collected the data and interacted with the participants. Thomas and Magilvy (2011) explained that a researcher operates as the research instrument. My experience as a small business coach for 10 years and my master's degree in business administration allowed me to understand the strategies of business and management practices. I had no prior, direct experience with dentists or the dental industry beyond involvement as a dental patient. The researcher needs to treat individuals as autonomous agents and if needed, treat individuals with reduced autonomy with protective measures as directed by U. S. Department of Health and Human Services (1979). The ethical principles contained in the *Belmont Report*, which protect research participants, include beneficence, justice, and respect for individuals (U. S. Department of Health and Human Services, 1979).

I minimized researcher bias by consistency and disclosure of interview methods as Viswanathan et al. (2014) described. I minimized and eliminated bias by using an interview protocol and the same semistructured questions during each interview. My research included face-to-face interviews with semistructured questions to recognize insights and comparisons of dental practice businesses, as Yin (2014) recognized using semistructured questions for insights and comparisons. Interview protocols give the researcher consistency and the ability to standardize data collection, reduce premature closure of data collection, reduce overfocusing on specific information, reduce recalling only first and last interview data, and confirm preconceptions (McHugh, Van Dyke, Osei-Anto, & Haque, 2011). Researchers use interview protocols to ensure attention to consistency and ethical issues within research burdens (Daker-White et al., 2014). My research used techniques that allowed for the respect of the participants interviewed and maintained ethical practices. Dental practice employees do not fall into the protected autonomy category and do not need additional protective measures. I used the interview protocol listed in Appendix A.

Participants

Eligibility criteria for the study participants included general dental practices in the Washington, DC suburbs that have sustained a solo dental practice for a minimum of 5 years. The researcher can contextualize the interviewee responses (Frels & Onwuegbuzie, 2013) to determine the criteria for selecting interviewees. Experienced researchers determined that setting the eligibility criteria of the participants reduced the number of participants and interview time needed to answer research questions similar to how Cairney and St Denny (2015) discussed the interview process to reduce experiences to concepts manageable by the interviewer. The researcher plans how the potential interviewee may have experiences, with minimal interpretation that fit into the research requirements to determine the eligibility criteria of interviewees (Grant, Rohr, & Grant, 2012). Knowing the eligibility criteria of potential interviewees gave me the ability to carefully select a dental practice in which to conduct research.

I lived in Montgomery County and called general practice dental practices near my residence, which minimized my commute. I called three general dental practices with which my family and I already had a professional relationship. By seeking out multiple dental practices to interview, I used different sources to increase the validity of my research efforts, as Bekhet and Zauszniewski (2012) described. Searching for multiple practices provided enough data for triangulation. Davey, Davey, and Singh (2015) described using multiple data sets for data triangulation. I applied the strategy of multiple sources since Tsang (2013) discussed multiple sources. I set appointments with dental practices that were able and willing to make appointments with me that established a working relationship.

I drafted a letter of cooperation (see Appendix C) to obtain permission from the practice to conduct voluntary interviews at the dental practice. The draft letter of cooperation was submitted to the IRB for approval before I approached the dental practice to obtain a wet signature from the dental practice. After the IRB had approved the draft letter of cooperation, I filled in the required details and asked the dental practice owner to sign the letter. I emailed the wet signed letter of cooperation as an attachment to IRB@waldenu.edu.

Interviewing multiple people provides triangulation of data due to multiple data sources providing the information (Horne & Horgan, 2012). Interviewing multiple people in the practice increases the validity of my research efforts (Bekhet & Zauszniewski, 2012). Planning how the dental practice personnel fit into the research requirements allows more efficient selection of the dental practice. Grant, Rhor, and Grant (2012) called for the use of participant eligibility. Each participant signed an informed consent form, shown in Appendix B, at the beginning of the interview. Each participant interviewed will receive the study results as an enticement to participate once the study is approved. I did not provide any other form of compensation.

After graduating from medical school, 75% of dentists seek to open their own small business (Harris, 2011). Dentists open and manage the operations of a dental practice, but 85% do not feel prepared to do so upon graduation from dental school

(Barber et al., 2011). Graduating dentists understand the need to prepare for managing their dental practices (Manakil et al., 2014). Successful dentists provided answers about how they built a sustainable business over 5 years.

Research Method and Design

The researcher selects from quantitative, qualitative, or mixed methods. Several research designs exist including case study, ethnography, grounded theory, narrative, and phenomenology. I selected a qualitative method and a case study design.

Research Method

The qualitative method allows one to explore the insights of participants (Scoble & White, 2013; Yin, 2014). Qualitative methodologists have an interest in how participants make sense of their experiences in the world and how they interpret their model of the world (Palinkas et al., 2013). The research I conducted allowed me to explore how dentists who had a sustainable business of 5 years found their business skills and success.

Quantitative and mixed methodologies did not fit the focus of this research topic. Quantitative research methodology relates numerical data to observations (Denzin & Lincoln, 2011; Leedy & Ormod, 2013). The mixed methodology uses both qualitative and quantitative methods (Leedy & Ormrod, 2013). I determined mixed methods as inappropriate because of the use of numeric data required for the quantitative component (Palinkas et al., 2013).

Research Design

The case study design provided an opportunity to explore the insights of how a general practice dentist learned the needed business skills to maintain a sustainable general practice business longer than 5 years. I gathered data by interviews and requested documents. The case study gives insight in how a participant performed the activities the researcher wishes to study (Yin, 2014). The case study design allows researchers to discover the unique experiences of the participant during the data collection process (Palinkas et al., 2013). A case study design also allows the researcher the opportunity to study an issue within the confines of a system or groups within the system (Palinkas et al., 2013). Case studies allow the researcher to set boundaries of research (Singh, 2014).

Other designs that belong in the qualitative research methodology include ethnography and phenomenology (Denzin & Lincoln, 2011). Ethnography involves the study of ethnic groups or societies (Leedy & Ormrod, 2013), which would not fit the purpose of the research. Phenomenology designs help researchers ascertain a phenomenon in the business observed from the lived experiences of participants (Denzin & Lincoln, 2011). I did not seek to find a business phenomenon the dentist performed, which makes the phenomenology design inappropriate.

I collected the data starting with the dentist. I then asked for corroboration of what the dentist said by asking for documentation and to interview an additional dental practice employee, until data saturation occurred. Data saturation occurs when more qualitative data do not provide any additional information (Fusch & Ness, 2015). The sample size must have enough variety and size to achieve the study objectives (Malterud, 2012). My sample size estimate came from the same concept of sample size coming from the discretion of the researcher, as Yin (2014) described.

I reviewed the data collected from three general dental practices using purposeful sampling to identify common patterns of data, as Palinkas et al. (2013) described using purposeful sampling for determining common patterns. I made the data set from data collected from three general dental practices. I interviewed general dental practice employees who worked for a practice in the Washington, DC suburbs and agreed to allow interviews. I traveled to the dental practice to make it convenient for the participants.

Population and Sampling

I used purposeful sampling to interview the participants at three general dental practices in the Washington, DC suburbs and collected any relevant documentation. Researchers use purposeful sampling to conduct research for information-rich case studies with limited resources and highly experienced participants (Palinkas et al., 2013). The types of purposeful sampling include deviant case, intensity, maximum variation, homogenous, typical case, critical case, snowball, criterion, theory based, confirming and disconfirming case, stratified purposeful, opportunistic, random, politically important, convenience, and combination (Palinkas et al., 2013). Researchers may select participants by comparing the research criteria (Leedy & Ormrod, 2013). When no new information comes from the participant's data set, data saturation has occurred (Palinkas et al., 2013). Data saturation occurs when multiple sources of data and viewpoints insure the validity of the data (Fusch & Ness, 2015).

Ethical Research

Participants filled out an informed consent form that appears in Appendix B before the interviews began. I brought the form with me for the participants to sign before the interview started. The participants received written instructions on the informed consent form relating to their voluntary participation, and they could have stopped at any time. Participants could have stopped the interview at any time and withdrawn their data by stating they wish to stop, but none did. Participants could have requested a 2- to 3page summary of this study for their participation, but none did.

Participants received ethical treatment, and no manner compromised their free, informed consent as part of key ethical principles (dos Santos, 2014). I will keep participant data collection devices in my locked home safe for 5 years to protect the participant's confidentiality. The participant's names and identifying information did not appear in any documentation other than on interview data collection devices such as notepapers or recordings. The Walden IRB approval number was 04-05-16-0467062.

Data Collection

Data collection allows the researcher to define processes to gather data (Covell, Sidani, & Ritchie, 2012). My data collection consisted of arranged interviews where I was the research instrument. My efforts yielded consistent results to the best of my ability and preparation.

Instruments

I was the primary data collection instrument and acted as the interviewer to conduct semistructured interviews, as Pezalla et al. (2012) described interviews as data

collection instruments. I asked to set the interview location near but outside of the dental practice office. I asked the dentist if we could meet in an office space in the same building or nearby and sought their help in procuring a suitable interview location that the dentist provided. The social interaction of an interview allows for the development of conversation to discover credible information (Pezella et al., 2012). My role as the interviewer gave me a sense of authority to ask for and gain answers, as explained West and Kreuter (2013). The interaction between interviewer and interviewee only occurs when the interviewer takes a position of authority to ask questions (Cadman & Brown, 2011). I asked for any materials or documents the employees had that substantiated the business strategies the dentist used. Data saturation occurs when participants provide documents in addition to interview data and multiple sources of data and viewpoints to insure the validity of the data (Fusch & Ness, 2015).

The interviews took approximately 45 minutes on average. Appendix A shows the interview protocol used. The interview questions were semistructured. I visited the dental office at the end of the interview and collected the documentation about the dental practice strategies the participants described and offered to me. All participants' identifying information reside only in the paper or voice recordings kept by me in my home safe.

I tested the interview questions to make sure the participants would understand them. Testing provides a method to add processes to systems (Pigliacelli, 2011). Testing allows more efficient use of new processes (Straub-Morarend et al., 2011). The testing of questions before using them relates to the dentist studying the use of proposed employees before employing them (Harris, 2011). The testing of the questions occurred when I asked the questions to five of my friends to ensure the questions gave the intended types of answers and removed as much bias as possible.

I reviewed the participants' answers after the interview to make sure of accurate recording of their answers and to find pragmatic meaning as Grant et al. (2012) described. I used member checking to ensure reliability and validity of each participant's answers at the end of the interview. Member checking, data interpretation, participant review, and triangulation increase the reliability and validity of the data collected (Cairney & St Denny, 2015). Member checking assists the interviewer to maintain accuracy of data collected (Covell et al., 2012).

I asked the dentist if I could talk to an employee of the practice for clarification or details about a dental practice strategy. Each dentist said yes and provided an introduction to their employee. I asked the dentist not to mention to the other participants in the office that I would conduct an interview with them. I avoided letting any patients or other office workers learn that I was interviewing them.

Data Collection Technique

Before the interview started, I inform the participants that I was turning on a recorder to record the conversation. I stopped the recorder at the end of the interview and told them the interview was complete except for receiving the documents they stated they would provide. I wrote notes on a notepad with a pen and recorded the interview on a small handheld voice recorder the answers the participants gave to my questions from the semistructured questionnaire. I collected documentation on strategies the dentist used.

My locked home safe will safely protect the voice recorder holding the participant data for 5 years from the date of the interviews. The recorder provided an advantage as I reviewed the interviews for clarifications as needed. The recorder allowed me to listen for clarity and accuracy and observe nonverbal actions of the participant, which enabled me to develop a more in-depth, rich interpretation of the collected data (Yin, 2014). Interviewers have described interviews as time-consuming due to the time required to prepare for the interview, schedule the interview, hold the interview, and review the interview (Thomas & Magilvy, 2011; Yin, 2014). Interviews also provide solid results when the questions have specific contexts (Cornell, Johnson, & Schwartz, 2013).

Reliability and validity increases as the process of member checking of data interpretation, participant transcript review, and triangulation occur in research (Cairney & St Denny, 2015). My review of the interview answers with the participants allowed for member checking of data interpretation. I reviewed the participant's answers to seek clarification to ensure the credibility of interview data collected as Gordon and Patterson (2013) described how clarification ensures credibility.

Documentation gave clarity to the strategies the dentists used. The interviewers use of direct questions relating to the internal activities of a business provided results when the questions had specific contexts (Cornell et al., 2010). The interview process provided the data needed for research into how sustainable dental practices operate.

Data Organization Techniques

The recorder containing the interview activities, any dental practice provided documents, and any postinterview note taking will remain locked in my home safe for 5

years from the date of the interviews and then destroyed. After 5 years, I will destroy the recordings on the voice recorder using the manufacturer's suggested process. The data organization by me ensures the safety and accurate organization of the data collected.

Data Analysis Technique

The four types of triangulation include data, investigator, theory, and method (Davey, Davey, & Singh, 2015). Data triangulation uses different sources of information to increase the validity of the study (Bekhet & Zauszniewski, 2012). I did not use investigator triangulation, as I was the only investigator or researcher. I did not use theory triangulation because I did not use different theoretical constructs. I mimicked Tsang (2013) and used data triangulation to analyze the collected data from interviews.

Methodological triangulation refers to the use of multiple sources of data to confirm findings and validate understanding of a phenomenon (Bekhet & Zauszniewski, 2012). I used methodological triangulation when I interviewed general dental practice dentists and employees and reviewed documentation they provided. Interviews plus document reviews gave researchers the ability to use methodological triangulation of observed and verbal data (Gorissen, van Bruggen, & Jochems, 2013). Comparing the dentist and employee's memory and practice documentation provided reliable confirmation of the phenomenon studied via methodological triangulation as Horne and Horgan (2012) described.

I asked for cooperation from the dental practice personnel and asked for additional business materials by obtaining a signed letter of cooperation (see Appendix C). The documentation from the dentist included marketing business materials. Methodological triangulation could occur from member checking, my observation of the dental practice during the interview, practice document review, or the transcript review as Horne and Horgan (2012) describe methodological triangulation. The interview data and the documentation collected allowed for triangulation.

I reviewed the research questions and answers to create preliminary coding themes to reduce the data for software analysis as Stuckey (2014) described questioning and creating themes to reduce data. I used NVivo 10.0 software to analyze the data for coding, mind mapping, and identifying pertinent themes like Yin (2014) described using tools for the data collected for analysis. The software reduced the data and segments the data based on the number of groups instantiated in the data collection process (Bloomberg & Volpe, 2012). I used the software to collaborate identification themes on statements I deemed significant and segment them into a structural and textual description to follow how Prendergast and Maggie (2013) collaborated identification themes. The search for meaning behind the data occurs when the coding of data provides themes (Cadman & Brown, 2011). I analyzed the data by focusing on topics, as Lauckner, Paterson, and Krupa (2012) compared key topics and processes for context. I determined and correlated key themes with the literature and the conceptual framework.

Reliability and Validity

Data collected by a researcher needed the qualities of reliability and validity. Reliability occurred when the researcher's data appear consistent. Validity occurred when data appeared reasonable, rational, and logically sound.

Reliability

Qualitative research submitted by me will include dependable analysis. Dependability results when a researcher uses consistent and repetitive processes (Yin, 2014), as I modeled by using the same questions in each interview. Meaningful research practices and coherence (Moraes, Carrigan, & Szmigin, 2012) increase the dependability of data. Dependable qualitative research papers contain work by the authors that contain consistent structure, data analysis relying on the coding data, and propositions provide theoretical contributions (Cairney & St Denny, 2015).

An interviewee performs a transcript review to ensure the quality of the interview transcript relating to the interviewer, interviewee, questions, transcriber, and equipment or location (Mero-Jaffe, 2011). Member checking helps the interviewer ensure the accuracy of the data collected during the interview process by having the interviewee confirm data accuracy and reliability (Covell, Sidani, & Ritchie, 2012). I reviewed the notes I took during the interview immediately after the interview with the participants to perform member checking.

Validity

Credibility does not exist from a rigid set of characteristics but builds as the processes of member checking of data interpretation, participant transcript review, and triangulation occurs in research (Cairney & St Denny, 2015). At the end of the interview, I reviewed what the participants said for member checking of data interpretation to ensure the credibility of interview data collected as Gordon and Patterson (2013) described how clarification ensures credibility. I reviewed the data to determine data saturation status as Craig et al. (2012) discussed reviewing information for data saturation. Credibility was increased as I reviewed the data and sought clarification from the participants for any concerns over interview data.

I defined the data collection process, provided clear and unbiased data analysis, and discussed the results. The reader and future researchers will gain the ability to transfer the findings to other groups and contextual areas (Thomas & Magilvy, 2011). Increases in trustworthiness relate to understanding the processes used could transfer to other contexts (Elo et al., 2014). Nurses provide an in-depth discussion of emergency procedures, which moves to different contexts (Graham-Dickerson et al., 2013). The research I completed may allow transferability to other contexts for future research as well as current reader understanding.

Confirmability of data builds as the reader of this study begins to trust my description of the research performed (Thomas & Magilvy, 2011). Confirmability of data exists when adequate separation exists between the interviewer and interviewee (Watkins, 2012). I was not familiar with the dental practice operations of the participants I interviewed. Adequate separation existed between the dentists and me in regards to the subject matter basis of dental practice strategies proving confirmability (Stoyanova & Hope, 2012). The data I presented will allow the reader to confirm the validity of the data by following my description of the data, comprehend the replication of bias, and understand that adequate separation exists.

I reviewed the interview data collected. I sought to determine if data saturation occurred. I stopped collecting data when I had enough data collected to satisfy the goal of

credible research like Collins and Onwuegbuzie (2013) described how credible research depends on enough data for data saturation. When I reviewed the data after the interviews, I worked as Craig et al. (2012) sought to find a consistency to confirm data saturation occurred. Upon review of the dental personnel interview data, I found consistent data, and determined data saturation did occur. Data saturation occurs when additional interviews yields no new data (Birks, Fernandez, Levina, & Nasrin, 2013).

Transition and Summary

I conducted qualitative research to study dentists that have successfully operated general dental practices in Washington, DC suburbs beyond 5 years. I used semistructured questions to interview dentists and employees until data saturation occurred. The participants responded to provide answers as to what strategies they used to build their practice. I used a recorder to record the answers the participants provided and will protect the recorded data and interview documents for 5 years. I used a case study method. The data collect will adhere to data collection standards with data checked for reliability and validity.

In Section 3, I provided the results of the research conducted during interviews and analysis. My work included conclusions and potential future research directions. I provided thoughts and reflections of my efforts during the writing of this study. Section 3: Application to Professional Practice and Implications for Change

In Section 3, I provide the details of the findings of my study. I also present the themes found as a result of the interviews I performed with participants from three dental practices. The results of my research give insights dentists can use to develop a solo practitioner general dental practice to sustain beyond 5 years in the Washington, DC suburbs. I provide recommendations for actions and further study and a brief summary of the findings as well as implications for social change. Section 3 concludes with reflections of my experience and a summary of my research.

The purpose of this qualitative multisite case study was to explore possible strategies that dentists used to sustain a solo practitioner general dental practice longer than 5 years in the Washington, DC suburbs. I interviewed the dentists who owned the dental practice and reviewed documents they provided to determine what strategies the dentist used in the practice when building and sustaining the practice. The dental practices I researched sustained beyond 5 years, operated as solo practitioner general dental practices, and resided in the Washington, DC suburbs.

The findings came from transcriptions of my recordings, notes, and documents from interviews where I used semistructured questions. My use of NVivo software helped me categorize the data collected into themes. I identified five themes, which included work hard, marketing, learning, patient's health, and debt.

Presentation of the Findings

My research question was as follows: What business strategies does a dentist use to sustain a solo practitioner dental practice longer than 5 years in the Washington, DC suburbs? I reviewed the interview data and documents collected from three dental practices, and I replaced the real names with P1, P2, P3. I found no new data at the end of the third interview, which signified data saturation. I organized the data into the following five themes.

Theme 1: Work Hard

All the participants stated how they needed to work hard to provide care to new patients and remove their pain. P1 explained that working hard meant providing emergency care at all hours of the night, even leaving home at 2am. P2 said that working hard meant staying to treat every patient who arrived in the practice office that day. P3 stated that he or she worked hard to make sure that every patient that showed up or called because of pain received treatment that same day. Each participant stated that referrals came as a result of the hard work the dentist did for the patients who needed dental care.

Theme 2: Marketing

All participants stated they initially needed traditional marketing to gain new patients. Traditional marketing allowed new patients to know how to contact the practice to get the dental care they needed. P1 used the largest yellow page ad in the book to attract patients with immediate needs. P2 used yellow page ads and postcards. P3 used yellow page ads, postcards, and value mailers. All of the practices used traditional marketing to attract patients when they first opened.

All the dentists mentioned they must use online marketing and they started within the past 4 years. Each participant mentioned their recent marketing had to include search engine optimization (SEO) to move the practice name to the first page of a Google search for a dentist and their practice city name. P1 and P3 mentioned they started heavily using SEO about 4 years ago. P2 started SEO in 2013. All the dentists explained they contracted SEO professionals.

Theme 3: Learning

Each practice learned how to improve the business operations of the business. The dental school did not provide all the required business skills and more learning had to occur. P1 and 2 used mentors as the major source of learning how to run and improve the practice. P3 used learning from classes, coaches, periodicals, and business products. All the dentists stated they needed to continue learning about improving business operations in an ongoing manner. Adding new procedures and refining existing processes was a requirement of all the practices.

Theme 4: Patient's Health

All the dentists explained how they put the health of the patient before the financial benefits of the practice. The referrals to each practice increased the more the practice cared about the patients. All the practices spoke of how bad dental practices sought to charge patients for unneeded dental services to increase the practice income. Every practice affirmed the need to put the patient's care and health above the need to generate additional income. The dentists all said they made enough money to build the practice and provide good salaries by caring first about the patient's health and getting paid second.

Theme 5: Debt

Every practice mentioned their focus on avoiding adding debt to the practice and spoke of minimizing student loans. None of the dentists had large student loan debt. P1 mentioned that his or her parents paid for dental school. The P2 and P3 dentists both mentioned they had small student loan debt compared to "today's student loan debt" of new dentists.

P1 mentioned the need to avoid expenditures for new equipment until the practice could pay for it. P2 stated that he or she could purchase equipment as long as the payments stayed within the practice budget for equipment. P3 affirmed the need for all monthly debt payments to total less than a week's net revenue.

Comparing Findings With Literature Review

Theme 1, work hard, was discussed in my literature review. A dentist working as a dentist only needs dental skills. A dentist operating a dental practice needs dental skills and work hard by adding what Richardson (2013) described as multiple business roles beyond dentistry. The dentist owner needs to operate the practice as an owner, and not as an employee (Barber et al., 2011). A dentist needs to learn how to operate and lead a dental practice after learning dental skills at dental school (Taichman et al., 2014).

Theme 2, marketing, was reviewed in my literature review. A dentist must learn and adopt good business marketing (Levin 2011a). Dentists need marketing skills (Bailit, 2013). Using entrepreneurial marketing allows dentists to outperform dentists who do not use it (Wilcocks, 2012). The research I performed in the dental practices and the literature review proved the existence of the marketing theme. Theme 3, learning, was discussed in my literature review. A dentist must learn and employ successful business strategies (Harris, 2011). A dentist must remain a lifelong learner to sustain his or her practice (Levin, 2014a). To successfully lead the dental practice, a dentist needs to upgrade his or her business skills stated by Taichman et al. (2014). Dentists do not have any option but to increase their knowledge and skills (Manakil et al., 2014).

Theme 4, patient's health, was explored in my literature review as customer service and dental health. Customer service, dental expertise, and profitability require the dentist and employee's attention (Manakil et al., 2014). Dental practice staff needed to allow patients to manage their dental health with guidance from the dental staff (Scarbez, 2012). Dental practice is needed to provide for a patient's health.

Theme 5, debt, was discussed in my literature review. Student loan debt was only used or increased when a planned payoff was available to the dentist. Dentists took on more educational debt when predictive intensions appeared (Iowa Dental Association, 2013). The white male dentist took on more student loans when one or both parents worked as dentists (Wancheck et al., 2014). Student dentists who had a family dental practice where they could work upon graduation took on student loan debt (Iowa Dental Association, 2013).

Comparing Findings With the Conceptual Framework

The conceptual framework for my research was general systems theory. The dental practice has components that work together to provide more capabilities than the summation of the components as von Bertalanffy (1972) described. The five themes all

appeared in the practices I researched. Each theme on its own would not allow a dental practice to exist, but together, the five themes supported a dental practice. A system becomes identified as a combination of individual necessary components working to support the system (Valentinov, 2012a).

The themes identified were all required in all the dental practices I researched to build a sustainable practice, and each theme had to occur in the practice. The themes related to what Valentinov (2012a) explained about the system being more than the sum of its components. Any one of the themes could not exist on its own to make a sustainable dental practice. All of the themes needed to exist within a dental practice along with other components.

Comparing Findings With Effective Business Practices

A dentist did work hard as an effective business practice. Dentists infused values in their business (Moeller & Valentinov, 2012). Dentists needed to direct and influence the outcomes of the practice just as a business owner directed his or her business and influenced the outcomes of business activities (Montgomery & Oladapo, 2014). Vigilance remained a dentist's priority like Kast and Rosenweig (1972) discussed how business management must remain attentive to direct the system to produce the desired results of the system. The ability to work hard allows the dentist to operate the business effectively.

Marketing gives a dentist an advantage and provides an effective business practice. Dentists needed to include marketing in their business practices among other business basics (Levin 2014a). Ethical standards and guidelines remained steadfast components of a well-run dental practice (Bailit, 2013). Marketing gave the dentist leverage and all the practices interviewed leveraged marketing to keep the practice operating effectively.

Dentists needed to continue to learn to lead the practice. Dentists learned dental skills, but not necessarily dental practice business skills in dental school (Barber et al., 2011). Dentists needed to learn business skills to provide good business services in the practice (Perhvec et al., 2014). Each practice understood the need for learning to maintain and increase their practice's effectiveness to deliver dental services.

Patient's health stems from good customer service. Business system basics included dental care and quality customer service as described by Richardson (2013). Customer service as a business practice within a dental practice continued to remain in the top three business categories (Manakil et al., 2014). A dentist balanced patient health care with effective business operations (Manakil et al., 2014) continued. Every practice interviewed gave a need for the practice to put patient health above profitability as an effective practice ideology.

Student loan debt provided a method for dentists to complete dental school, and good business practice called for effective business processes to return the amount borrowed. Dental students with a family practice where they can work after graduating dental school took out loans (Iowa Dental Association, 2013). Some dental students took out more student loans when one or both of their parents were dentists and they understood how they could pay back the loans through a dental practice (Wancheck et al., 2014).

Applications to Professional Practice

The findings of this study provided what a dentist needed to do to sustain a dental practice in the Washington, DC suburbs beyond 5 years. The five themes found in this study may aid dentists in operating a dental practice effectively. A dentist must implement hard work, marketing, learning, focusing on patient health, and controlling debt.

Hard work allows the dentist to provide dental care to patients with a sense of urgency. The dentist provides hard work when he or she stays late to treat patients who need relief as soon as practical. Patients who receive the dental care they need when they need it may become repeat patients and recommend the dentist to others.

Effective marketing strategies may provide a dentist's contact information to new patients. Marketing may make it easier for patients to receive dental care that increases their health and the dental practice income. The dentist's use of marketing may include a list of reasons to seek out dental care that provides a patient the reasons they need to find the dentist to relieve their pain.

Dentists graduating from dental school did not feel prepared to open and operate a dental practice (Barber et al., 2011). When a dentist learns business skills, their confidence grows relating to opening a dental practice (Manakil et al., 2014). Dentists need to learn business strategies so they feel prepared to open and operate their dental practice.

Each dentist interviewed expressed concern for the patient's dental health before the financial gain of the dental practice. The dentist's priority of providing for the patient's health delivered the trust a patient needed to return and to refer new patients to the dentist. The sales of unnecessary dental service caused short-term profits but reduced long-term income of the dental practice, as patients did not return as often. All of the dentists explained that they made enough money by putting the patient's dental health as the priority as it provided long-term sustainability.

Dentists had a large investment of capital and time to attend dental school, procure an office, procure equipment, and hire and pay employees to open and operate a dental practice. In addition to the capital and time outlays, the dentist needed to understand and implement the correct financial business strategies to sustain a practice effectively. The dentist needed to lead the dental practice to avoid losing the investment expenses and avoid wasting the time and energy invested in opening their dental practice while paying off student loans. The research findings provided the need for a dentist to consider debt repayment when operating a dental practice.

A dentist who wants a list of strategies to sustain a practice would benefit from my research findings. The dentist could learn new business strategies or add to their existing business strategies to prepare for opening and operating their dental practice. The five themes may provide the strategies a dentist needs to sustain a dental practice in the Washington, DC suburbs beyond 5 years.

Implications for Social Change

Positive social change from a dental practice sustained longer than 5 years may occur in communities as more health services become available to its members in the long term. Employees of the community can receive benefits with long-term dental staff careers. A community with more dental services and long-term dental staff careers may experience positive social change. A dentist who learns and implements the strategies in the findings of this research may sustain his or her dental care practice, resulting in a positive increase on the health of the members in the community. The Washington, DC suburbs community may see positive social change because of more dental practices sustained beyond 5 years.

Recommendations for Action

The strategies found from the interviews provided recommendations a dentist could implement to sustain a solo dental practice beyond 5 years in the Washington, DC suburbs. Since most dentists stated they felt unprepared to operate a dental practice upon graduating from dental school, the findings of this research provide dentists the knowledge of the strategies they need to feel prepared to sustain their practice. The dentists found they should work hard, implement marketing, continue learning, concentrate on patient's health, and manage debt in their practice.

Dental health educators should disseminate the strategies from my research to help dentists and dental practice employees build sustained dental practices. Dentists could receive the strategies within mandatory dental school classes and as an option in the required ongoing dental education classes. Dental practice employees could learn these strategies from reading dental industry periodicals and attending dental business conferences. I plan to provide business coaching and services to educate dentists and the dental practice staff with success strategies and how to implement them. I plan to author strategy implementation articles and videos for online and offline distribution and at conferences.

Recommendations for Further Study

A limitation of the research I conducted relates to the timeliness of the research. The dental practices that provided dental care may change over time. Dental practices could change how they provide dental services and patients could change how they seek out dental services. When changes occur to the strategies a dental practice uses, more research will need to occur. When changes occur to the strategies patients use to seek dental services, more research will need to occur.

Dentists who wish to learn more details about a successful practice would benefit from research into practices that sustained during their first 5 years as opposed to after the first 5 years. A researcher recording the strategies implemented by a dentist in or near real-time would provide more accurate recordings of activities without relying on the memory of the dentist or staff. A researcher interviewing new dentists in the first 5 years of the practice would not know which dental practices would sustain to the 5-year anniversary. The researcher would need to interview more practices to increase the probability of gathering relevant findings from sustained practices and eliminate data from failed practices.

Reflections

Dentists who desired to operate successful practices needed the strategies of dentists who sustained a successful practice beyond 5 years in the Washington, DC suburbs. After completing my research, I felt that the dentists who sustained their practice found the right strategies to succeed and hired people to help them implement the strategies. I wish I had thought to interview the dentists to learn the processes they used to decide which strategies to implement. By learning the processes dentists use to evaluate strategies, the processes could be used by other dentists to decide on potential additional or alternative strategies.

The doctoral process was a significant and valuable achievement in my life. I increased my critical thinking skills as a result of the process. I wondered if a reduction of my dream of building my coaching practice is somehow related to knowing the full scope of the strategies and efforts required to build a practice. I have always been a naturally optimistic person and I have looked forward to how my enthusiasm for business and enhanced critical thinking played together in my life.

Summary and Study Conclusions

A dentist built a sustainable dental practice by implementing the same strategies as other successful dental practices that sustained beyond 5 years. I have learned that finding out what successful people do and emulating their strategies increases the odds of success. As new dentists start their practice in the Washington, DC area, they should implement the five themes identified in this research study to duplicate the success of the dentists who sustained their practice beyond 5 years.

Each theme provides a component of a dental practice. A dentist who does not work hard does not gain the repeat business or the referral business of a patient who needs urgent dental care. Marketing allows patients to find the dental practice to receive the dental care they need. Dentists who learn how to operate, maintain, and improve their business and dental skill feel confident in operating their dental practice and develops a sustainable dental practice. A dentist who puts the patient's dental health as the priority obtains a repeat patient and referrals. Low debt helps a dentist manage the financial needs of the practice to sustain the business efficiently. Each theme that emerged from this study reflects strategies to build a sustainable dental practice. A dental practice implementing the five themes emulates a general system comprised of several components that must exist to make the system operate beyond the abilities of each of the components.

References

Ackerman, M., Waldman, H., & Perlman, S. (2014). Indebted to the bank or the profession? New doctor debt and its effect on access to care. *Special Care in Dentistry*, 34, 161-163. doi:10.1111/scd.12073

ADA (2015). Glossary of dental clinical and administrative words. *Journal of the American Dental Association*. Retrieved from http://www.ada.org/en/publications/cdt/glossary-of-dental-clinical-andadministrative-ter#x

- Adams, K., Hester, P., Bradley, J., Meyers, T., & Keating, C. B. (2014). Systems theory as the foundation for understanding systems. *Systems Engineering*, 17, 112-123. doi:10.1002/sys.21255
- Anderson, C. N., Noar, S. M., & Rogers, B. D. (2013). The persuasive power of oral health promotion messages: A theory of planned behavior approach to dental checkups among young adults. *Health Communication*, 28, 304-313. doi:10.1080/10410236.2012.684275
- Bailit, H. (2013). Dentistry is changing: Leaders needed. Journal of the American Dental Association, 145, 1022-1029. doi:10.14219/jada.2013.29

Barber, M., Wiesen, R., Arnold, S., Taichman, R. S., & Taichman, L. S. (2011). Perceptions of business skill development by graduates of the University of Michigan dental school. *Journal of Dental Education*, 75, 505-517. Retrieved from http://www.jdentaled.org/

- Beazoglou, T., Douglass, J., Myne-Joslin, V., Baker, P., & Bailit, H. (2014). Impact of fee increases in dental utilization rates for children living in Connecticut and enrolled in Medicaid. *Journal of the American Dental Association*, 146, 52-60. doi:10.1016/j.adaj.2014.11.001
- Bekhet, A. K., & Zauszniewski, J. A. (2012). Methodological triangulation: An approach to understanding data. *Nurse Researcher*, 20(2), 40-43. Retrieved from http://www.nursing-standard.co.uk
- Berg, J. H., & Stapleton, F. B. (2012). Physician and dentist: new initiatives to jointly mitigate early childhood oral disease. *Clinical Pediatrics*, 51, 531-537. doi:10.1177/0009922811435167
- Bloomberg, L. D., & Volpe, M. (2012). Completing your qualitative dissertation: A road map from beginning to end. (2nd ed.). Thousand Oaks, CA: SAGE.
- Blythe, S., Wilkes, I., Jackson, D. & Halcomb. E. (2013). The challenges of being an insider in storytelling research. *Nurse Researcher*, *21*(1), 8-13. Retrieved from http://rcnpublishing.com/journal/nr
- Brocklehurst, P. R., Ashley, J. R., & Tickle, M. (2011). Patient assessment in general dental practice–risk assessment or clinical monitoring? *British Dental Journal*, 210, 351-354. doi:10.1038/sj.bdj.2011.284
- Buchmueller, T., Orzol, S., & Shore-Sheppard, L. (2015). The effect of Medicaid payment rates on access to dental care among children. *American Journal of Health Economics*, 223, 2332-3493. doi:10.1162/AJHE_a_00012

- Cairney, P., & St Denny, E. (2015). Reviews of what is qualitative research and what is qualitative interviewing. *International Journal of Social Research Methodology: Theory and Practice*, 18, 117-125. doi:10.1080/13645579.2014.957434
- Chen, K. (2014). Optimizing star-coordinate visualization models for effective interactive cluster exploration on big data. *Intelligent Data Analysis*, 18, 117-136. doi:10.3233/IDA-140633
- Christensen, G. (2012). Do your patients know the alternatives for their oral care?
 Journal of the American Dental Association, 143, 1353-1355.
 doi:10.14219/jada.archive.2012.0099
- Collins, K. T., & Onwuegbuzie, A. J. (2013). Establishing interpretive consistency when mixing approaches: Role of sampling designs in evaluations. *New Directions For Evaluation*, 2013(138), 85-95. doi:10.1002/ev.20060
- Cornell, R. M., Johnson, C.B., & Schwartz, W. C. (2013). Influence of leadership positions on internal controls and reported fraud in religious organizations. *Journal of Forensic & Investigative Accounting*, 5(1), 85-125. doi:10.1108/09513570410525238
- Covell, C. L., Sidani, S., & Ritchie, J. A. (2012). Does the sequence of data collection influence participants' responses to closed and open-ended questions? A methodological study. *International Journal of Nursing Studies*, 49, 664-671. doi:10.1016/j.ijnurstu.2011.12.002

Craig, C., Klein, M. I., Griswold, J., Gaitonde, K., McGill, T., & Halldorsson, A. (2012).
Using cognitive task analysis to identify critical decisions in the laparoscopic environment. *Human Factors*, *54*, 1025-1039. doi:10.1177/0018720812448393

Crede, E., & Borrego, M. (2013). From ethnography to items: A mixed methods approach to developing a survey to examine graduate engineering student retention. *Journal of Mixed Methods Research*, 7(1), 62-80.
doi:10.1177/1558689812451792

- Daker-White, G., Hays, R., Esmail, A., Minor, B., Barlow, W., Brown, B., ...Bower, P. (2014). Maximizing involvement in multimorbidity (maximum) in primary care:
 Protocol for an observation and interview study of patients, GPs and other care providers to identify ways of reducing patient safety failures. *BMJ Open*, 4(8), 1-10. doi:10.1136/bmjopen-2014-005493
- Davey, S., Davey, A., & Singh, J. V. (2015). Options for a health system researcher to choose in meta review (MR) approaches-meta narrative (MN) and meta triangulation (MT). *Indian Journal of Community Medicine : Official Publication of Indian Association of Preventive & Social Medicine*, 40(3), 152–157. http://doi.org/10.4103/0970-0218.158843
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- DeRue, S. D. (2011). Adaptive leadership theory: Leading and following as a complex adaptive process. *Research in Organizational Behavior*, *31*, 125-150. doi:10.1016/j.riob.2011.09.007

- dos Santos, M., Massarollo, M., & Moraes, E. (2014). The family interview in the process of donating organs and tissues for transplantation: Perceptions of potential donors' relatives. *Transplantation Proceedings*, 46, 1674-1677 doi:10.1016/j.transproceed.2014.05.010
- Drack, M., & Schwartz, G. (2010). Recent developments in general system theory. Systems Research & Behavioral Science, 27, 601-610. doi:10.1002/sres.1013
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen1, K., & Kyngäs, H. (2014).
 Qualitative content analysis: A focus on trustworthiness. *Open, 4*, 1-10.
 doi:10.1177/2158244014522633

Esterberg, J. (2011). Are dentists losing their status as 'professionals'? *Journal of the American Dental Association*, *142*, 1084-1085. doi:10.14219/jada.archive.2011.0333

- Forest, A., Taichman, R., Inglehart, M., & habil (2013). Dentist's leadership-related perceptions, values, experiences and behavior. *Journal of the American Dental Association*, 144, 1397-1405. doi:10.14219/jada.archive.2013.0076
- Frels, R. K., & Onwuegbuzie, A. J. (2013). Administering quantitative instruments with qualitative interviews: A mixed research approach. *Journal of Counseling and Development*, 91(2), 184-194. doi:10.1002/j.1556-6676.2013.00085.x
- Fusch, P., & Ness, L. (2015). Are we there yet? Data saturation in qualitative research. Qualitative Report, 20(9). Retrieved from http://tqr.nova.edu/
- Garcia, R. (2014). The restructuring of dental practice. *Journal of the American Dental Association*, *145*, 1008-1010. doi:10.1016/S0002-8177(14)60160-4

- Gordon, J. & Patterson, J. (2013). Response to Tracy's under the "big tent": Establishing universal criteria for evaluating qualitative research. *Qualitative Inquiry*, 19, 689-695. doi:10.1177/1077800413500934
- Gorissen, P., van Bruggen, J., & Jochems, W. (2013). Methodological triangulation of the students' use of recorded lectures. *International Journal of Learning Technology*, 8(1), 20-40. doi:10.1504/IJLT.2013.052825
- Graham-Dickerson, P., Houser, J., Thomas, E., Casper, C., ErkenBrack, L., Wenzel, M.,
 & Siegrist, M. (2013). The value of staff nursing involvement in decision making. *Journal of Nursing Administration*, 43, 286-292.
 doi:10.1097/NNA.0b013e31828eec15
- Grant, M. A., Rohr, L. N., & Grant, J. T. (2012). How informants answer questions? Implications for reflexivity. *Field Methods*, 24, 230-246. doi:10.1177/1525822X11432081
- Harris, M. (2011). Profitable dentistry: A teaching case in entrepreneurship. *Business Education Innovation Journal*, 3(2), 103-106. Retrieved from http://cases.8chs.com/
- Hartman, E. (2011). Virtue, profit, and the separation thesis: An Aristotelian view. *Journal of Business Ethics*, 99, 5-17. doi:10.1007/s10551-011-0745-9
- Henner, K, & Esterberg, J. (2014). Dealing with a dentist who has recommended unnecessary treatment. *Journal of the American Dental Association*, 145, 1397-1405. doi:10.14219/jada.2013.6

- Horne, C., & Horgan J. (2012). Methodological triangulation in the analysis of terrorist networks. *Studies in Conflict & Terrorism*, 35. doi:10.1080/1057610x.2012.639064
- Iowa Dental Association (2013). Others in dentistry join ADA in marking their own milestone. *Journal of the American Dental Association*, 144, 65S-68S. doi:10.14219/jada.archive.2013.0253
- Kaine, G., & Cowan, L. (2011). Using general systems theory to understand how farmers manage variability. Systems Research & Behavioral Science, 28, 231-244. doi:10.1002/sres.1073
- Kast, F. E., & Rosenzweig, J. E. (1972). General system theory: Applications for organization and management. *Academy of Management Journal*, 15, 447-465. doi:10.2307/255141
- Kerr, J. (2014). Protecting your practice. *Journal of the American Dental Association*, 146, 50-51. doi:10.1016/j.adaj.2014.10.005
- Lauckner, H., Paterson, M., & Krupa, T. (2012). Using constructivist case study methodology to understand community development processes: Proposed methodological questions to guide the research process. *Qualitative Report*, *17*(25), 1-22. Retrieved from http://www.nova.edu
- Lee, W., Seok-Joo, K., Albert, J., & Nelson, S. (2013). Community factors predicting dental care utilization among older adults. *Journal of the American Dental Association*, 145, 150-158. doi:10.14219/jada.2013.22
- Leedy, P. D., & Ormrod, J. E. (2013). Practical research: Planning and design (10th

ed.). Upper Saddle River, NJ: Pearson Education.

- Levin, R. (2011a). Dentists and marketing. *Journal of the American Dental Association*, *142*, 1081-1082. doi:10.14219/jada.archive.2011.0332
- Levin, R. (2011b). Nepotism and dental practices. *Journal Of The American Dental* Association, 142, 964-965. doi:10.14219/jada.archive.2011.0305
- Levin, R. (2013a). Addressing bottlenecks in the dental practice. *Journal of the American Dental Association*, 144, 659-660. doi:10.14219/jada.archive.2013.0178
- Levin. R. (2014a). Succeeding as a new dentist. *Journal of American Dental Association*, 145, 290-291. doi:10.14219/jada.2014.6
- Levin, R. (2014b). The three essentials for successful team building. *Journal of the American Dental Association*, *144*, 203-204. doi:10.14219/jada.2014.81
- Lewis, C., McKinney, C., Lee, H., Melbye, M., & Rue, T. (2015). Visits to US emergency departments by 20- to 29-year-olds with toothache during 2001-2010. *Journal of the American Dental Association*, *146*, 295-302e.2. doi:10.1016/j.adaj.2015.01.013
- Malterud, K. (2012). Systematic text condensation: A strategy for qualitative analysis. *Scandinavian Journal of Public Health*, 40, 795-805. doi:10.1177 /1403494812465030
- Manakil, J., Rihani, S., & George, R. (2014). Preparedness and practice management skills of graduating dental students entering the work force. *Education Research International*, 2015(2015), 1-8. doi:10.1155/2015/976124

- McHugh, M., Van Dyke, K., Osei-Anto, A., & Haque, A. (2011). Medicare's payment policy for hospital-acquired conditions: Perspectives of administrators from safety net hospitals. *Medical Care Research and Review*, 68, 667-682. doi:10.1077558711408326v1
- McKay, J. C., & Quiñonez, C. R. (2012). The feminization of dentistry: implications for the profession. *Journal Canadian Dental Association*, 78, c1. Retrieved from http://www.jcda.ca
- Merritt, K. (2015). How to appropriately use dental auxiliaries. *Journal of the American Dental Association, 146*, 214, 216. doi:10.1016/j.adaj.2015.01.001
- Mero-Jaffe, I. (2011). 'Is that what I said?' Interview transcript approval by participants: An aspect of ethics in qualitative research. *International Journal Of Qualitative Methods*, 10, 231-247.
- Moeller, L., & Valentinov, V. (2012). The Commercialization of the Nonprofit Sector: A
 General Systems Theory Perspective. *Systemic Practice & Action Research*, 25, 365-370. doi:10.1007/s11213-011-9226-4
- Montgomery, E. G., & Oladapo, V. (2014). Talent management vulnerability in global healthcare value chains: A general systems theory perspective. *Journal Of Business Studies Quarterly*, 5(4), 173-189.

Moraes, C., Carrigan, M., & Szmigin, I. (2012). The coherence of inconsistencies:
Attitude–behaviour gaps and new consumption communities. *Journal of Marketing Management*, 28 (1-2), 103-128. doi:10.1080/0267257X.2011.615482

- Muirhead, V., Marcenes, W., & Wright, D. (2014). Do health provider–patient relationships matter? Exploring dentist-patient relationships and oral healthrelated quality of life in older people. *Age Ageing*, 43, 399-405 doi:10.1093/ageing/aft183
- Murphy, M. (2005). Dimension 3: business applications. *Dental Economics*, 95(5). Retrieved from http://www.dentaleconomics.com/
- Naidoo, S., & Du Toit, J. (2014). Planning for treatment ethically: Dental ethics. *South African Dental Journal*, 69, 374-375. Retrieved from http://www.sada.co.za
- Nasseh, K. & Vujicic, M. (2014). The effect of growing income disparities on U.S. adult's dental care utilization. *Journal of the American Dental Association*, 145, 435-442. doi:10.14219/jada.2014.1
- O'Reilly, M. & Parker, N. (2012). 'Unsatisfactory saturation': A critical exploration of the notion of saturates sample sizes in qualitative research. *Qualitative Research*, *13*, 190-197. doi:10.1177/1468794112446106
- Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N., & Hoagwood, K.
 (2013). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42. doi:10.1007/s10488-013-0528-y
- Perhvec, D., Rebolj, D., & Sman, N. (2014). Systematic approach for sustainable conservation. *Journal of Cultural Heritage*, 16(1). doi:10.1016/j.culher.2014.01.004
- Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2:

Introducing qualitative research methodologies and methods. *Manual Therapy*, *17*, 378-384. doi:10.1016/j.math.2012.03.004

- Pezalla, A., Pettigrew, J., & Miller-Day, M. (2012). *Qualitative Research*, *12*, 165-185. doi:10.1177/1468794111422107
- Pigliacelli, S. (2011). The changing face of dentistry. *Dentistry IQ*, 7. Retrieved from http://www.surgicalrestorative.com
- Prendergast, G. P., & Maggie, C. H. W. (2013). Donors' experience of sustained charitable giving: A phenomenological study. *Journal of Consumer Marketing*, 30(2), 130-139. Retrieved from http://www.emeraldinsight.com/0736-3761.htm
- Richardson, A. (2013). The business of dentistry. *Dental Economics, 104*(1). Retrieved from http://www.dentaleconomics.com/
- Rocha Pereira, H. (2012). Rigour in phenomenological research: Reflections of a novice nurse researcher. *Nurse Researcher*, *19*(3), 16-19. Retrieved from http://nurse researcher.rcnpublishing.co.uk
- Rosato, R. (2012). What are the ethical implications of using social coupons to expand my patient base? *Journal of the American Dental Association*, *143*, 1035-1037. doi:10.14219.jada.archive.2012.0336
- Rosenberg, G. N. (2008). *The hollow hope: Can courts bring about social change?* Chicago, IL: University of Chicago Press.
- Ryan, K. E., Gandhal, T., Culbertson, M. J., & Carlson, C. (2013, December). Focus group evidence: Implications for design and analysis. *American Journal of Evaluation*, 1-18. doi:10.1177/1098214013508300

Santos, F. M., Pache, A., & Birkholz, C. (2015). Making Hybrids Work: Aligning business models and organizational design for social enterprises. *California Management Review*, 57(3), 36-58. doi:10.1525/cmr.2015.57.3.36

Scarbecz, M. (2012). 'Nudging' your patients toward improved oracle health. *Journal of the American Dental Association*, 143, 907-915.
 doi:10.14219/jada.archive.2012.0297

- Scarbrough, A. (2014). Dealing with patient requests to provide only treatment covered by insurance. *Journal of the American Dental Association*, 146, 50-51. doi:10.1016/S0002-8177(14)60157-4
- Scoble, H., O., & White, S., N. (2013). Compound complex curves: The authentic geometry of esthetic dentistry. *Journal of Prosthetic Dentistry*, *111*, 448-454 doi:10.1016/j.prosdent.2013.10.025
- Seiler, J. H., & Kowalsky, M. (2011). Systems thinking evidence from colleges of business and their universities. *American Journal of Business Education*, 4(3), 55-61. Retrieved from http://www.ejournalofbsuiness.org
- Shah-Khan, M. (2014a). Increasing purchasing power for your practice: Understanding the dental distribution business. *Dental Economics*, 104(12). Retrieved from http://www.dentaleconomics.com
- Shah-Khan, M. (2014b). Starting a dental practice How can you afford it? *Dental Economics*, *104*(9). Retrieved from http://www.dentistryiq.com

- Shields, P. M., & Rangarajan, N. (2013). A playbook for research methods: Integrating conceptual framework and project management. Stillwater, OK: New Forums Press.
- Siggelkow, N. (2011). Firms as systems of interdependent choices. *Journal Of Management Studies*, 48, 1126-1140. doi:10.1111/j.1467-6486.2011.01010.x
- Singh, A. S. (2014). Conducting case study research in non-profit organisations. Qualitative Market Research: An International Journal, 17(1), 77-84. doi:10.1108/QMR-04-2013-0024
- Stoyanova, M., & Hope, D. (2012). Gender, gender roles, and anxiety: Perceived confirmability of self report, behavioral avoidance, and physiological reactivity.
 Journal of Anxiety Disorders, 26(1), 206-214. doi:10.1016/j.janxdis.2011.11.006
- Straub-Morarend, C. L., Marshall, T. A., Holmes, D. C., & Finkelstein, M. W. (2011). Informational resources utilized in clinical decision making: Common practices in dentistry. *Journal of Dental Education*, 75, 441-452. Retrieved from http://www.jdentaled.org/
- Stuckey, H. L. (2014). Three types of interviews: Qualitative research methods in social health. *Journal of Social Health Diabetes*, 1, 56-59. Retrieved from http://www.joshd.net/text.asp?2013/1/2/56/115294

Taichman, L. S., Taichman, R. S., Inglehart, M. R., & habil, P. (2014). Dentist's leadership-related educational experiences, attitudes, and past and current behavior. *Journal of Dental Education*, 78, 876-885. http://www.jdentaled.org/content/78/6/876.short ter Bogt, H., & van Helden, J. (2012). The practical relevance of management accounting research and the role of qualitative methods therein: The debate continues. *Qualitative Research in Accounting and Management*, 9, 265-273.
doi:10.1108/1176609121125/7470

Thomas, E., & Magilvy, J. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, 16, 151-155.
doi:10.1111/j.1744-6155.2011.00283.x

- Torrance, H. (2012). Triangulation, respondent validation, and democratic participation in mixed methods research. *Journal of Mixed Methods Research*, 6 (2), 111-123. doi:10.1177/1558689812437185
- Tsang, E.W. K. (2013). Case study methodology: Causal explanation, contextualization, and theorizing. *Journal of International Management*, 19, 195-202. doi:10.1016/j.intman.2012.08.004
- U. S. Department of Health and Human Services. (1979). *The Belmont report: National* commission for the protection of human subjects of biomedical and behavioral research. Retrieved

from https://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

- U.S. Small Business Administration (SBA). (2012). General Business Statistics. Retrieved from http://www.sba.gov
- Valentinov, V. (2012a). The institutionalist implications of the general systems theory:
 The societal role of the market. *Systems Research & Behavioral Science*, 29, 253-262. doi:10.1002/sres.1129

Valentinov, V. (2012 b). Toward a holistic nonprofit economics: Insights from institutionalism and systems theory. *Journal of Bioeconomics*, 14, 77-89. doi:10.1007/s10818-011-9108-y

Viswanathan, M., Carey, T., Belinson, S., Berliner, E., Chang, S., Graham, E., & White,
C. (2014). A proposed approach may help systematic reviews retain needed
expertise while minimizing bias from nonfinancial conflicts of interest. *Journal of Clinical Epidemiology*, 67, 1229-1238.

http://dx.doi.org/10.1016/j.jclinepi.2014.02.023.

- von Bertalanffy, L. (1972). The history and status of general systems theory. Academy Of Management Journal, 15, 407-426. doi:10.2307/255139
- Vujicic, M. (2014). The 'invisible hand' and the market for dental care. *Journal of the American Dental Association*, *145*, 1167-1169. doi:10.14219/jada.2014.100
- Vujicic, M. (2015a). The booming medicaid market. *Journal of the American Dental* Association, 146, 136-138. doi:10.1016/j.adaj.2014.12.009

Vujicic, M. (2015b). What the ADA can learn from the NBA. *Journal of the American Dental Association*, *146*, 136-138. doi:10.1016/j.adaj.2015.05.013

- Wallace, B., & MacEntee, M. (2012). Access to dental care for low-income adults:
 Perceptions of affordability, availability and acceptability. *Journal of Community Health*, 37(1), 32-39. doi:10.1007/s10900-011-9412-4
- Wancheck, T., Nicholson, S., Vujicic, M., Menezes, A., & Ziebert, A. (2014).Educational debt and intended employment choice among dental school seniors.

Journal of the American Dental Association, 145, 428-434.

doi:10.14219/j.adaj.2014.12

- Watkins D.C. (2012). Qualitative research: The importance of conducting research that doesn't "count". *Health Promotion Practice*, *13*, 153-158.doi:10.1177/1524839912437370
- Wentworth, R. (2011). What are the ethical issues I need to consider when developing marketing strategies for my practice? *Journal of the American Dental Association*, 142, 966-967. doi:10.14219/jada.archive.2011.0306
- West, B. T., & Kreuter, F. (2013). Factors affecting the accuracy of interviewer observations: Evidence from the national survey of family growth. *Public Opinion Quarterly*, 77, 522-548. doi:10.1093/pog/
- Wieczorek, A. J., & Hekkert, M. P. (2012). Systemic instruments for systemic innovation problems: A framework for policy makers and innovation scholars. *Science & Public Policy (SPP)*, 39(1), 74-87. doi:10.1093/scipol/scr008
- Willcocks, S. (2012). The entrepreneurial role in primary care dentistry. *British Dental Journal*, 212(5), 213-217. doi:10.1038/sj.bdj.2012.177
- Yawson, R. (2012). Systems theory and thinking as a foundation theory in human resource development - A myth or reality? *Human Resource Development Review*, 12(1), 53-85. doi:10.1177/1534484312461634
- Yazdanfar, A. (2015). Business advisory services and risk among start-ups and young companies: A gender perspective. *International Journal of Gender and Entrepreneurship*, 7, 168-190. doi:10.1108/IJGE-05-2013-0046

- Yin, R. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Zenko, Z., Bojan, R., Mulej, M., Tatjana, M., & Nastja, M. (2013). General systems theory completed up by dialectical systems theory. *Systems Research and Behavioral Science*, 30, 637-645. doi:10.1002/sres.2234

Appendix A: Interview Protocol

I used the following interview protocol:

 Upon obtaining the names and contact information of dentist and employees who meet the research requirements, an email request for an interview will be transmitted to them. The email request follows:

Dear Dr. XX,

You are being asked to participate in a doctoral study regarding factors that contribute to private dental practice success. Dentists who have sustained a successful dental practice for more than 5 years in the Washington, DC suburbs may participate in the study.

If you agree to participate in this study, you will be asked to allow me to interview you and one to three employees for approximately 45 minutes. Your participation in this doctoral study is strictly voluntary. Should you agree to contribute your insights to this study, I will provide you the semistructured, openended questions and the purpose of the study prior to the interview.

Any information provided will remain kept confidential, and the results from all the interviews will be presented in aggregate format. I plan to conduct my interviews from XXX to XXX and if you would provide me a good time and phone number to call you, I would be grateful.

If you have any questions, please feel free to contact either the researcher or faculty chair by clicking reply all or directly emailing me. The researcher's name is David Gagner phone: XXX or email: XXX@waldenu.edu. The researcher's faculty chair is Dr. Janet Booker email: XXX@waldenu.edu.

Thank you for your consideration.

Sincerely,

David Gagner

- 2. I will ensure I obtain the signed Consent to Participate documentation from each participant prior to the interview. I will store the interview recordings on the recorder and the informed consent forms in a locked safe for a minimum of 5 years. No one else will have access to the data.
- 3. I will visit each participant at the agreed time/date and location. I will remind each participant that he/she may withdraw from the study at any time and that all data will remain confidential. I will thank each participant for volunteering to

share his or her insights. I will remind each participant that the focus of the interview will relate to success factors of dentists sustaining a solo practitioner dental practice for 5 years in the Washington, DC suburbs. During the question asking part of the interview, I will watch for nonverbal cues, paraphrase as needed, and ask follow-up probing questions to get more in-depth responses. I will ask each participant the following interview questions:

- 1. What business skills do you have?
- 2. How did you learn the skills?
- 3. What strategies contribute to your success?
- 4. What marketing strategies did you use to promote the growth of your business?
- 5. How did you use technology to sustain the business?
- 6. What skills do other people perform in your business?
- 7. How did you hire those skills?
- 8. How did you discover you were missing skills?
- 9. How did you deal with the lack of the skill at the time?
- 10. What do you think the essential skills a new solo practitioner dentists needs?
- 11. What advice would you give to other dentists about opening their practice?
- 4. Upon the completion of the face-to-face interview, I will verbally thank the participant for their time. I will ask for time to review the results and a good time

to schedule a member checking session. To prepare for the member checking session, I will prepare a succinct, 1 paragraph synthesis for each question answered. I will ask the participant to listen to me read the questions and paragraph and ask any clarifying questions needed to understand any answers I did not understand. I will ask the participants if I missed anything or if they would like to add any more information.

5. I will send the following thank you letter to each participant.

Dear Doctor <Participant>:

I wanted to take the opportunity to thank you for participating in my research study on success factors of dentists sustaining their solo practitioner dental practice for more than 5 years in the Washington, DC suburbs. I recognize you are very busy and truly appreciate your time and effort. The results of the study are currently being assembled and explored. Thank you again for sharing your insights!

Sincerely,

David Gagner Doctor of Business Administration Candidate Walden University

Appendix B – Informed Consent Form

I used the following IRB approved form to obtain consent from each of the dentists after

I obtained a letter of cooperation.

Informed Consent Form

You are invited to take part in a research study of determining factors leading to the sustainability of a dental practice for more than 5 years in the Washington DC area. The researcher is inviting dentists who have operated a dental practice as an owner for more than 5 years in the Washington, DC area to be in the study and employees of the practice during those 5 years. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

A researcher named David Gagner, who is a doctoral student at Walden University, is conducting this study.

Background Information:

The purpose of this study is to explore actions taken by dentists who have operated a dental practice that sustained for more than 5 years.

Procedures:

If you agree to be in this study, you will be asked to:

 Agree to participate in one face-to-face interview scheduled to lasting approximately 45 to 90 minutes at a professional office space in your same building or a nearby location acceptable to you at a mutually convenient time and date. The interview will include an audio recording, which will be kept confidential and for research purposes only.

- If applicable, voluntarily provide copies of operating processes and procedures relating to items such as practice marketing, help wanted ads, and business education classes related to the dental practice during the first 5 years of your practice.
- Perform member checking, which is done to ensure completeness and accuracy of the responses provided. Member checking will take approximately 15-20 minutes.

Here are some sample questions:

- What business skills do the dentist or practice employees have?
- How did the dentist or employees learn those skills?
- How did the dentist or practice deal with the lack of skills at the time?
- What marketing strategies did the dentist use to promote the growth of the practice?

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Participation in this type of study involves some risk of the minor discomforts experienced in daily life, such as stress, uneasiness, becoming uncomfortable. Being in this study would not pose a risk to your safety or wellbeing. Potential benefits of this study could provide insight as to increase a dentist's capability to lead and manage a dental practice to sustainability in the early years of its formation. Another potential benefit is identifying the employees skills needed to successfully sustain a practice beyond 5 years.

Declining or discontinuing participation in the interview will not impact your relationship with the researcher, the researcher family, friends, or associates in any way.

Payment:

The participant understands that there is no compensation for participation.

Privacy:

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Signed consent forms and the interview saved on the recorder used in the interview will be kept secure for at least 5 years as required by Walden University. The only identifying markers on the audio recoldings or any materials collected from the dental practice will be an interview number. The researcher will use the interview number to allow interview data and materials to be known to come from the same dental practice while completely removing any other practice identifying information. Any business materials collected with practice or dentist identifying information shall have that identifying information removed or blocked else the materials will not be used in the research. In no case will any stored interview or practice information be traceable to the practice or dentist.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via or . If you want to talk privately about your rights as a participant, you can call is the Walden University representative who can discuss this with you. Her phone number is . Walden University's approval number for this study is <u>04-05-16-</u> 0467062, and it expires on April 4, 2017.

The researcher will give you a copy of this form to keep.

At the end of the study, all participants will receive a 1-2 page summary of the research results. I have read the above information, and I feel I understand the study well enough to make a decision about my involvement. By signing, I understand that I agree to the terms described above.

Printed Name of Participant

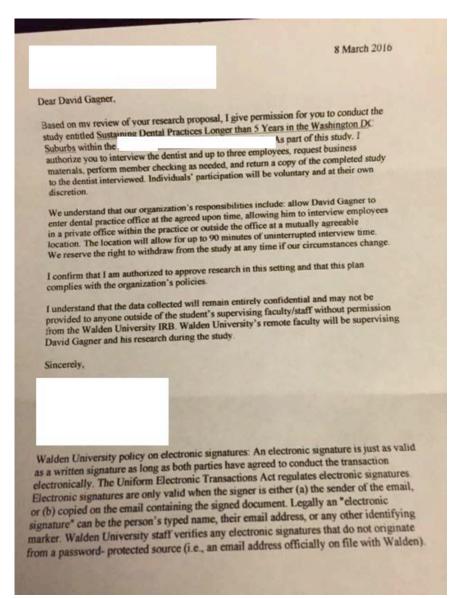
Date of consent

Participant's Signature

Researcher's Signature



Appendix C - Letter of Cooperation



8 March 2016

Dear David Gagner.

Based on my review of your research proposal, I give permission for you to conduct the study entitled Sustaining Dental Practices Longer than 5 Years in the Washington DC Suburbs within the As part of this study, I authorize you to interview the dentist and up to unce composes, request business materials, perform member checking as needed, and return a copy of the completed study to the dentist interviewed. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: allow David Gagner to enter dental practice office at the agreed upon time, allowing him to interview employees in a private office within the practice or outside the office at a mutually agreeable location. The location will allow for up to 90 minutes of uninterrupted interview time. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not performed to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB. Walden University's remote faculty will be supervising David Gagner and his research during the study.

Sincerely,

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. The Uniform Electronic Transactions Act regulates electronic signatures. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verifies any electronic signatures that do not originate trom a password- protected source (i.e., an email address officially on file with Walden).

7 March 2016

Dear David Gagner.

Based on my review of your research proposal, I give permission for you to conduct the study entitled <u>Sustaining Dental Practices Longer than 5 Years in the Washington DC</u> <u>Suburbs within the</u> <u>As part of this study, I authorize you to interview the dentition of the completed study to the dentist interviewed. Individuals' participation will be voluntary and at their own discretion.</u>

We understand that our organization's responsibilities include: allow David Gagner to enter dental practice office at the agreed upon time, allowing him to interview employees in a private office within the practice or outside the office at a mutually agreeable location. The location will allow for up to 90 minutes of uninterrupted interview time. We reserve the right to withdraw from the study at any time if our circumstances change

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

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Appendix D – List of Interview Questions

- 1. What business skills do you have?
- 2. How did you learn the skills?
- 3. What strategies contribute to your success?
- 4. What marketing strategies did you use to promote the growth of your business?
- 5. How did you use technology to sustain the business?
- 6. What skills do other people perform in your business?
- 7. How did you hire those skills?
- 8. How did you discover you were missing skills?
- 9. How did you deal with the lack of the skill at the time?
- 10. What do you think the essential skills a new solo practitioner dentists needs?
- 11. What advice would you give to other dentists about opening their practice?