5-1-2014

Partnership functioning and sustainability in nursing academic partnerships: the mediating role of partnership synergy

Chris-Tenna Marie Perkins

UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

PARTNERSHIP FUNCTIONING AND SUSTAINABILITY IN NURSING ACADEMIC PRACTICE PARTNERSHIPS: THE MEDIATING ROLE OF PARTNERSHIP SYNERGY

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

Chris-Tenna Marie Perkins

College of Natural and Health Sciences
School of Nursing
Nursing Education

May 2014

This Dissertation by: Chris-Tenna Marie Perkins
Entitled: *Partnership Functioning and Sustainability in Nursing Academic Practice Partnerships: The Mediating Role of Partnership Synergy*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Natural and Health Sciences in School of Nursing. Program of Nursing Education

Accepted by the Doctoral Committee

_____
Kathleen LaSala, PhD, APRN, PNP-BC, Research Advisor

_____
Janice Hayes, PhD, RN, Committee Member

_____
Vicki Wilson, PhD, MS, RN, Committee Member

_____
M. Todd Allen, PhD, Committee Member, Faculty Representative

Date of Dissertation Defense December 5, 2013

Accepted by the Graduate School

_____
Linda L. Black, Ed.D.
Dean of the Graduate School and International Admissions

ABSTRACT

Perkins, Chris-Tenna. *Partnership Functioning and Sustainability in Nursing Academic Practice Partnerships: The Mediating Role of Partnership Synergy.* Published Doctor of Philosophy dissertation. University of Northern Colorado, 2014.

The United States is presently challenged with numerous high profile issues in health care. The nursing profession is composed of the greatest number of healthcare providers in the system and has the opportunity to effect extensive change. Creating and sustaining academic practice partnerships is a method to meet these profound challenges more efficiently; however, nursing partnerships have not been studied. The purpose of this cross-sectional, descriptive research study is to enhance knowledge about the process by which nursing academic practice partnerships (APP) generate partnership synergy and sustainability. The research sample included participants that are involved in established nursing APP in the United States. The relationships between partnership functioning, synergy and sustainability are illustrated and the mediation of synergy among partnership functioning and sustainability is examined. Descriptive statistics, correlation analysis, and path analysis were utilized to address the research questions. The research participants describe themselves, their institutions, and their partnerships similar to what is related in the literature. The short version of the Partnership Self-Assessment Tool (PSAT-S) revealed high Cronbach's α scores representing good reliability for the tool. All variables revealed statistically significant relationships amongst the variables ($p < .05$ or $p < .01$), except the relationship between non-financial resources and sustainability.

Partnership synergy was revealed to partially mediate partnership functioning and sustainability; however, efficiency was the only partnership functioning concept that revealed to be a statistically significant negative predicator of partnership synergy. This study serves as foundational research in the area of academic practice partnerships. The association between the partnership functioning, synergy, and sustainability model and the guiding principles and strategies of academic practice partnerships in relation to the Institute of Medication Future of Nursing recommendations are explicated. The need for further research is explored.

Table of Contents

LIST OF TABLES

TABLE

LIST OF FIGURES

FIGURE

CHAPTER I

INTRODUCTION

Health care in the United States is a complex, multifarious, ever-perplexing issue. While health care systems continue to grow more intricate, the challenges continue to escalate to include an aging and more diverse population, increasing costs in a for-profit system, consumer demands of higher quality, and innovations in new treatments and technologies that challenge the knowledge and skills of health care workers. The nursing profession plays an essential role in the health of the nation because nursing comprises the largest number of individuals in the health care workforce; however, the profession is experiencing significant issues of paramount concern such as the projected nursing shortage, nursing faculty shortage, and the lack of advanced educational preparation of registered nurses to face the complexities of today's health care environment. In 2010, the Institute of Medicine released the Report on the Future of Nursing that encouraged the nursing profession to engage in a more active role in the health of the nation. Associations between health organizations and nursing education are a fairly common strategy utilized to efficiently confront many issues facing the nursing profession; however, many to most of these partnerships are informal and have not been studied. The purpose of chapter one is to introduce concepts related to nursing academic practice partnerships (APP) and outline the research study

General Background

Academic practice partnerships are not new to the nursing profession (Beal & Alt-White, 2012; Beal, 2012; Beal, Green, & Bakewell-Sachs, 2011; Frank, 2008). In fact, nursing education was originally rooted in hospital-based programs; however, as nursing sought to have a more professional base in the 1960s, nursing education was transferred to settings that awarded academic degrees (Stanley, Hoiting, Burton, Harris, & Norman, 2007). Nevertheless, due to the increasing complexity in health care and nursing education, there is an ever-increasing need to promote more partnerships, alliances, and collaboration between the community, health care services, and academia (American Association of Colleges of Nursing [AACN], 1990; American Association of Colleges of Nursing [AACN], 1997; Barger & Das, 2004; Bleich, Hewlett, Miller, & Bender, 2004; Fralic, 2004; Hewlett & Bleich, 2004; Institute of Medicine, 2010; O'Neil & Krauel, 2004).

Over the last several decades, the United States has engaged in a national conversation about the health of the nation and the system in which care is provided. "Healthcare faces an unprecedented perfect storm, a convergence of massive and disruptive forces requiring transformational change if healthcare institutions are to survive in the open competitive market" (Everett et al., 2012, p. 554). Simply stated, the health of our nation is not on at the level commensurate with the amount of money that is invested in our health care system. One revolutionary report that significantly contributed to the national healthcare dialogue was the Institute of Medicine (IOM) *To Err is Human: Building a Safer Health System* report that called to increase patient safety. In the 21st century, organizations such as the American Hospital Association, the

Joint Commission on Accreditation of Healthcare Organizations, the Pew Health Professions Commission, and the Robert Wood Johnson Foundation among others have called for reform (Boland, Kamikawa, Inouye, Latimer, & Marshall, 2010; Stanley et al., 2007). In 2010, the IOM released a landmark report, *The Future of Nursing: Leading Change, Advancing Health*, that challenged all nurses to become leaders of the future of health care by practicing to the full extent of their education and training, achieving higher levels of education, becoming partners with other health professionals, and improving the infrastructure for a more effective workforce planning and policy making. The Tri-Council for Nursing acknowledges, "At this tipping point for the nursing profession, action is needed now to put in place strategies to build a stronger nursing workforce. Without a more educated nursing workforce, the nation's health will be further at risk" (2010, p. 2). It is imperative for health care services and academia to work together for the health of the nation.

Presently, leaders in the American Association of Colleges of Nursing (AACN) and the American Organization of Nurse Executives (AONE) are collaborating to examine nursing academic practice partnerships through establishing a national dialogue and creating developmental guidelines to sustain effective academic practice partnerships (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). This steering committee has conducted focus groups, a survey, and a literature search to develop a toolkit for academic practice partnerships to utilize in creating and maintaining such partnerships. The work this committee has contributed in a short amount of time is quite substantial; however, there continues to be a lack of research in the area of academic practice partnerships to support their efforts.

Problem Statement

Due to the complex issues and challenges facing the nursing profession in the United States health care system, partnerships are growing at a rapid pace (Beal & Alt-White, 2012; De Geest et al., 2010; De Geest et al., 2013; IOM, 2010). Academic practice partnerships have a longstanding history in nursing; nevertheless, assessment of these partnerships has been limited to descriptions of anecdotal success and a few reports of basic program evaluation (Beal & Alt-White, 2012; Beal, 2012; Boland et al., 2010; De Geest et al., 2013). The reality is that up to 50% of all health related partnerships do not make it past one year (Lasker, Weiss, & Miller, 2001). Given that leading government, educational, and service organizations continue to promote collaboration, more information about partnerships is needed to cultivate the alliance between nursing academia and service (Beal, 2012; De Geest et al., 2013; Nabavi, Vanaki, & Mohammadi, 2012).

Theoretical Framework

To examine the complex nature of nursing academic practice partnerships, the conceptual framework of partnership functioning, synergy and sustainability was utilized (Cramm, Strating, & Nieboer, 2013). Partnership synergy, the mediator of partnership functioning and sustainability, is created by the collaboration of people with diverse knowledge, skills, and perspectives (Lasker et al., 2001). This collaboration provides opportunity for creative, comprehensive, practical, and transformative thinking supporting synergy that results in sustainability. Figure 2 provides the pictorial relationships of the theoretical framework.

Figure 1. Partnership Functioning, Synergy and Sustainability Theoretical Framework.

The partnership framework is composed of three main elements: partnership functioning, partnership synergy and sustainability (Cramm et al., 2013). This framework was enhanced from the original partnership synergy framework by Lasker, Weiss, and Miller (2001) that included the distal element of partnership effectiveness instead of sustainability. Cramm, Strating, and Nieboer (2013) explored the distal concept of sustainability instead of effectiveness due to the increased significance of sustainability to funders and leaders that implement health related programs. Partnership synergy is the mediating construct of partnership functioning and sustainability. Partnership functioning, the proximal construct of partnership synergy, is composed of four parts -- leadership, efficiency, administration and management, and nonfinancial resources (Cramm. Strating & Nieboer, 2011). Operational definitions of variables of terms within and related to the partnership conceptual framework are listed in the following table (Table 1).

Table 1

Definitions of Key Terms

Term	Operational Definition
Academic Practice Partnerships (APP) Or Academic Service Partnerships	Academic practice partnerships are 'a mechanism for advancing nursing practice to improve the health of the public. Such intentional and formalized relationships are based on mutual goals, mutual respect, and shared knowledge. An academic practice partnership is developed between an academic nursing program and a care setting and is defined broadly to include relationships within nursing and other professionals, corporations, government entities, and foundations. Such relationships are defined broadly and may include partnerships within nursing, and other professions, corporations, government entities, and foundations" (AACN-AONE Task Force on Academic-Practice Partnerships, 2012, p. 1).
Administration and management	The administration and management of a partnership has been described as "glue." Effective communication, collaboration, and organization are major components along with management of evaluating the progress and impact of the group (Cramm, et al., 2011; Cramm et al., 2013; Lasker et al., 2001).
Efficiency	Efficiency is concerned with how well the partnership utilizes the resources – financial, in-kind, and time (Cramm et al., 2011; Lasker et al., 2001).
Leadership	Leadership within partnerships is composed of both formal and informal leaders. The leaders need to build trust, respect, inclusiveness, and openness to ultimately inspire and motivate partners to achieve high levels of synergy. The leaders are responsible for the partnership and for recruiting the "right" people to create a diverse group (Lasker et al., 2001).
Nonfinancial resources	Non-financial resources are valuable items such as skills, expertise, information, connections, and influence (Cramm et al., 2011).
Partnership	A partnership is the state of being a partner, a legal relation between two or more persons contractually associated in a business, or a relationship resembling a legal partnership that both parties have specified and joint rights and responsibilities (Merriam-Webster, n.d.). Any type of collaboration that brings people and organizations together to improve health (Lasker et al., 2001).
Sustainability	The concept related to the continuation of programs to persist for a given period of time to be effective (Cramm et al., 2013).
Partnership Functioning	Factors that influence the partnership's ability to collaborate synergistically. Factors include leadership, efficiency, administration and management, and non-financial resources (Cramm et al., 2011; Cramm et al., 2013; Lasker et al., 2001; Weiss, Anderson, & Lasker, 2002).
Partnership Synergy	"Synergy is the degree to which the partnership combines the complementary strengths, perspectives, values and resources of all partners in the search for better solutions and is generally regarded as the product of a partnership" (Cramm et al., 2011, p. 2).

Purpose

The empirical evidence of nursing academic practice partnerships and the relationships of partnership functioning, synergy, and sustainability have not been elucidated. The purpose of this cross-sectional, non-experimental, descriptive research study is to enhance knowledge about the process by which nursing academic practice partnerships generate partnership synergy and sustainability. The researcher asked the following research questions in regard to nursing academic practice partnerships:

Q1 What are the characteristics of the participants and institutions?

Q2 What is the relationship between partnership functioning, synergy, and sustainability?

Q3 Does partnership synergy mediate the relationship of partnership functioning and sustainability?

Professional Significance

The United States of America health care issues are complex and change is imminent. Morton (2013) states "Has the time come to find a new balance? What should academic and practice partnerships look like? It seems that we should determine the direction of future partnerships based on the preferred vision of health care. Both academics and our practice partners need to be at the table to express a unified voice for health care reform" (2013, p. 125-6). Through partnerships, comprehensive action can address multifarious problems (Beal & Alt-White, 2012; Beal, 2012; De Geest et al., 2013; Lasker et al., 2001). As the largest group of health care professionals, the nursing profession is a unique position to make a significant impact. In an editorial in the Journal of Professional Nursing titled *The Time is Right –The Time is NOW… Academic-Service Partnerships Need to Be Revisited* (2011), Beal and Green states "Never before—at least

in our lifetimes—have we in the profession of nursing been faced with such a challenge and yet such an opportunity. The time is right…" (p. 1). Academic practice partnerships have the potential to serve as the foundation to resolve the current and future issues that the nursing profession confronts.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Chapter two provides a comprehensive appraisal of nursing academic practice partnerships in relation to the partnership functioning, partnership synergy, and sustainability theoretical framework. Specifically, this chapter will provide a description of the theoretical framework, offer a current perspective of the state of nursing academic practice partnerships, review the empirical literature, and propose the potential contribution to the science from this study.

Theoretical Framework

According to Fawcett (2005) "a theory is defined as one or more relatively concrete and specific concepts that are derived from a conceptual model, the propositions that narrowly describe those concepts, and the propositions that state relatively concrete and specific relations between two or more of the concepts" (p. 18). To elucidate the status of nursing academic practice partnerships in the United States, a theoretical model created for community health partnerships will be utilized to assess the current state of nursing academic practice partnerships. The researcher built on the work of Cramm et al. (2013) to illustrate the relationships of the theoretical constructs -- partnership functioning, partnership synergy, and sustainability. Figure 2 provides the illustrative description of the theoretical model.

Figure 2. Partnership functioning, synergy and sustainability.

Theoretical Constructs: Partnership, Functioning Synergy, and Sustainability

The partnership functioning, synergy, and sustainability theoretical model was developed by Cramm, Strating, and Nieboer (2013) to evaluate community care partnerships in the Netherlands. These authors adapted this theoretical framework from the Partnership Synergy model originally created by Lasker, Weiss, and Miller (2001) to assess community health partnerships in the United States. The original Partnership Synergy conceptual model was derived by the authors acknowledging that health agencies are pushed to do more with less, forced to measure health outcomes, and obligated to meet benchmarks; therefore, there is great potential for organizations to partner and capitalize on their combined resources. The authors noted that creating effective partnerships is not simple. Forming effective collaborative associations involves the development of interpersonal relationships, processes, and procedures which requires a good deal of time, resources, and energy (Lasker et al., 2001). While others interested in evaluating partnerships had focused on partnership effectiveness including inputs, throughputs, and outcomes, Lasker and colleagues were more concerned with the process of collaboration that augments the capacity of people and organizations. They

believed that the pathway through which the partners become a successful, flourishing partnership was not well explained in the previous research.

Cramm and colleagues (2013) proposed the adaptation of the original model to substitute the distal theoretical construct effectiveness for sustainability. This adaptation occurred due to the researchers noticing the considerable amount of resources that are required to implement and validate an innovative program in community care. These programs are often created without assurance that they could be sustained following the consumption of extramural funding. The researchers limited their explanation of the new theoretical construct to the description of adding sustainability; they did not address the elimination of effectiveness. Nonetheless, effectiveness has not been tested as part of the partnership synergy model except for a single study (Cramm et al., 2011) - described in detail in the review of empirical literature section.

The partnership functioning, synergy, and sustainability theoretical model is the best fit for this research study for several reasons. First, the American Association of Colleges of Nursing (AACN) and the American Organization of Nurse Executives (AONE) Task Force on Academic-Practice Partnerships (APPs) has identified sustainability as a goal of academic practice partnerships (Beal et al., 2012). The task force developed a toolkit that includes guiding principles and strategies to build and sustain successful academic practice partnerships (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). Second, effectiveness (or success) is ill-defined. The AACN-AONE Task Force found that less half of academic practice partnerships have developed objectives or metrics (AACN-AONE, n.d.); therefore, most APPs could not evaluate the effectiveness of their partnership objectively. Third,

sustainability is an important construct to test in nursing academic practice partnerships. Most partnerships do not have a single foci, they collaborate on a multitude of projects (AACN-AONE, n.d.); therefore, there is a need to sustain the partnership. Fourth, Nabavi, Vanaki, and Mohammadi (2012) completed a literature review specific to academic practice partnerships for clinical education. From this review, the authors recommend further research to examine sustainability of APPs. Lastly, the partnership functioning, synergy and sustainability conceptual constructs have been tested with adequate support (Cramm et al, 2013); consequently it is considered a theoretical framework. The theoretical framework provides a solid foundation for the study. The next sections will explicate the constructs of the theoretical model.

Partnership functioning. Lasker et al. (2001) describes partnership functioning as a determinant of partnership synergy which influences the magnitude of partnership synergy that can be created. When partnership synergy was at the conceptual model level, Lasker et al. proposed numerous partnership functioning constructs. Weiss et al. (2002) conducted a cross-sectional, non-experimental study utilizing the Partnership Synergy model and found that 4 of the numerous constructs (leadership, efficiency, non-financial resources, and administration and management) were significantly correlated with partnership synergy. In studies of community care programs in the Netherlands, Cramm et al. (2011, 2012, 2013) found that the same four constructs had significant correlations to partnership synergy. Because the four sub-constructs of partnership functioning have been validated in previous studies, they will be utilized in this research study.

Leadership. It has been well acknowledged in the literature that leadership is a significant component of successful partnerships (Beal, 2012; Cramm et al., 2011, 2012, 2013; De Geest et al, 2010; De Geest et al, 2013; Horns et al., 2007; Lasker et al., 2001; MacPhee, 2009; Nabavi et al., 2012; Smith & Tonges, 2004; Weiss et al., 2002). Leadership is needed to bridge groups together to build partnerships that cannot only overcome diverse cultures and sharing power, but maximize the potential of the collaboration (Weiss et al., 2002). Formal and informal leaders facilitate open dialogue, reveal and challenge assumptions, appreciate different perspectives, and empower the members of the partnership to expand beyond their traditional boundaries.

Both Lasker et al. (2001) and Cramm et al. (2013) identify the challenge with leadership that numerous partnerships experience; most health disciplines are not producing leaders with the qualities to fulfill this role. They suggest that presently leaders are prepared to have a narrow range of expertise, speak the expertise language of their profession that is only understood by their peers, and only relate to others similar to themselves. Lasker et al. recommends that leaders of partnerships should inspire and motivate partners to collaborate in such a way that achieves high levels of synergy. Leaders should possess qualities that will "foster respect, trust, inclusiveness, and openness among partners" (p. 194). If leaders create an environment built on these foundational concepts then differences of opinion can be voiced and conflict can be successfully be managed. When a safe working environment is formed, creative thinking is stimulated and the capacity of partnership can be expanded.

Administration and management. Administration and management of the partnership is another significant construct of partnership functioning (Cramm et al,

2011, 2012, 2013; Weiss et al., 2002). Administration and management has been described as the "glue" that makes partnerships possible. One of the most important functions of administration and management function is communication. George Bernard Shaw states, "The single biggest problem with communication is the illusion that it has taken place" (cited in "Good Reads", 2013). This could not be more true when people of diverse backgrounds, cultures, and expertise partner. Lasker et al. (2001) recommends that extensive outreach, orientation, and logistical supports are needed to encourage the diverse group. Effective communication strategies are needed to coordinate activities and facilitate synergistic, innovative thinking and action.

In addition to coordinating effective communication amongst the partnership, administration and management of the partnership has other notable components. Organization of the partnership meetings, activities, and projects is an important undertaking that includes minimizing barriers to participation (Cramm et al, 2011). However, one of those most critical elements of administration and management that is often overlooked is creating and implementing an evaluation process. This process implies that the partnership has formally created mission and vision with outcomes that can be evaluated. The progress and impact of the partnership needs to be evaluated as well as the perceived success/effectiveness/synergy of the participants within the partnership.

Efficiency. Partnership efficiency is an additional component of partnership functioning. Efficiency relates to the degree the partnership utilizes partnership's time, financial resources, and in-kind resources (Lasker et al., 2001). This includes assigning roles and responsibilities within the partnership that best matches individual interests and

strengths. In addition, time is a precious commodity that should be utilized effectively, as well as, monetary resources to include in-kind donations.

Non-financial resources. In addition to efficient use of financial resources, another noteworthy construct of partnership functioning is the efficient use of non-financial resources (Lasker et al, 2001). One of the most significant benefits of a partnership is the diverse knowledge, expertise, skills of the partner. Engaging partners to devote human capital to the experience is an essential component to the amount of partnership synergy that can be created to maximize the amount of influence needed within and outside the partnership (Cramm et al., 2013). Along with optimizing the involvement of partners, the partnership should get the most out of their ability to utilize a rich source of data as well as connections to the target population.

Partnership synergy. Partnership synergy is the mediating concept of the theoretical model. Cramm et al. (2013) states "synergy is the degree to which the partnership combines the complementary strengths, perspectives, values, and resources of all partners in the search for better solutions and is generally regarded as the product of a partnership. The synergy that a partnership can achieve is more than simply an exchange of resources among its partners. Theoretically, when partners effectively merge their perspectives, knowledge, and skills to create synergy, they create something new and valuable – a whole that is greater than the sum of its parts" (p. 210).

Stephen Covey (2008) utilizes a musical metaphor to describe synergy. He asks, what makes a jazz band sound good? One could suggest individual expertise on instruments that takes responsibility for their part coupled with the gift of band members listening and appreciating their fellow band mates. Band members wait until one person

has finished their solo before restarting their part thereby not competing for all the attention. This allows people to utilize their strengths and celebrate the diversity of the group; however, everyone is playing the same song even though they are playing different instruments. A jazz band cannot be composed of all saxophones or all drums; it requires a diverse group of instruments to develop a unique, textured sound and rhythm.

Mr. Covey provides an exceptional metaphor to apply to the partnership synergy model. "Synergy is evidenced through a partnership's activities and relationships, and through the knowledge-building that accrues from the collaborative effort," (Gray, Mayan, & Lo, 2009, p.4) just as a good jazz band's synergy is evidenced by pleasing music produced by a group of diverse musical instruments. Within a partnership, synergy is revealed in the way partners consider goals, actions, and evaluation methods; the types of work that the partnership completes; and the relationship of the partnership with the broader community (Lasker et al., 2001) similar to how a jazz plan selects their music, decides when and where they are going to perform, and how they relate to the people (community) they serve.

Synergy has been described as both a product and a mediator within the theoretical and empirical literature (Cramm et al., 2011, 2012, 2013; Lasker et al, 2001; Weiss et al, 2002). There is an assumption that high levels of synergy is ultimately a good thing in itself (a product) and that is likely to enhance the dimension of partnership effectiveness (Cramm et al., 2011; Lasker et al.) or partnership sustainability (Cramm et al., 2013). In this study, synergy will be assessed as a mediator, not as a singular product of partnership functioning. Synergy facilitates the connection of partnership functioning qualities to sustainability.

Sustainability. As mentioned above, sustainability is a new theoretical construct to the model. Cramm et al. (2013) simply define sustainability as the continuation of programs. The authors recognize that this definition implies that the system of workflow and performance of the partnership are appropriate for the work that needs to be completed. Their literature review on sustainability of health-related innovations in community care revealed the importance of leadership; particularly, the literature cites the impact of having a champion within the organization that advocates effectively for the partnership. Similarly to the partnership functioning constructs that Weiss et al. (2002) found in their study, the literature on sustainability of health-related community care revealed that resources, administration, management, and efficiency as qualities important to sustaining a partnership. Ultimately, the assumption of sustainability is that the longer partners work together, the greater potential for efficient and effective outcomes with limitless boundaries.

Current Perspectives of Nursing Academic Practice Partnerships

Despite innovations, advancements, and efforts nursing academic practice partnerships historically have experienced ups and downs (Lancaster, 2005). Warner and Burton (2009) describe the present relationship dynamic of academe and service as "parallel play with siloed policy and political realities. Behaviors range from toleration to coordination, which are usually structured, superficial, and mechanistic..." (p. 330). This section will explore the background and current perspectives of nursing academic practice partnerships in the United States.

Background

Nursing education and service has an extensive history of affiliations starting in the 17th century when nursing education was administered by religious traditions and communities (Beal, 2012). Nursing education in the 18th, 19th, and a portion of the century was controlled by hospitals, physicians, and medical colleges. In the 20th century, nursing intentionally began to separate from other health care disciplines to create a distinct profession (Stanley, Hoiting, Burton, Harris, & Norman, 2007). This separation from service altered previous close relationships to what could be described as affiliations; nevertheless, starting in the 1950s there has been individual nursing academic practice partnership cases documented in the nursing literature (Bleich et al., 2004).

In the last half of the 20th century and presently in the 21st century numerous academic practice partnerships have developed into innovated programs to support current issues such as faculty based practices, nursing research centers, and student and staff development centers (Beal, 2012; Kirschling & Erickson, 2010). The nursing literature is full of anecdotal accounts of successful partnerships. Beal et al. (2011) suggests that the nursing profession and the United States health care system has never been at such a critical point in time to partner with each other and other disciplines to move toward seamless, high quality, and cost-effective care to improve the health outcomes of the citizens. Support for the creation and maintenance of strategic alliances is as strong as it has ever been. For example, the American Association of Colleges of Nursing (AACN) in conjunction with the Association of Nurse Executives (AONE) endorses such a partnership in 1990. In addition, the AACN acknowledged the need for collaboration in the *Faculty Shortages in Baccalaureate and Graduate Nursing*

Programs: Scope of the Problem and Strategies for Expanding the Supply (2005) white paper to "identify and capitalize on specific benefits that are attractive and useful to both partnerships" (p. 19). Furthermore, the *National Advisory Council of Nurse Education and Practice: Sixth Report to the Secretary of Health and Human Services and the Congress* (2008) specifically advises two needed purposes of academic practice partnerships: 1) "facilitate partnerships between health care systems and nursing programs to matriculate existing nursing personnel into baccalaureate degree program" and 2) "support partnerships between hospitals and academic nursing institutions to assist hospitals in achieving evidence-based status" (2009, p.1). Lastly, the AACN and AONE intentionally formed a collaborative partnership specific to exploring academic practice partnerships in nursing (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). The work of this partnership will be fully explored in the next section.

American Association of Nursing and American Organization of Nurse Executives Steering Committee

Recently, the American Association of Colleges of Nursing (AACN) and American Organization of Nurse Executives (AONE) partnered to initiate a dialogue on current and best-practice partnerships and develop a road map for nursing leaders to develop and sustain effective academic practice partnerships (APP) (Beal & Alt-White, 2012). This partnership developed due to the sense of urgency created around the nursing shortage, the faculty shortage, and the 2010 IOM report on the Future of Nursing. The group formed in March of 2010 and was initially called a Task Force; subsequently, their

partnership has been extended and the group is now referred to as the AACN-AONE Academic-Practice Partnership Steering Committee.

The AACN-AONE Steering Committee is composed of four leaders from academe and four leaders from practice to engage the nursing profession in a national dialogue on current and future academic practice partnerships (APP). Initially, the task force was charged to

- Document the historical perspectives on academic-practice partnerships in the profession of nursing.
- Synthesize the current evidence based literature on academic-practice partnerships in nursing.
- Identify and categorize current academic-practice initiatives and innovations across the country.
- Identify the impact of such practices on academic and practice institutions and their constituencies.
- Define the characteristics of effective academic-practice partnerships.
- Identify the facilitators and barriers to the establishment and continuity of effective academic-practice partnerships.
- Recommend opportunities for academic-practice innovations.
- Develop Hallmarks of Excellence in Academic-Practice Partnerships that include elements essential for the development and sustainability of effective academic-practice partnerships. (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013).

The following section details the work that has been completed by this Committee.

Overview of Work. As mentioned, the American Association of Colleges of Nursing (AACN) and the American Organization of Nurse Executives (AONE) teamed together to assess the current state of academic practice partnerships (APP) (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). The Committee initiated their work by assessing the literature and gathering data from practice and academia professionals across the United States. This work led to the development of a definition, guiding principles, strategies, and a toolkit for nursing to create and sustain effective APP.

Focus Groups. The AACN-AONE Task Force conducted focus groups at national AACN and AONE conventions to include the following groups: AACN doctoral granting institutions – private, AACN doctoral granting institutions – public, AACN private institutions, AACN public institutions, American Organization of Nurse Executives (AONE), Association of State and Territorial Directors of Nursing (ASTDN), Long-Term Care nurse executives, and National Organization of Nurse Practitioner Faculties (NONPF) (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). The Task Force gathered information from these groups to include current practices and barriers, concepts of dream partnerships, and recommendations for academic practice partnerships in nursing. The focus groups revealed that current practices of effective partnerships include shared resources, ability to demonstrate outcomes and mutual benefits, and had similar characteristics. These characteristics of successful partnerships include those that are interdisciplinary, had regular, clear

communication, were formal with mutual goals, and possessed involved, dedicated, committed staff and faculty. Key barriers include lack of resources/finances, structural barriers such as lack of leadership at the top or lack of ongoing commitment, and lack of time to create and sustain relationships or lack of consistent, clear communication.

The AACN-AONE focus groups offered their ideal partnership model that would provide structure for sustainability and success (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). The ideal model would include committed, sustainable faculty and staff where joint goals and needs were met with mutual trust and effective communication. To create this dream partnership it requires "administrators who are risk taking and willing to assume liability" (p. 2). In addition to faculty members need connections with the right people and the right time and place with their college philosophy supporting service as integral to the schools of nursing's goals. Lastly, the focus groups offered recommendations to develop ideal partnerships. Recommendations included restructuring organizations to become familiar with each other's core outcome measures, understanding the financial impact on decisions on both sides, and encouraging meetings with deans, administrators, health department leaders for strategic planning, and provide structure for ongoing collaboration.

There are limitations with the data supplied from the focus groups. The group did not indicate the use of a research design or ethical considerations for a research study; therefore, the conclusions from the focus groups may or may not reveal an accurate representation of the data. Nevertheless, many of the current practices, barriers, dreams, and recommendations appear to be consistent with the nursing literature.

Survey. The AACN-AONE Task force (n.d.) surveyed AACN, AONE, and Association of State and Territorial Directors of Public Health Nursing about their perspectives with academic-practice partnerships (APP). Participants were surveyed by email utilizing Survey Monkey with a 45% response rate (295 deans, 111 nurse executives, and 32 leaders in Public Health). The most common partnership activity reported by participants was student clinical placement along with joint research committees, joint memberships on other committees, consultation, and clinical projects. The majority of partnerships did not collect outcome measures; however, the 40% of partnerships that evaluate their partnerships report collecting data on NCLEX-RN pass rates, hiring of students, retention rates of graduate hires, graduates pursuing advance degrees, and staff teaching in the academic setting. Nevertheless, most partnerships reported the lack of written goals or objectives.

There are various limitations to the survey presented above. The survey results are presented in summary form. It appears that the survey was not associated with a research design, conceptual framework, research question or hypothesis, or ethical considerations of a research study; therefore, the results of survey provide data without means to utilize it.

Guiding documents. From the data that the committee synthesized from the literature, focus groups, and survey, the AACN-AONE Task Force on APP created a definition, guiding principles and strategies, and a toolkit. The task force defines academic-practice partnerships as a "mechanism for advancing nursing practice to improve the health of the public. Such intentional and formalized relationships are based on mutual goals, respect, and shared knowledge. An academic-practice partnership is

developed between a nursing education program and a care setting. Such relationships are defined broadly and may include partnerships within nursing, and other professions, corporations, government entities, and foundations" (AACN-AONE Task Force on Academic-Practice Partnerships, 2012, p. 1). The Task Force provides 8 guiding principles with strategies for building and sustaining academic practice partnerships.

In addition to providing guidance documents, the AACN Steering committee created a toolkit to "facilitate the development, growth, and evaluation of academic-practice partnerships as a fundamental condition to advance nursing practice and improve the quality of care. In addition to exemplars, resources were created to guide you from start to finish in developing a partnership" (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013, para. 5). The toolkit provides a recipe to develop new partnerships that includes: selecting partners, preparing for the initial and subsequent meeting, and preparing the environment (time, space, regulation, and context). In addition, exemplars are provided to help guide the formation of new entities.

The Steering Committee has presented their work in multiple presentations, journal articles, and the AACN website. The work was presented at the 2012 AACN Spring Annual meeting, the 2012 AONE meeting, the 2011 AACN Baccalaureate Conference, and the 2011 AACN Executive Development Series (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). In November 2011, the *Journal of Professional Nursing* published a special edition dedicated to discussing academic-practice partnerships which included an article from the Task Force. In addition, the AACN sponsored a national conference in April, 2013 focusing of implementing successful academic-practice partnerships. The AACN has revealed

remarkable support and leadership in continuing the progress of nursing academic-practice partnerships. The plethora of work represents the significance and urgency around the topic of academic practice partnerships at the national level.

Empirical Literature Review

Nursing Academic Practice Partnerships – State of the Science

The state of the science of nursing academic practice partnerships (APP) is alarming. APP in nursing has been practiced for years, yet the scientific evidence to support it is lacking. In the present world of outcome measurement, evidence based interventions, and financial restrictions more information is needed to build and support partnerships. The following sections include the only three literature reviews published in the nursing literature on academic practice partnerships.

Academic practice partnership - integrative review. Beal (2012), co-chair of the AACN-AONE Task Force, published an integrative review of the literature on nursing academic practice partnerships. The extensive review included empirical and conceptual articles published from 1990 to 2010 in the Cochrane Library, CINAHL, and MEDLINE databases. More than 300 peer-reviewed articles were accessed, 110 articles met criteria for inclusion (English language; published within the last 20 years; detailed and substantive information about any aspect of a nursing academic practice partnership). Of the 110 articles reviewed, only nine provided original research, most articles provided descriptions of best practices but lacked formal evaluation. Within the 110 articles, Beal identified four main themes: 1) pre-requisites for successful partnerships, 2) benefits of partnerships, 3) types of partnerships, and 4) workforce development (Beal, 2012). These 4 main themes are explored below.

Beal (2012) acknowledges that numerous nursing authors have identified pre-requisites of successful partnerships that are crucial to creating and sustaining effective partnerships. Important elements of effective partnerships include: "mutual trust; shared vision, commitment, and goals; mutual respect; recognition of opportunities and strengths; open and ongoing communication" (Beal, 2012, p. 2). In addition, specific strategies discussed in the literature to develop and maintain partnerships were "written, formalized, and measurable goals and ongoing evaluation; strongly articulated institutional leadership support; the ability to take risks and tolerate ambiguity; structured accountability; institutionally shared resources; dedicated time; celebration of successes" (p.2).

Beal (2012) found that many articles on academic practice partnerships describe benefits of partnership. In 1990, the American Association of Colleges of Nursing (AACN) presented "Resolution: Need for Collaborative Relationships between Nursing Education and Practice." Bleich, Hewlett, Miller, and Bender (2004) consider the benefits listed in this landmark document still very relative. These benefits include: "strength and power in mutual goal setting, increased visibility and esteem for nursing's contribution to health care delivery, maximization of resources, enhanced opportunity for educators to remain current in practice, cost effective quality care and education of students and staff, increased research productivity, and development of patterns of excellence" (Beal, 2012, p. 5). In addition, improving the efficiencies of organizations, sparking innovation, and improving recruitment and retention are other benefits stated in the literature.

Types of partnerships with academia vary widely from acute care facilities, public health facilities, governmental agencies, schools, and tertiary care facilities (Beal, 2012). Most recently, academic practice partnerships focus on building workforce capacity. These partnerships vary from models of faculty practice to centers for research and evidence based practice. For example, faculty practice models have been around for decades; however, partnerships have moved toward the ability to create joint appointments. An example of the benefit of partnerships with centers for research and evidence based practice is that researchers are allowed access to subjects and clinicians have access to researchers. These partnerships have not only led to improving patient outcomes, but provide research training for a new generation of scholars.

Another focus of academic practice partnerships is workforce development initiatives (Beal, 2012). Beal identifies two main sub-themes of this category: academic practice progression and nursing education re-design. The 2008 Nurse Executive Center report led to the development of ten priorities for new graduates to include the polarizing views of practice readiness. "Nearly 90 percent of academic leaders believe that their new graduate nurses are fully prepared to provide safe and effective care, compared to only 10 percent of hospital and health system executives" (cited in Beal, 2012, p. 9). Senior capstone experiences have been created to assist with bridging this gap in addition to more student nurse experiences with vulnerable populations, schools, the elderly, and primary care settings.

Another workforce development initiative is re-designing nursing education (Beal, 2012). Re-designing nursing education is focused on increasing faculty capacity and more effectively prepare nursing students for the realities of clinical practice.

Examples of innovative approaches include: accelerated programs (BSN and doctoral), centralized clinical placement, dedicated education units, nurse residency programs, the Robert Wood Johnson New Careers in Nursing Program, the Nursing Teacher Loan Forgiveness programs, and public policy on further nursing education. Other examples include the Clinical Nurse Leader role development, the University Health System Consortium, and the Oregon Consortium for Nursing Education. These nursing education re-designs represent the actions taken by partnerships to confront complex, multifarious problems. More re-design is to come due to the focus on student and patient outcomes, financial restrictions/incentives, and continuing to meet the difficult demands of today's healthcare.

The limitations of this integrative review are as follows. The author limited the date range to 20 years and articles in the English language; literature outside of this date range or language may or may not have been significant. In addition, the study was limited to three databases. Expanding the number of databases and including gray literature may have broadened the review and results. The articles reviewed included minimal empirical literature which in turn limits the results of the study. Lastly, the methodology of the meta-analysis was not well described; therefore, it would be difficult to replicate the study to produce similar results.

Beal (2012) observes that there is a significant dearth of empirical literature on academic practice partnerships in nursing. She acknowledges that the nursing literature is filled mostly with anecdotal stories and suggestions for success. The small amount of research that is published has limited generalizability. The research samples are typically from a single location and represent a short amount of time. Beal keenly acknowledges

that measurement is essential to determine the short- and long-term effectiveness and efficiency of partnerships initiatives. In addition, the end result – patient outcomes – needs to be considered in this evaluation, as well as staff and faculty outcomes. Although there are is a lack of scientific rigor on this topic, Beal notes that nursing leaders across the country are taking action at the local, region, and national level to respond to the multiple challenges that the profession is experiencing. She states "The time is right to move forward by building together on past successes for both the good of our patients and the continuing development of our professional capacity" (Beal, 2012, p.6).

Clinical education academic practice partnership literature review. Nabavi et al. (2012) conducted a systematic review of academic practice partnerships for the purpose of reforming clinical education in nursing. In January, 2008 Nabavi and colleagues performed an electronic search of articles in CINAHL, Medline, ISI Web of Science, BNI, and ERIC databases that range from 1995 to 2008 utilizing the following search terms: undergraduate nursing education, clinical practice education model, clinical teaching model, and collaborative model. The search revealed that articles presented on academic practice partnerships were case study articles with the purpose of sharing their experience of development and implementation of the process. No articles resulted from a controlled-trial study; therefore, the inclusion and exclusion were modified and a second more extensive search was conducted utilizing the following keywords: academic service partnership, education practice partnership, community university partnership, clinical practice education model. In addition, a hand-search of reference lists of articles was performed. As a result, 85 articles were identified as potentially pertinent documents. Inclusion criteria included case reports that described academic practice

partnerships that focus on clinical education and were written English. Editorial or commentary articles were excluded. From that 86 papers potentially identified, 36 papers appeared to meet criteria and in the end 15 articles met inclusion criteria (21 articles were excluded).

Nabavi et al. (2012) found there were four main stages to initiate and operationalize partnerships between academe and service: "1) mutual potential benefits, 2) moving from being competitors to collaborators, 3) joint practice, and 4) mutual beneficial outcomes" (p. 123). In the first stage, the authors identified that mutual potential benefits were to enhance the capacity of nursing education, augment clinical competence for nurse educators, expand nursing research and evidence-based nursing, provide opportunities for staff development, and ease the transition of graduates. The second stage, moving from being competitors to collaborators, is centered around stakeholders (with an emphasis on top management), shared decision making, and shared structure. Joint practice, the third stage, is a process where the two organizations create a bridge to attain mutual benefits. During this process clinical education is transformed, bedside nurses become more involved in the education of students from clinical tutors to instructors, and the faculty members are responsible for staff development to prepare the bedside nurse to support or become an educator.

Nabavi et al. (2012) systemic review contains limitations. It is limited to one portion of academic service partnerships – clinical education. In addition, the authors had strict inclusion and exclusion criteria that may have limited the review of other significant literature. Due to the lack of empirical literature on the topic, the study was limited with no fault to the authors. The authors recommend that long-term sustainability

of programs need to be evaluated and more studies need to examine the success of partnerships to achieve their states goals.

Systematic literature review of academic service partnerships around the globe. A robust systematic literature review was conducted by De Geest, Dobbels, Schonfeld, Duerinckx, Sveinbuarnardottir, and Denhaerynck (2013) on academic service partnerships (ASP). The researchers' purpose of the review was "to identify structured ASPs in nursing worldwide and to describe the characteristics of the identified ASPs" (p. 2). The study methodology is based on the Preferred Reporting Items for Systematic Review and Meta-Analysis guidelines proposed by Engberg (2008) and Moher, Liberati, Tetzlaff, and Altman (2009). The researchers queried four databases: PubMed, CINAHL, PsycINFO, and Embase. The following inclusion criterion was delineated: publication data between the inception of the database and August 1, 2010; either moderately or highly structured ASP; and publication in German, Dutch, English or French.

The researchers consistently applied the noted systematic literature methodology (De Geest et al., 2013). Two of the researchers conducted the sequential state-of-the-art approach that includes three steps. The first step included that the two reviewers independently determined with abstracts/titles resulting from database searches that would be relevant to retrieve the full paper. Second, the full texts of all the potentially eligible papers were reviewed for inclusion and exclusion criteria. The initial analysis revealed that the researchers agreed on 76% of the articles meeting the criteria. The remaining articles were selected based on consensus. The third step provided an opportunity for data to be extracted again utilizing a structured form specifically

developed for the review. Findings were appraised and discussed to obtain consensus where possible.

For the intent of the study, the researchers developed descriptions for moderately and highly structured academic service partnerships (ASP) (De Geest et al., 2013). Moderately structured ASPs are characterized by an "organizational description of the ASP yet *do not* have a formal contract or strategic plan, do not have bylaws nor information on financial arrangement, and do not have clear management structures. A moderately structured ASP is mostly developed ad-hoc in response to a particular need and is situational in nature" (p. 3). In contrast, a highly structured ASP is characterized "by an organizational description of the ASP, are based either on formal contracts between the partners (signed by the top leaders) and strategic plans, or on bylaws and information regarding financial arrangements between partners. Highly structured ASPs also have clear management structures and often reflect ongoing relationships that serve mutual objectives" (p.3).

De Geest and colleagues (2013) revealed a number of descriptive results in their study. First, 114 articles describing 119 academic service partnerships met inclusion and exclusion criteria for review. Of those descriptions, 35% were highly structured ASPs and the remainder (65%) were moderately structured ASPs. The earliest article included was from 1974. There was a significant increase in the number articles after 1991 and a further increase after 2004. The median partnership duration was 6 years. The majority of ASPs reported were in the United States (84.9%) with the majority of the focus in community health settings (57.1%) and hospitals (40.3%). Over half (56.3%) of the ASP descriptions were in urban areas.

The researchers also identified the focus, organizational structure, and formal evaluation method of the academic service partnership (ASP) (De Geest et al., 2013). Most ASPs identified education (86.7%) as their focus followed by practice/clinical (49.6%), research (39.5%), and workforce issues (28.6%). Organizational characteristics varied greatly. For example, 21.8% of ASPs were contractual agreements, 2.5% had bylaws, 27.7% were part of a strategic plan, and 75.6% reported some type of financial funding or arrangements. In general, ASPs reported limited information on formal methods. The majority of articles (66%) provided some type of evaluation method. The researchers stated that "the content and approach of evaluations varied largely and were general of poor quality" (p.4). The evaluation processes described varied from focus groups or surveys while others look at pre- and post-introduction data, while one study mentioned an action research approach.

The researchers also assessed facilitators and barriers of ASPs, as well as the overall effect that the manuscripts articles provided. Fifty-five percent of the articles provide insight on facilitator factors, while only 24% of articles described barriers. Table 2 provides a list of the facilitators and barriers that the researchers discovered. Possibly due to the anecdotal nature of the success stories that are presented in articles, more facilitators than barriers are noted. Nevertheless, most authors of ASP articles (55%) reported favorable effects of ASP implementation but the lack of scientific rigor limits the generalization of outcomes (De Geest et al., 2013).

Table 2

Facilitators and Barriers of ASPs

Facilitators	Barriers
Frequent communication/open dialogue (at different levels involved)	Lack of resources/financial sustainability
Trust, tact, and respect	Lack of time/uneven time commitment
Commitment	Competition
Shared visionary and strong leadership	Conflicts of power and control
Mutual benefits	Cultural/value differences
Shared decision making	Infrastructure issues
Cooperation/collaboration	Multiplicity of demands to partners
Articulation of measures of success	Mismatch of priorities
Clear accountability	Administrative/legal differences
Clear, mutual planning, and structure	Organizational changes in one partner
Flexibility in planning	Lack of transparency
Power sharing	Lack of management support
Support of key persons/partnering institutions	
Valuing contributions of all involved	
Availability of infrastructure	
Constant process of evaluation	
Equity of partners	
Existence of and adherence to time table of objectives/priority setting	
Dedication and optimism	
Long-term thinking	
Mentoring	
People oriented management style	
Risk taking	
Shared and clear responsibilities	
Stakeholder buy-in	

Despite a rigorous approach to systematic review, this study is not without limitations (De Geest et al., 2013). First, the authors limited the literature review to four databases described and did not include "gray" literature (i.e. literature not controlled by publishers such as governmental, academic, industry, or business) in the methodology. Second, the study was limited to four languages and peer-reviewed data sources. Third, the search strings could include more alternative terms such as collaboration or inter-institutional relation. Lastly, the amount APP literature has significantly grown in recent times and articles produced in the last three years were not included due to the time between conducting the study and publishing.

State of the Science: Partnership Functioning, Synergy, and Sustainability

Lasker et al. (2001) proposed the original conceptual model of Partnership Synergy due to the perceived need for advancing collaboration in the American health system. The authors recognized the challenges that this country faces related to health cannot be accomplished by individual people, groups, or organizations, but partnerships are not always positive. Partnerships have the potential to be destructive and more than half of partnerships do not make it to their one year anniversary; yet, the benefit of partnership synergy can outweigh the effort that is necessary for synergy to occur. Cramm et al. (2013) adapted the Partnership Synergy model to alter the distal outcome of effectiveness to sustainability. Synergy appears to mediate the effects of partnership functioning on sustainability. This section will provide a review of the empirical literature on partnership synergy.

National Study of Partnership Function. Weiss et al. (2002) followed by testing the conceptual model in the National Study of Partnership Function. This exploratory study examined the relationship between constructs of partnership functioning in relationship to the proximal outcome, partnership synergy. The researchers hypothesized that partnership functioning was composed of six sub-constructs: leadership, administration and management, efficiency, nonfinancial resources, partner involvement challenges, and community-related challenges. The sample consisted of public and private partnerships from the Center for the Advancement of Collaborative Strategies in Health database. Of the 71 eligible partnerships identified, 66 partnerships in 28 states agreed to participate. A total of 815 questionnaires were returned (75% response rate). Three survey instruments (partnership synergy, partnership

functioning, and duration of partnership) were utilized to gather data from the participants. These instruments were developed from semi-structured qualitative interviews with people in partnerships and based on a review of the existing literature. After the instrument was created, they were distributed to a diverse group of partners to learn about the thought processes of the respondents. Data were collected from 22 individual interviews. Revisions to instruments were made based on the data collected to maximize content validity, minimize respondent burden, and maximize content validity. These instruments were later revised and named the Partnership Self-Assessment Tool (PSAT).

Weiss, Anderson, and Lasker (2002) found that higher levels of synergy were related to more effective leadership ($\beta = .41$, $p < .05$) and greater partnership efficiency ($\beta = .27$, $p < .05$). In addition, the results also suggest a correlation between partnership synergy and more effective administration ($\beta = .19$, $p < .10$) as well as enhanced sufficiency of nonfinancial resources ($\beta = .14$, $p < .05$). Partnership involvement challenges and community related challenges did not have a correlation to partnership synergy. This analysis explained 73 percent ($p < .05$) of the variance in partnership synergy.

This study, although very strong due to the number of participants, national sample, and high level of statistics is not without limitation (Weiss et al., 2001). The data were collected as a cross-sectional sample; therefore, the causal correlations cannot be inferred. The research design of the study did not assess the mediator effect of partnership synergy on partnership functioning and partnership effectiveness. In addition, generalization of this study should be guarded due to the convenience sample

utilized. Although the partnerships varied in duration, structure, and purpose all partnerships were in community health and could provide a disproportionate amount of synergy. Partnerships outside of community health need to be assessed for comparison.

Development and validation of the short version of the partnership self-assessment tool. Cramm, Strating, and Nieboer (2011) tested the psychometric properties of the Partnership Self-Assessment Tool (PSAT) by developing and validating a short-version of the tool. The constructs of the Partnership Synergy framework were tested in disease-management partnerships in the Netherlands. The researchers sampled 22 disease-management partnerships in various Dutch regions consisting of 393 professionals and representing 153 organizations. A total of 218 respondents completed the questionnaire (55% response rate; range 35-100%). The questionnaire included the PSAT (9 partnership synergy items, 11 leadership items, 3 efficiency items, 9 administration and management items, and 6 resource items). In addition, the Assessment of Chronic Illness Care (ACIC) tool was utilized to correlate the data from the PSAT. The researchers utilized descriptive statistics to describe the sample characteristics, confirmatory factor analysis (LISREL program) to verify the structure of the question and the relationships amongst the variables, and item reduction analysis was utilized to develop the short-version of the questionnaire. Cronbach's alpha test was utilized to assess internal consistency of the subscales and convergent validity to evaluate the associations between the dimensions of partnership with partnership synergy and ACIC.

The researchers found that both the original PSAT and the short-version PSAT are reliable and valid tools. The confirmatory factor analysis reveals that the indices of

model fit were sufficient. Cronbach's alpha ranged from suitable for the efficiency subscale ($\alpha = .75$) and exceptional for the leadership subscale ($\alpha = .87$). The correlations from the full scale to the short scales also showed acceptable range ($\alpha = .92 - 1.00$). The convergent data assessed the correlation of partnership functioning and partnership synergy. The results demonstrate that all dimensions of partnership functioning were positively correlated with partnership synergy ($p \leq 0.001$). The ACIC measures of chronic illness had a positive correlation with all dimensions of partnership functioning and synergy (all $p \leq 0.001$). The strongest relationships were between the disease-management partnership dimensions, synergy, and effectiveness in chronic-illness care delivery; therefore, synergy appears to likely enhance partnership effectiveness in this sample.

The limitations of this study include testing the original PSAT and PSAT-S in Dutch, resulting in a need for the instruments to be tested in English to verify validity (Cramm et al., 2011). In addition, the instrument's sensitivity to change requires further evaluation. Further research is needed on the predictive value of the PSAT and PSAT-S, further research could include a control group (or control sites) to strengthen the validity. The response rates (35% -100%) in each partnership varied widely and could have influenced the results. Lastly, further research could consider patients as partners to investigate their perception of the partnership.

Disease-management partnership functioning, synergy and effectiveness. Cramm and colleagues (2011) conducted a cross-sectional, non-experimental study to examine the relationships of partnership functioning, synergy, and effectiveness in chronic-illness care. The Partnership Self-Assessment Tool (PSAT) was used to measure

the dimensions of partnership functioning (leadership, efficiency, administration and management, and resources) and partnership synergy. The Assessment of Chronic Illness Care (ACIC) was utilized to assess the effectiveness of the chronic care model. The study was conducted in the Netherlands and consisted of chronic illness programs carried out by ZonMw (the Netherlands Organization for Health Research and Development). 218 respondents completed the questionnaire (55% response rate; range 35-100%). The data analysis consisted of descriptive statistics to describe the sample, Cronbach's alpha to measure the homogeneity to reflect the weighted average correlation of items within a scale measured at the individual level, correlational analysis to investigate the relationships of the partnership variables, and stepwise multiple regression analysis to determine the consistency of the data with theoretical model propositions.

The researchers found the following results (Cramm et al, 2011). Cronbach's alpha values for ACIC (0.91) and PSAT (0.76-0.93) indicate good reliability of the variables. Pearson's correlation analysis reveal significant relationships between the variables (all at $p \leq 0.001$). Stepwise multiple regression analysis reveal a significant relationship between partnership effectiveness and leadership ($\beta = 0.25$; $P \leq 0.01$) and resources ($\beta = 0.31$; $P \leq 0.001$). No significant relationship was found between efficiency, administration and effectiveness of disease-management. After controlling for all variables in step 2, partnership functioning, partnership synergy significantly affects partnership effectiveness in chronic-illness care delivery ($\beta = 0.25$; $P \leq 0.01$). In addition, the previous significant relationship between partnership functioning and effectiveness was weakened when the effects of the mediator entered this model. These

results support that partnership synergy is a partial mediator of partnership functioning and partnership effectiveness.

As with all studies, this research study is not without limitations (Cramm et al, 2011). The non-experimental, cross-sectional design allows the researcher to only assess a partnership at one point in time within a real situation. Relationships of the variables cannot infer causality, therefore, it cannot be confirmed that synergy within a partnership is an advantage over the work of the individual or single institution. Next, the size and method of sampling can inhibit the generalization of results. The convenience sample is less rigorous than random sampling and there were only 22 partnerships assessed. Future research should consider a larger sample size and random sampling, as well as, think about the assessment of patient outcomes in addition to the other variables.

Role of partnership functioning and synergy in achieving sustainability. Cramm, Stating, and Nieboer (2013) conducted a study to assess partnership functioning and synergy in relation to achieving sustainability in innovative community care programs in Rotterdam, The Netherlands. A total of 21 innovative collaborative projects were identified for the sample. The programs were sent an introductory letter to explain the research and the recipients were asked to select preferably 10 professionals in the partnership to participate. This led to the inclusion of 244 potential participants. The number of participants varied amongst projects ranging from 1 to 25. These 244 candidates were sent an email with a link to complete the questionnaire and then follow-up occurred two weeks later to those who did not respond. One hundred six people responded to the survey (43% response rate). The survey consisted of the PSAT-S instrument (9 synergy items, 4 leadership items, 3 efficiency items, 4 administrative and

management items, and 4 non-financial resource items) and a 9-item sustainability instrument developed by Slaghuis et al. (2011). All survey items were on a 5-point Likert scale. Partnership functioning and synergy dimensions were derived by calculating the sum of responses within each of the concepts.

The researchers analyzed the data utilizing descriptive, correlational, and regression statistics (Cramm et al., 2013). The sample was described utilizing descriptive statistics. To assess homogeneity of items with the scale, Cronbach's alpha test was utilized and showed good reliability (range: $\alpha = 0.79$ to 0.93). Pearson's correlation revealed strong relationships between partnership functioning, synergy, and sustainability (all $p \leq 0.001$). Hierarchical regression analysis revealed the partial mediating role of partnership synergy in the distal outcome – sustainability. In stage 1 of the hierarchical regression, sustainability significantly correlated with leadership ($\beta = .0.32$, $p < 0.001$) and non-financial resources ($\beta = .25$, $p < 0.008$); however, no significant relationship was discovered between efficiency or administration and management with sustainability. After controlling for all partnership functioning variables (stage 2 of the multiple regression analysis) partnership synergy significantly affected sustainability ($\beta = 0.39$, $p < 0.001$). The relationship significantly decreased when removing the strong independent variable – leadership ($\beta = 0.32$ to 0.15, Steiger's $Z = 2.26$, $p < 0.008$). Similar results occurred when resources was removed from the synergy and sustainability equation ($\beta = 0.25$ to 0.14, Steiger's $Z = 2.14$, $p < 0.005$). The researchers concluded that there is a strong relationship amongst all the theoretical constructs and that partnership synergy acts as a mediator between partnership functioning and sustainability; therefore, the

partnerships that are able to creatively develop synergy are more likely to continue to provide community services to the population.

There are several limitations to this research study. For example, the research design is a cross-sectional and non-experimental that is not as rigorous as a longitudinal design with controlled experiments. The design evaluates a partnership at one snapshot in time within the context of reality where there is no control of other potential barriers. In addition, the sample was a convenience sample limited to a geographic region which limits the generalizability to other groups or geographic regions. Nevertheless, the exploratory results support the theoretical model presented by the authors, but more research is needed to support the theory outside the country of The Netherlands and outside of community care to generalize the results to the nursing academic practice partnerships in the United States.

Potential Contribution to Science

The nursing literature on nursing academic practice partnerships (APP) reveals a dearth of research (Beal, 2012; De Geest et al, 2013; Nabavi et al, 2012). The stories of success and limited evaluations of projects accomplished in a single location are not robust enough scientific evidence to support the generalizations of the results to the APP population. It is evident that research on APP is needed. The partnership functioning, synergy, and sustainability framework provides theoretical constructs to ground the study. The outcomes of this study have remarkable potential to contribute to both the science of partnership research and the science of academic practice partnerships.

The experts in nursing academic practice partnerships have identified similar characteristics that facilitate effective, sustainable partnerships that are fundamentally

similar to those presented in the theoretical framework. Partnership qualities such as mutual trust and respect, congruent mission and vision, mutual benefit, and commitment to the partnership are essential foundations to successful partnerships (Beal, 2012; Beal & Alt-White, 2012; De Geest et al, 2013). Frequent and effective communication, sharing knowledge, managing resources (i.e. time, expertise, funding), and shared decision making are also important elements. These characteristics align with the descriptions of partnership functioning within the theoretical framework (Cramm et al., 2013); therefore, this study could potentially support the concepts of successful, sustainable partnerships that are currently presented in the literature.

If this study supports the theoretical framework, as supported in community health partnerships, then partnership functioning, synergy, and sustainability could serve as a theoretical framework for nursing academic practice partnerships (APPs). This is especially important at this time when there is minimal evidence to support nursing APPs, yet APPs are at a high rate of growth due to the complex nature of the nation's healthcare crisis. The theoretical framework could provide the support essential to create synergy and sustainability by encouraging partners to utilize creative thinking and expand their work outside of the traditional boundaries of their organizations (Lasker et al, 2001; Weiss et al, 2002).

In addition, to the potential contribution to nursing science, this research study could contribute to the science of partnerships. Polit and Beck (2008) state "high quality studies typically achieve a high level of conceptual integration" (p. 139). This study is not only utilizing a theoretical framework to ground the concepts, it is testing the validity of the relationships of the constructs. The partnership functioning, synergy, sustainability

theoretical framework has only been evaluated in its complete form once in a study of community health partnerships in the Netherlands (Cramm et al., 2013). Testing the theoretical framework outside of community care and in the United States could contribute to the body of knowledge about partnerships in disciplines. Furthermore, the psychometric properties of the short version of the Partnership Self-Assessment Tool (PSAT-S) have only been evaluated in a single study conducted in the Dutch language. Evaluating the tool in a subsequent study that would be conducted in English will provide further the body of knowledge about the instrument.

Summary

In summary, chapter two provided a comprehensive review of the theoretical framework and review of the literature. Partnership functioning, synergy and sustainability will be utilized as the theoretical framework for this research study. The author has presented the current state of nursing academic practice partnerships in the United States. The empirical literature was reviewed and revealed a deficit of research in nursing APP with a foundation of research in partnership synergy in community health. This research study assesses relationships of partnership functioning, synergy, and sustainability of nursing academic practice partnerships in the United States to contribute to the knowledge of both nursing APP and partnership synergy research. The results may provide foundational theoretical constructs to study and advance nursing academic practice partnerships in the United States, as well as contribute to the body of knowledge of partnership synergy.

CHAPTER III

METHODOLOGY

Introduction

The purpose of chapter three is to provide a detailed report of the methodology utilized in this research study. Information regarding the study's research design, survey instruments, population and sampling procedures, and ethical considerations is provided.

Research Design

A non-experimental, cross-sectional research design was utilized to complete this quantitative research study (Polit & Beck, 2008). Non-experimental research allowed the researcher to observe what naturally occurs without an intervention that manipulates the independent variable. The cross-sectional design represents how members of a partnership respond to a survey in one moment of time. This design is similar to the study by Cramm and colleagues (2013) that hypothesized that "the ability to create partnership synergy would be an essential factor for the achievement of sustainability in innovative program(mes) in community care" (p. 210). Descriptive, correlational, and path analysis statistics were utilized to examine the research questions.

Descriptive statistics allowed the researcher to depict current characteristics and practices of nursing academic practice partnerships in the sample, as well as describe the characteristics of functioning, synergy, a sustainability of the partnerships. Polit and Beck (2008) state that descriptive research is utilized to describe relationships among data instead of focusing on the causality or prediction of behaviors, conditions, and

situations. Descriptive statistics were utilized to describe the characteristics of the participants and their institutions, such as age, gender, educational preparation, years of experience, type of institution, and institutional accreditation, in addition, to providing contextual information about the partnerships such as, duration and focus of the partnership as well as the formalization of the partnership. In addition, descriptive statistics were also utilized to provide descriptive properties (i.e., mean, standard deviation, range, Cronbach's alpha) of partnership functioning, synergy and the sustainability in nursing academic practice partnerships.

A correlational design was utilized to make connections about the relationships of the partnership variables (Polit & Beck, 2008 ; Gall, Gall, & Borg, 2007). Polit and Beck define correlation designs as "an interrelationship or association between two variables, that is, a tendency for variation in one variable to be related to variation in another" (p. 272). This design allowed the researcher to express both positive and negative relationships among the variables. In this study, relationships between the four sub-parts of partnership functioning, synergy and sustainability were tested.

Lastly, path analysis with observed variables was conducted. This design allowed this researcher to assess the degree of the relationships of the independent variable (partnership functioning), the mediating variable (partnership synergy), and the dependent variable (sustainability), as well as test the mediator effect on the independent and outcome variables. In the landmark article by Baron and Kenny (1986) on mediator and moderator variables, the authors describe the mediator function as a third variable that represents the generative mechanism that the independent variable can influence the outcome variable of interest. Bennett (2000) states "mediator-oriented research is

usually concerned with the mechanism of the relationship between the independent variable and the outcome variable. In other words, the 'how' and 'why' is more interesting to the researcher than the independent variable itself" (p. 417). The mediator variable is more than likely an internal property or characteristic of the individual or group being studied. Mediators are not usually researched unless there is a relationship between the independent and outcome variables (Bennett, 2000).

Setting and Population

The research study was conducted in the United States. The setting was chosen as the population of interest. De Geest et al. (2013) found that 85% nursing academic practice partnerships described in the literature were located in the United States. It appears that APPs are more embedded in North American countries; however, publication and researcher bias may impact that impression. Moreover, the literature has a disproportionate representation of successful APPs; it is unfeasible for the researcher to be able to accurately identify informal or formal partnerships because a registry does not exist. Polit and Beck (2008) state that population "is the entire aggregation of cases in which a researcher is interested" (p. 337). For this research study, the researcher is interested in known nursing academic practice partnerships in the United States. Because most academic practice partnerships are informal, it was not feasible for the researcher to identify the entire APP population.

Sampling Procedure

Polit and Beck (2008) state that "sampling is the process of selecting a portion of the population to represent the entire population so that inferences about the population can be made" (p. 339). Because the population of academic practice partnerships is

unknown, the researcher utilized a convenience and snowball sampling technique. A convenience sample is a group of people that are conveniently used as study participants; whereas, a snowball sample is a type of convenience sampling that ask others to refer people who meet the eligibility criteria (Polit & Beck, 2008).

Participants for the study were identified by a variety of methods. First, the researcher identified authors of articles in the nursing literature that describe their own experiences with nursing academic practice partnerships. Second, the researcher gathered a list of participants from the 2013 AACN Academic Practice Partnership meeting. Lastly, the researcher networked with nursing leaders to identify academic practice partnership participants. Following the three methods described, the author utilized a snowball technique. The researcher asked the participants to identify colleagues within their partnerships to participate in the study. The participants were asked to forward the email request to their colleagues and copy the researcher on the email to provide a way of counting the potential sample. These three methods of sampling academic practice partnerships represent a non-probability, convenience sample that may represent the larger population. Nonprobability sampling is the weakest, yet most common sampling method; therefore, there will be limitations for generalizing the results of the research study (Polit & Beck).

Eligibility criteria, also known as inclusion and exclusion criteria were set by the researcher to specify the population characteristics that individuals and/or groups must possess to be part of a research study (Polit & Beck, 2008). It is ideal to align the eligibility criteria by theoretical considerations. The eligibility criterion for this study sample includes:

- Subjects who authored an article in the nursing literature within the last ten years describing a nursing academic practice partnership in the United States or identified by the author as a current participant in the author's described partnership.
- Academic practice partnership still actively exists.
- The subjects were over the age of 18 and able to provide consent.

Power Analysis

To achieve statistical validity in quantitative studies, researchers need to focus on sample size (Polit & Beck, 2008). Most often the larger the sample size in quantitative studies the better. A power analysis is a procedure that can be utilized to estimate sample size needs. To estimate the sample size in a power analysis, the researcher should select the statistical method that requires the largest sample. Sample size can be problematic when utilizing regression analysis because an insufficient sample sizes can lead to a Type II error (Polit & Beck, 2008). Since multiple regression analysis is the most rigorous statistical method in the study, a power analysis for this method was conducted. A power analysis can be completed to estimate the sample needed to reject the null hypothesis. The following equation is utilized to complete the power analysis shows that 98 participants are needed to detect a population R^2 of 0.13 with 3 predictors, with a 5% chance of a Type I error and a 20% chance of a Type II error (see Figure 3).

$$N = \frac{L}{\gamma} + k + 1$$

$$98.409 = \frac{13.62}{0.149} + 6 + 1$$

Figure 3. Power analysis.

Ethical Considerations

Ethical considerations for this study are limited. There were minimal risks to participants in this study, that is, no greater risk than in typical life experiences (Polit & Beck, 2008). Subjects did not receive any experimental treatments, nor were they otherwise considered vulnerable. The limited risk was the potential breach of confidentiality if identifiers are discovered and a related risk to the partnerships that participated in the study if the results were negative.

Measures to decrease the chance of potential breach of confidentiality were taken. All data collected by the researcher has been kept electronically and password protected. Any data printed in hard copy will be under lock and key. Participation in the survey was voluntary and this study was approved by the University of Northern Colorado Institutional Review Board for approval. Individuals were informed that personal or institutional identification will be anonymous in the report. All data were reported in aggregate form with no identifying information (individual, institution, or partnership) made available.

Data Collection

Instrumentation

For this research study, three surveys were created or adapted to collect data. First, the author developed demographic questions to include personal information, institutional information, and partnership information. The second survey utilized was the Partnership Self-Assessment Tool: Short (PSAT-S). This tool gathers data related to partnership functioning (leadership, efficiency, administration and management, and non-financial resources) and partnership synergy (Cramm et al., 2013). The last tool utilized in this study consisted of a portion of an instrument originally created by Slaghuis, Strating, Bal, and Nieboer (2011) and adapted by Cramm, Strating, and Nieboer (2013). The following sections will describe these tools more in detail.

Demographic survey. The researcher developed demographic questions to better understand the sample. These questions were closed-ended and multiple choice. Polit and Beck (2008) state that closed-ended questions are more time efficient and participants are more likely to check a box than fill in an open-ended question; however, closed-ended questions can force the participant to choose a category that may or may not fit. The authors suggest that is best to offer respondents the opportunity to fill-in information that allows freedom for elaboration or spontaneity; therefore, respondents were offered a fill-in "other" option.

The demographic data collected covers three distinct categories: 1) personal, 2) institutional characteristics, and 3) partnership characteristics. First, personal information was gathered and included factors such as age, gender, race, ethnicity, educational preparation, and current role. This demographic data was utilized to determine the

characteristics of the group as compared to national statistics. Institutional data included accreditation type, size, and description of services. For academic institutions, data were gathered about institutional accreditation (Commission on Collegiate Nursing Education (CCNE) or the National League for Nursing Accrediting Commission (NLNAC)), types of nursing degree programs (associate degree in nursing, diploma, bachelors of science in nursing, registered nurse to bachelors of science in nursing, masters of science in nursing, doctorate of nursing practice, doctorate of philosophy in nursing), and size (student population). For service institutions, information about the type of institution, accreditation such as Joint Commission on Accreditation of Healthcare Organizations (JCAHO), AACN Magnet© designation, and academic health center designation were collected. Lastly, partnership characteristics included duration, types (advancing education in nursing, advancing nursing scholarship, advancing practice, and community service), the partnership's focus on the Institute of Medicine's Future of Nursing recommendations, and formal structure of the partnership.

Partnership Self-Assessment Tool: Short (PSAT-S). Cramm, Strating, and Nieboer (2011) validated the use of the Partnership Self-Assessment Tool (PSAT) in the Netherlands and reduced the number of items of PSAT while maintaining validity and reliability. Twenty-two disease-management partnerships were identified as the convenient sample and a total of 218 out of 393 subjects (55% response) participated. The Assessment of Chronic Illness Care (ACIC) was utilized to test convergent validity with the PSAT. To test the relationship between the observed relationship variables and their underlying latent constructs, confirmatory factor analysis through the use of LISREL program was utilized. Items were excluded one by one, starting by eliminating

items with factor loadings below 0.40 and stopped when reliability (Cronbach's alpha) of each scale drop below 0.70 and 3. All items were screened for univariate and bivarate normality. Confirmatory factor analysis revealed that items had factor loadings above 0.60 on the intended factor except two items. The indices of model fit revealed that the model fit was sufficient; however, indices indicated that the model left room for shortening. Correlations between the full scale and short scale ranged from 0.92 to 1.00, indicating an acceptable coverage of the original sub dimensions. The ACIC results positively correlated with the PSAT full and short scale.

Cramm et al. (2011) found that the psychometric properties and convergent validity of the PSAT-S rendered the instrument valid and reliable for assessing partnership synergy and dimensions of partnership functioning. There are several limitations of this study. First, the convenience sample can limit the generalizability of the study results. Second, the short scale was tested in Dutch and will need to be tested in English. Third, there is a chance that completing the PSAT could act as an intervention by incidental education awarded by the survey itself; however, the researchers found this unlikely. Lastly, the response rates varied widely amongst the partnerships (35% - 100%). Nevertheless, the psychometric properties of the PSAT and PSAT-S are sound and the PSAT-S appears to be a promising alternative instrument.

Sustainability. Cramm and colleagues (2013) tested the partnership functioning, synergy, and sustainability theoretical model and utilized selected survey questions from an instrument that was originally developed to measure sustainability of work practices in long term care (Slaghuis, Strating, Bal, & Nieboer, 2011). The objective of the long-term care study was to develop a theoretical framework and measurement of sustainability.

The framework conceptualized two main dimensions: routinization and institutionalization. The study supported the validity and reliability of a short- and long-version of the tool. Slaguhuis and colleagues anticipated that the framework, with all the sub-dimensions, would not only be applicable to long-term care but other service organizations. The limitations of the sustainability framework study include small sample size, the use of imputed data, choice of improvement teams as the sample, interrelated issues with employees in organizations, internal consistency could be stronger with utilizing test-retest, and there were some problems with the initial model of fit.

Cramm and colleagues (2013) selected questions from the routinization component of the short-version of the sustainability instrument. Specifically, questions from routinization I and II short-version of that tool were selected, Cronbach's alpha scores 0.85 and 0.75, respectively. Examples of the items include "the new practice is regarded as the standard way to work" and "all colleagues involved in the new work practice are knowledgeable about it" (Cramm, et al, 2013, p. 212). Responses are on a 5-point Likert scale with higher scores indicating greater sustainability. The sustainability score is derived by calculating the mean of both the routinization I and II question scores.

Data Collection Procedure

Participants in nursing academic practice partnerships were identified as the sample, then contacted by email to request their participation in the research study. The research subjects were asked to forward the original email requesting study participation to current participants within their given partnership and to copy the researcher on the email. The email contained a cover letter indicating that participation in the survey

would be considered consent for their survey responses included in the study. For easy access, the survey was hyperlinked to the email. Qualtrics software was utilized to gather the survey data. Participants were informed that data would be kept confidential. The researcher coded individual data and only report aggregate data. All identified subjects who did not participate in the study after a two-week period received a follow up email request.

Data Analysis

To review, the purpose of this research study was to provide data on the current state of nursing academic practice partnerships, assess synergy as a mediating variable in the partnership synergy model, and evaluate the partnership synergy model for use in nursing. The study is a quantitative, non-experimental research design that utilized both descriptive and inferential statistics. Participants in nursing academic practice partnerships were asked to take part in a survey. The survey consisted of participant demographic questions, institutional demographic questions, description on the types of partnerships, the short version of the Partnership Self-Assessment Test (PSAT), and survey questions related to sustainability. The following sections describe the data analysis procedures for each research question and hypothesis.

Q1: What are the Characteristics of the Participants and Institutions?

To describe participants and their associated institutions, frequency distribution, central tendencies, and variability descriptive statistics were utilized. Polit and Beck (2008) describe frequency distributions as an arrangement of values from lowest to highest that are represented in a table or graph. Central tendency is a method to represent values by a single number that best represents the group of values. Central tendency

includes mode, mean, and median. Variability is a representation of how values are spread out, such as range and standard deviation.

In this study, participants were asked to give personal demographic information, information about their institution, and characteristics of their academic practice partnership. Participant demographic information included gender, age, race, ethnicity, educational preparation, and current role. Institutional data includes accreditation type, size, and description of services. Partnership characteristics include duration, types (advancing education in nursing, advancing nursing scholarship, advancing practice, and community service), formalized structure (i.e. mission/vision, goals and outcomes, contracts, bylaws, and financial agreements), and work toward Institute of Medicine's Future of Nursing recommendations. Utilizing frequency distribution descriptive statistics, the researcher was able to organize the data to answer the research question.

Q2: What is the Relationship between Partnership Functioning, Synergy, and Sustainability?

To explore research question two, the researcher utilized a correlational design to test the relationships about the given variables – partnership functioning, partnership synergy, and sustainability (Polit & Beck, 2008). Specifically, the researcher utilized product-moment correlation product, also known as Pearson's *r*, to reveal the strength of the relationship between two variables. The correlations between two variables can be plotted on a scattered plot diagram and when the relationship is not perfect, the degree of the correlation can be analyzed by seeing how close the points cluster around a straight light. Correlation coefficients were reported in a two-dimensional correlation matrix.

Q3: Does Partnership Synergy Mediate the Relationship of Partnership Functioning and Sustainability?

To analyze the mediating effect of partnership synergy, the researcher utilized path analysis with observed variables conducted using EQS 6.2. This approach to examining mediation is superior to traditional ordinary least square (OLS) regression approaches because a single analysis is necessary rather than a series of OLS regressions, and thus, obviating potential inflation of familywise Type I error rate (Tabachnick & Fidell, 2013).

Because the conceptual model of partnership functioning, partnership synergy and sustainability has been logically developed and tested, the researcher controlled the order of entry of data into the equations (Baron & Kenny, 1986). The researcher first entered partnership functioning followed by partnership synergy then sustainability. Because partnership functioning involves four subsets of data (leadership, efficiency, administration, and non-financial resources), the data were entered in as a block. For the mediator effect to be present the following two conditions must be established: "a) the mediator is a significant predictor of the outcome variable and b) the direct relationship of the independent variable to the outcome variable is less significant than it was in the second equation" (Bennett, 2000, p. 418).

Data Screening and Assumption Testing Procedures

Prior to data analysis, the data were examined to ascertain whether necessary assumptions were met. For all analyses, data were evaluated for univariate and multivariate normality. Univariate normality was evaluated using skewness and kurtosis as well as histograms with normal curve overlay. Tabachnick and Fidell (2013) argue that

values less than the absolute value of 2 indicate that the data approximates a normal distribution. For the present data, skewness and kurtosis for all continuous variables—that is, measured at the interval or ratio scale—indicate that the data approximated univariate normality. Multivariate normality is independent of univariate normality because, although all variables under investigation are univariate normal, it does not guarantee that, when combined in a linear combination, they are normally distributed. Mardia's Normalized Estimate was used as the metric for assessing multivariate normality. Tabachnick and Fidell posit that a value less than 6 indicates multivariate normality; for the present data, this value was less than 5, and hence, the data were also multivariate normally distributed.

The data were also evaluated for the presence of univariate and multivariate outliers. Because outliers unduly influence, and thus bias, parameters (e.g., means, standard deviations, regression coefficients, etc.), it is necessary to detect and omit them from analysis (Tabachnick & Fidell, 2013). The data did not exhibit either univariate or multivariate outliers. Finally, all other assumptions, including lack of multicollinearity and homoscedasticity, were also met, and thus, data analyses proceeded as planned.

Threats to Internal Validity

All research studies have potential factors that can challenge the validity of the inferences (Polit & Beck, 2008). Validity has been defined as "the approximate truth of an inference" (p. 286); whereas, internal validity "refers to the extent to which it is possible to make an inference that the independent variable is truly causing or influencing the dependent variable and that the relationship between the two is not the spurious effect of a confounding variable" (p. 295).

There are two types of internal validity that can threaten the results of this research study. First, temporal ambiguity is a type of internal validity that can influence this study. In a causal relationship, the cause must come before the effect (Polit & Beck, 2008). In an experimental study, the researcher observes the effect of the independent variable on the outcome variable. This study is a non-experimental, correlational design which makes it more difficult to establish if the independent variable precedes the mediator and outcome variables. Another type of internal validity threat is selection (Polit & Beck, 2008). When groups are not randomly selected then there is possibility that the groups are not alike. In this study, the researcher utilized a convenient sample. Selection of participants will threaten internal validity.

While threats to internal validity cannot be completely avoided, the researcher can carefully design the study to best guard against and detect threats (Polit & Beck, 2008). This researcher identified temporal ambiguity and selection as a threat to internal validity. To ameliorate this concern, the researcher gathered demographic data about the participants, their institutions, and their partnerships to describe the sample. This data were compared to the APPs described in the AACN-AONE survey and the nursing literature.

Summary

Chapter 3 provided a detailed description of the research study methodology. This description includes a description of the research design, the survey instruments, the population, the sampling technique, potential ethical considerations, the plan for data analysis, and potential threats to internal validity.

CHAPTER IV

RESULTS

Introduction

The purpose of this cross-sectional, descriptive research study is to enhance knowledge about the process by which nursing academic practice partnerships (APP) generate partnership synergy and sustainability. Chapter four provides a comprehensive presentation of the research study results. This chapter includes a description of the data analysis for each research question and any additional findings.

Sample

The researcher obtained the sample as described in the Methodology (Chapter 3) section. A total of 279 email requests were sent to potential research participants through Qualtrics or the University of Northern Colorado's email system. Participants were also asked to forward the research request to other academic practice partners. In addition, participants received a "thank you" email for participation through email if their request was generated through Qualtrics. This thank you email reminded them to forward the request for research participation to others in their academic practice partnership group. A response rate cannot be calculated because the researcher cannot attest to the amount of snowball e-mail requests that occurred. Very few participants copied the researcher on an email to request further participation as requested.

The first question of the survey was utilized as the qualification question. The question stated "Are you part of an active academic practice partnership?" A total of 106 participants answered yes to this question and were eligible to participate in the study out of the 145 people that opened the survey and either answered "no" to the qualifying question or did not respond to any questions. Of the 106 participants that participated in the survey, not all participants completed all of the questions. By design participants were asked to skip a block of questions if they were not part of a group (i.e. practice representatives should not complete the questions that refer to academia demographics); nevertheless, participants were not forced to answer all the questions that pertained to them. There was a variety of participation rates per question.

Data Analysis

Three research questions were proposed in this research study. Data were analyzed by each research question and presented below in that manner.

Q1: What Are the Characteristics of the Participants and Institutions?

Research participants were asked questions to describe characteristics about themselves and their institution of employment. These characteristics allowed the researcher to provide contextual information about the participants. Tables 3-5 contain the descriptive statistics for the: (1) personal characteristics of the participants; (2) characteristics of the institution; and (3) characteristics of the partnership. Table 6 provides descriptive statistics and internal consistency reliability coefficients (α) for the PSAT-S subscales, sustainability, and synergy. A summary of the results of each table is given below.

Participants in the study present the typical characteristics of nurses in academia and practice administration. Participants in this study were mostly registered nurses (77.2%), generally female (75.6%), and typically in the age range of 50-59 (39.3%). Most participants identified their ethnicity as not Hispanic or Latino (76.6%) and their race as White (72.4%). The education level of participants was high, all but two participants had a master's degree or higher. The other category revealed mostly doctoral candidates or Ed.D degrees. Most participants were from academia: administration (24.8%) and faculty (28.3). Table 3 provides the details of the participant characteristics.

Participants provided descriptions about their institutions. Those from academia mostly reported accreditation from the Commission of Collegiate Nursing Education (CCNE) (45.9%). There was a variety in the types of nursing education programs offered at the institutions. Most participants reported offering a bachelor of science in nursing programs (n=77), followed by masters programs (n=64), and doctoral programs (n=42). A minority of participants offered associate degree programs (n=12). In addition, the total student enrollment varied greatly and was well distributed over the different categories; most participants reported having greater than 601 students (17.2%).

Participants from practice also provided information about their institutions. The majority of institutions represented were hospitals (20.7%); nevertheless, participants from community, psychiatric mental health facilities, and school-based health care were also represented. Most institutions were accredited by The Joint Commission (24.8%). The distribution of Academic Health Center status was almost evenly split, as well as, those institutions that are part of the ANCC Magnet© recognition program. Table 4 below provides details about each institution.

Table 3

Frequencies and Percentiles of Participant Characteristics

Variable	*N*	%
Licensed RN		
Yes	112	77.2
No	4	2.8
Age		
20-29	1	7.0
30-39	5	3.4
40-49	23	15.9
50-59	57	39.3
60-69	31	21.4
Gender		
Male	6	4.1
Female	117	75.6
Ethnicity		
Hispanic or Latino	3	2.1
Not Hispanic or Latino	111	76.6
Race		
White	105	72.4
Black	8	5.5
Asian	1	0.7
Other	1	0.7
Education		
Baccalaureate	2	1.4
Masters	43	29.7
DNP	14	9.7
PhD	49	33.8
Other	8	5.5
Current Role		
Academic Administration	36	24.8
Academic Faculty	41	28.3
Practice-setting Manager	2	1.4
Practice-setting educator	10	6.9
Practice-setting Chief Administrator	4	2.8
Practice-setting Staff	4	2.8
Other	19	13.1

Note. Not all 145 participants responded to the items, and thus, the percentiles in each category may not equal 100.

Table 4

Frequencies and Percentiles of the Characteristics of Institutions

Variable	*N*	%
Accrediting Body		
NLNAC	16	11.0
CCNE	68	45.9
Other	6	4.1
Type of Nursing Program [a]		
Associate	12	
BSN	77	
Masters	64	
DNP	42	
PhD	30	
Other	4	
Total Student Enrollment		
1-100	5	3.4
101-200	14	9.7
201-300	12	8.3
301-400	15	10.3
401-500	11	7.6
501-600	6	4.1
> 601	25	17.2
Institution Type		
Hospital	30	20.7
Community	3	2.1
Psychiatric Mental Health	1	0.7
School Based Health Care	1	0.7
Other	15	10.3
Type of Accreditation		
The Joint Commission	36	24.8
Other	10	6.9
Part of an Academic Health Center		
Yes	23	15.9
No	22	15.2
Magnet Recognition		
Yes	19	13.1
No	21	2.1
In Candidacy	3	14.5

[a] Percentiles are not provided because some institutions offer multiple types of degree programs.

Note. Not all 145 participants responded to the items, and thus, the percentiles in each category may not equal 100.

Table 5

Frequencies and Percentiles of the Characteristics of Partnerships

Variable	*N*	%
Length of Partnership		
0-1 year	10	6.9
1-3 years	32	22.1
4-6 years	16	11.0
7-10 years	7	4.8
> 10 years	27	18.6
Goals of the Partnership [a]		
Advancing Education in Nursing	74	
Advancing Nursing Scholarship	40	
Advancing Nursing Practice	58	
Community Service	24	
Other	12	
IOM Future of Nursing Recommendations [a]		
Remove scope of practice barriers	29	
Expand opportunities for nurses to lead and diffuse collaborative improvement efforts	55	
Implement nurse residency programs	34	
Increase proportion of nurses with a BSN to 80% by 2020	57	
Double the number of nurses with a doctorate by 2020	26	
Ensure that nurses engage in lifelong learning	58	
Prepare and enable nurses to lead change to advance health	50	
Build on infrastructure for the collection/ analysis on interprofessional health care workforce data	28	

[a] Percentiles are not provided because participants were asked to select "all that apply".

Note. Not all 145 participants responded to the items, and thus, the percentiles in each category may not equal 100.

Lastly, participants were asked to describe their partnerships. There is a representation in all length of partnerships categories; however, most partnerships were either 1-3 years old (32%) or greater than 10 years old (27%). The most commonly reported goals of partnership were to advance education in nursing, followed by

advancing nursing practice, advancing nursing scholarship, and community service. In regard to the Institute of Medicine's (IOM) Future of Nursing Recommendations, at least 28 or more institutions report that their partnerships are intentionally focusing on each of the eight recommendations. The four most common recommendations that partnerships reported focus, in order of highest frequency, are: (1) Recommendation #6: Ensure that nurses engage in lifelong learning (n=58); (2) Recommendation #4: Increase proportion of nurses with a BSN to 80% by 2020 (n=57); (3) Recommendation #2: Expand opportunities for nurses to lead and diffuse collaborative improvement efforts (n=55); (4) Recommendation #7: Prepare and enable nurses to lead change to advance health (n=50). Table 5 provides details about the characteristics of nursing academic practice partnerships.

There are additional findings utilizing descriptive statistics. Table 6 reveals descriptive statistics characterizing the functioning, synergy and effectiveness of the partnerships. On a 5-point scale participants rated their responses to a variety of questions in each category. The mean sum of each category, standard deviation (SD), and Cronbach's α is given. As evidenced by the Cronbach's alphas across all scales, the internal consistency reliability coefficients for all measures in the present study were high. Cronbach's α values for the PSAT-S range from 0.92 (synergy) to 0.84 (leadership, nonfinancial resources), indicating good reliability. The standard deviations for all measures demonstrated an appropriate spread and dispersion, and thus, measurement error.

Table 6

Descriptive Statistics and Internal Consistency Reliability Coefficients (α) *for the PSAT-S Subscales, Sustainability, and Synergy*

Variable	*M Sum*	*SD*	α
Leadership	15.02	3.47	0.84
Efficiency	11.25	2.67	0.85
Administration and Management	9.58	3.65	0.91
Non-Financial Resources	8.55	2.53	0.84
Sustainability	19.58	6.36	0.87
Synergy	20.09	7.34	0.92

Q2: What is the Relationship between Partnership Functioning, Synergy, and Sustainability?

To explore research question two, the researcher utilized a correlational design to test the relationships about the given variables – partnership functioning, partnership synergy, and sustainability (Polit & Beck, 2008). Specifically, the researcher utilized a product-moment correlation product, also known as Pearson's *r*, to reveal the strength of the relationship between two variables. The strength of the relationship between variables depends on how close the correlations coefficients are to 1 or -1, either positively or negatively correlated (Polit & Beck, 2008). The p-value provides the probability of obtaining a test statistic at least as extreme as the one observed in the study. Partnership functioning, synergy and sustainability were strongly correlated to one another in nursing academic practice partnerships (all $p < .01$).

Table 7 contains the zero-order correlation matrix to answer the second research question. Leadership and efficiency were positively correlated to each other but negatively correlated with all other concepts (all $p < 0.01$). Administration and management were positively correlated with non-financial resources ($p < 0.01$), synergy ($p < 0.01$), and sustainability ($p < 0.05$). There was not a statistically significant correlation of non-financial resources and sustainability; however, non-financial resources were positively correlated with synergy ($p < 0.01$). Sustainability was positively correlated with synergy ($p < 0.01$). Table 7 exhibits the relationships amongst all of the variables.

Table 7

Zero-Order Correlation Coefficients of Partnership Functioning, Sustainability, and Synergy

Variable	1	2	3	4	5	6
1. Leadership	-	.70**	-.80**	-.46**	-.28*	-.52**
2. Efficiency		-	-.67**	-.39**	-.41**	-.58**
3. Administration and Management			-	.53**	.28*	.57**
4. Non-Financial Resources				-	.16	.47**
5. Sustainability					-	.33**
6. Synergy						-

* $p < .05$ ** $p < .01$

Q3: Does Partnership Synergy Mediate the Relationship of Partnership Functioning and Sustainability?

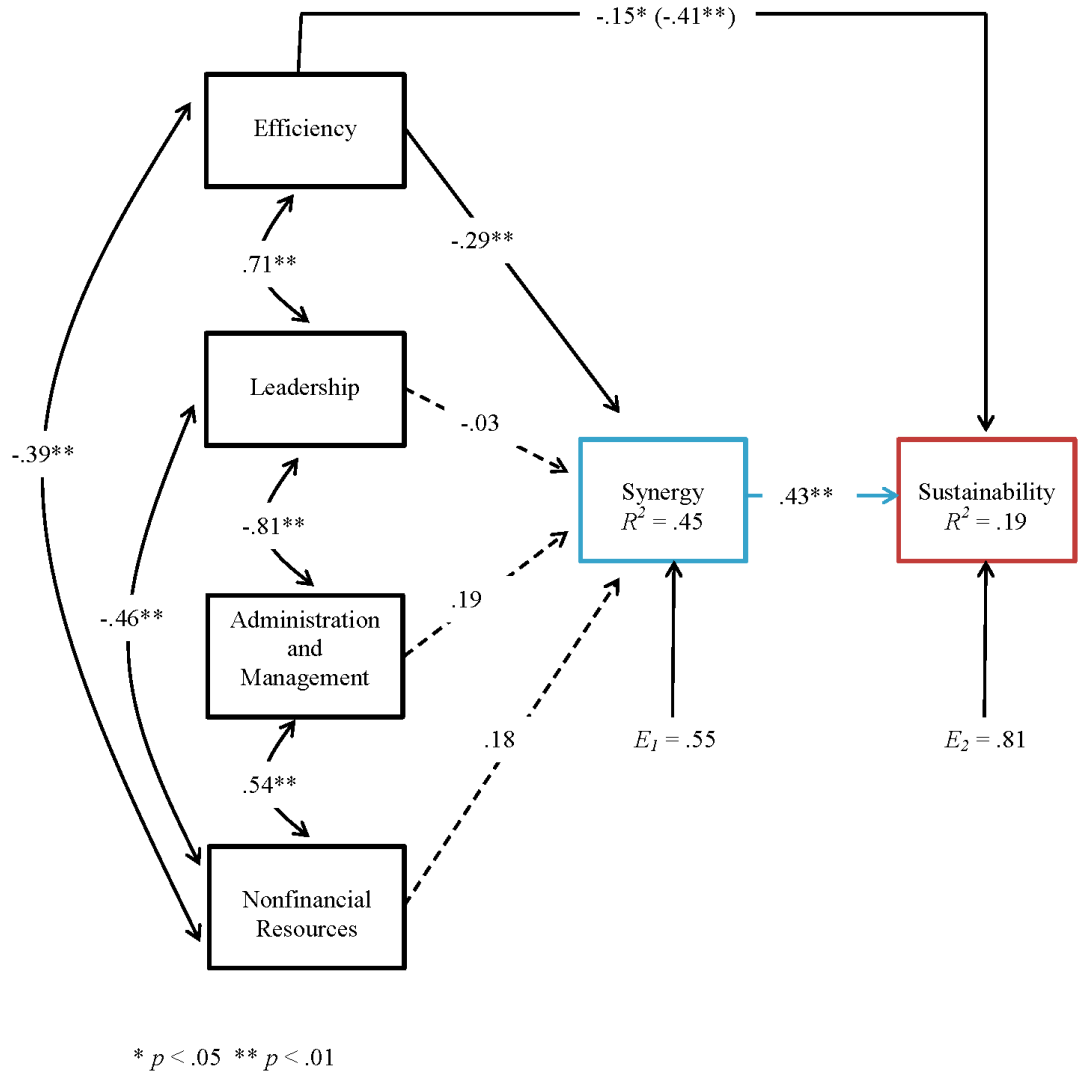

Figure 4. Final path model examining the mediational effect of partnership synergy between partnership functioning and sustainability. Dashed lines represent nonsignificant paths. The path coefficient in parentheses represents the decreased magnitude of the coefficient in the presence of synergy--that is, evidence of partial mediation.

Summary of Findings

The researcher provided the results of the research study in chapter four. A total of 106 participants were included in the study; however, not all participants answered all the questions. The participants were mostly white females above the age of 50. Most participants had at least a Master's level education with the majority having a terminal degree. The academic institutions were mostly accredited by CCNE offering at least a bachelor's degree. The practice institutions were mostly hospitals accredited by The Joint Commission. Partnerships tend to focus the most of advancing nursing education and intentionally focused mostly on the IOM Future of Nursing Recommendations, 2, 4, 6 and 7.

The PSAT-S revealed high Cronbach's α score in each category to support good reliability of the tool. The zero-order correlation results revealed that all correlations were statistically significant, except the correlation between non-financial resources and sustainability. Interestingly, the correlations between leadership and efficiency with the other variables were negative whereas the correlations between administration and management and non-financial resources with all other variables were positive.

Path analysis revealed that partnership synergy is a partial mediator of partnership functioning and sustainability. There was a significant predictive negative relationship between efficiency and sustainability. Nevertheless, synergy was a significant positive predicator of sustainability. Chapter 5 will provide a discussion of these results.

CHAPTER V

SUMMARY AND DISCUSSION

Chapter 5 is the final chapter of this dissertation that provides a summary and discussion of the research findings. The researcher will review the problem statement, purpose, methodology, summary of the results, discussion of findings, limitations of the study, and implications for academic practice partnerships and nursing education, recommendations for future research, as well as conclusions.

Summary of Results

The United States health care system is in a disconcerting state. The nursing profession, providing the largest number of health care providers in the nation, has the opportunity to effect substantial change; nonetheless, the nursing profession is challenged with a great deal of complex problems, such as the nursing shortage complicated by the nursing faculty shortage. In recent times, nursing academic practice partnerships have been developed to confront these multifarious issues; yet, the effectiveness and sustainability of these partnerships had not been studied (Beal & Alt-White, 2012; Beal, 2012; Boland et al., 2010; De Geest et al., 2013). National organizations and governmental agencies continue to promote such partnerships; therefore, more information is needed to support the creation and maintenance of these collaborations (Beal, 2012; De Geest et al., 2013; Nabavi, Vanaki, & Mohammadi, 2012).

Purpose

Due to the lack of research, more knowledge is needed about nursing academic practice partnerships (APPs). The partnership functioning, partnership synergy, and sustainability theoretical framework was utilized to elucidate the process by which APPs operate. The purpose of the research study was to enhance knowledge about the process by which APPs in nursing generate synergy and sustainability.

Design, Population, and Methodology

A cross-sectional, non-experimental, descriptive study was conducted. This quantitative research study, allowed the researcher to discover what naturally occurs at one moment in time. The setting for the study was the United States since that was the country of interest and it contained the largest number of documented nursing academic practice partnerships (APPs) discussed in the nursing literature (De Geest et al., 2013). A convenience sampling method was utilized due to the lack of a formal registry of academic practice partnerships. The researcher emailed participants in a recent AACN-AONE national conference on APPs, in addition to authors of articles in the nursing literature that presented cases on academic practice partnerships and networking with the AACN-AONE steering committee and personal colleagues for direction on finding the sample. Participants were then asked to forward the research participation request to members of their academic practice partnerships groups thereby utilizing a snowballing technique. The researcher sent 279 emails and obtained 106 participants, which met the standard produced by the power analysis of 98 participants.

As described in chapter three, the researcher utilized a variety of methods to explore each research question. The first research question explores the personal,

institutional, and partnership characteristics of the participants. Descriptive analysis was conducted to include frequency distributions, variability, and bivariate statistics. The second research question investigates the relationship between the theoretical variables. Pearson's r is utilized to describe these relationships. Lastly, path analysis is utilized to examine the third question in regard to mediation of partnership synergy in the partnership functioning and sustainability theoretical model.

Discussion of Findings

Interpretation and Relationship to Previous Nursing Research

Participants. Participants in the research study were representative of nurses in academic and executive roles. Most participants were white, females, in the age range of 50-59, and with higher levels of education (at least a master's degree). This portrayal is consistent with the description in the *2010-2011 Salaries of Instructional and Administrative Nursing Faculty in Baccalaureate and Graduate Programs in Nursing* where the average ages of faculty range from 50-60 with master's and doctoral degrees (American Association of Colleges of Nursing [AACN], 2012) and of the average age of nurse leaders in practice range from late 40s to early 60s with an average age of 52 (Jones, Havens, & Thompson, 2008).

There were more participants from academia than practice which is likely related to a variety of reasons. First, the researcher had difficulty locating email addresses for potential study participants in practice on the World Wide Web. E-mail addresses for those in academia were more readily available. Second, when utilizing APP nursing authors the first author listed in the article tended to come from academia and that was the email address listed in the article. Third, the researcher was from academia and had

more contacts in academia than in practice; therefore, the snowballing technique was utilized more for practice than academia which more than likely was not as effective. Lastly, the response rate for the AACN-AONE Academic Practice Partnership survey revealed similar response rates that deans had a response rate of 45%, whereas, the response rate from nurse executives was 13% (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013); therefore, there is a consistency with the response rate in this study versus previous surveys.

In regard to institutional characteristics of the participants in this study, the historical connection between hospitals and academia continued (Beal, 2012). Hospitals were the top agency to report partnerships with academia. This was not surprising since partnerships in the AACN-AONE survey revealed that the top reasons to partner were to negotiate clinical sites (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013). There was an equal split of hospitals that were Magnet© certified (or on the journey) and those that were not. There was a connection to the requirements of Magnet© and the need to partner with academia for support in obtaining criteria (Sherwood & Drenkard, 2007); however, this study did not reveal a stronger affiliation with Magnet© facilities.

Partnership characteristics were also defined in this study. Participants reported that their partnerships had been in existence a variety of number of years. The variety of years may influence the latter results of relationships amongst the variables. Forty-two of the 92 participants responding to this question reported that their partnership has been in existence 3 or less years, whereas, De Geest and colleagues (2013) found that the median number of years that partnerships described in the nursing literature was 6. Therefore,

the partners in this study may not have the experience yet to determine the partnership functioning qualities, assess the levels of synergy, or sustainability. Participants identified that their partnerships were mostly focused on advancing education and lifelong learning. This result was consistent with the findings of the AACN-AONE survey as well as the nursing literature (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013; Beal, 2012; De Geest et al., 2013).

Causal modeling. Significant pathways within the model support previous recommendations from the nursing literature. Nabavi et al. (2012) recommended further research on sustainability of academic practice partnerships (APPSs). Through this study, path analysis revealed the statistically significant positive pathway of synergy to sustainability; therefore, the higher the levels of synergy created in a partnership the higher likelihood that the partnerships can be sustained. Exploration of the tenets of synergy within APPs could support the potential sustainability of partnerships.

Interpretation and Relationship to Partnership Synergy Research

Participants. There are significant differences in this study's participants compared to the Cramm et al. (2013) study. While the majority of participants in both studies were female with similar age ranges, and highly educated, the participants in Cramm's study were not identified as nurses they were managers, coordinators, policy officers, communication officers, occupational therapists, and a substantial percentage of "other." Their partnerships were in community health that worked with a variety of individuals to include those with intellectual disability or psychiatric problems or elderly that are physically isolated, or partnerships that focused on the developed of informal care networks in a home for the elderly or created associations that enable elderly or

intellectually disabled children to participate in sports. These partnerships would be considered "highly structured" by the De Geest et al. (2013) definition because each of these partnerships were funded that required formal relationships, function, and evaluation; whereas, participants in this research study were active partners but the partnerships are more loosely defined. Lastly, Cramm and colleague's study was in the Netherlands which has a significantly different health system than the current study conducted in the United States.

In comparison to other partnership synergy studies, there were significant differences in the participants. The Cramm & Nieboer (2012) study was conducted in the Netherlands on 22 disease management community partnerships with a total of 393 professionals participating. The majority of participants were female and 25% of that sample was labeled "practice nurse." The 22 disease-management partnerships were formal programs implemented in a variety of regions in the Netherlands suggesting highly formal/structured relationships. Weiss et al. (2002) conducted their study in the United States, the setting of this research study, on 63 community partnerships that were found on rosters of public and privately funded initiatives from a database formed in an earlier study. Therefore, these partnerships also reveal a highly structured partnership due to the requirements related to funding distinguishing a potential difference in Weiss and colleagues study and this research study.

Partnership Self-Assessment Short Tool. This research study supported the reliability of the short-version of the Partnership Self-Assessment Tool (PSAT-S). Cronbach's alpha (α) subscale scores ranged from 0.84-0.92. All sub-scales rated above 0.80 which is considered the standard reliability index to estimate good internal

consistency of measured subparts (Polit & Beck, 2008); therefore, this data further supports that the PSAT-S is a reliable tool.

Correlations. The relationships between the partnership functioning, partnership synergy, and sustainability concepts were interesting. Although the results of this study revealed strong relationships amongst all variables except non-financial resources and sustainability, the direction of the relationship was not always positive as in previous studies. Leadership and efficiency were found to be negatively correlated with administration and management, non-financial resources, synergy, and sustainability ($p < .01$). This result was not consistent with the previous research in community partnerships, all four partnership functioning sub-scales have been positively ($p <0.5$, $p <.01$) correlated with synergy (Weiss et al., 2002; Cramm & Nieboer, 2012; Cramm et al., 2011; Cramm et al., 2013), as well as sustainability (Cramm et al., 2013). Nevertheless, administration and management and non-financial resources were positively correlated ($p <0.5$, $p <.01$) with all the variables as in previous partnership synergy studies except there was not a statistically significant relationship between non-financial resources and sustainability (Cramm & Nieboer, 2012; Cramm et al., 2013; Weiss et al., 2002).

Research participants in this study rated higher sums in leadership (15.02) and efficiency (11.25) than in Cramm and colleague's (2013) study (leadership 12; efficiency 9.5), but rated synergy lower (20.09 versus 28.5); therefore, this influenced the directional relationship of the variables. A variety of factors could have potentially influenced this outcome. First, the formality of each academic practice partnership (APP) in nursing is loosely defined. This is supported by the findings of the AACN-AONE

Steering Committee survey (n.d.) that revealed that more than half of the APP participants they surveyed did not have established goals or outcomes to measure. In addition to De Geest and colleague's (2013) findings that categorized APPs described in the literature into moderately structured and highly structured. Highly structured were characterized as partnerships that were organized by a formal contract, a strategic plan, bylaws, and/or financial arrangements; whereas, moderately structured partnerships did not contain these items and functioned more as ad-hoc committees. De Geest and colleagues found that only 35% of the APPs in the literature were highly structured. While this study did not focus on the structure of APP as much as the process, the structure (or lack of structure) could have a significant impact on the perception of the variables. The lack of formality of APPs could have influenced the results that there were higher levels of leadership and efficiency, yet, lower levels of synergy. Furthermore, about half of the participants in this study reported that their partnerships had been existence for 3 or less years; therefore, there is a possibility that there has not been enough time for synergy to form in these partnerships.

Causal modeling. Path analysis has not been utilized in previous research studies on partnership synergy. The results of this study revealed that partnership efficiency was a significant negative predictor of partnership synergy ($\beta = -.29$; $p < .05$) and sustainability ($\beta = -.41$; $p < .01$). Synergy also revealed a significant path to sustainability ($\beta = .43$; $p < .01$). Leadership, administration and management, and non-financial resources were not statistically significant paths. Nevertheless, partnership synergy was revealed to serve as a partial mediator similar to Cramm and colleague's (2013) findings. The final

path model did not support the theoretical framework in entirety; however, there were several significant pathways that provide support to the Partnership Synergy literature.

Limitations

Although this study represents the first multi-site nursing research study on nursing academic practice partnerships (APP), this study is not without limitations. First, the cross-sectional, non-experimental design provides an opportunity to discover "what is" but only provides a "snapshot" of the partnerships (Polit & Beck, 2008). The non-experimental design opens a threat to internal validity. Temporal ambiguity, a type of threat to internal validity, is related to the order of cause and effect. In an experimental design, the cause is controlled where the effect can be intentionally evaluated. This cannot be done in a non-experimental design; however, an experimental design would not be appropriate for this study. Second, utilizing a convenience sample opens the internal validity threat of selection. When participants are not randomly sampled this can pose an issue to generalizing the results because the sample may not be an accurate representation of the population; nevertheless, the sample obtained in this study compared to the information about partners and their partnerships.

In addition to the internal threats to validity, there are additional limitations. As discussed earlier, the researcher had difficulty finding e-mail addresses for partners in practice. Their e-mails were not as readily available on the World Wide Web in comparison to the partners in academia; therefore, this could have influenced the representation of research participants in practice. In addition, the researcher received replies from many authors stating that they had retired or were in a different place of employment without an academic practice partnership; implicating that the sampling

technique of using authors from APP articles in the nursing literature may have not been the best sampling method. A better method may have to utilize the same sampling method that the AACN-AONE Steering Committee utilized for their survey. That would reach all current potential partners in academia and practice; however, this method would not have been consistent with previous partnership synergy studies. Furthermore, the researcher cannot calculate a response rate due to the snowballing technique that was utilized. A registry of academic practice partnerships would be helpful for further research.

Lastly, a significant limitation may exist in regard to the perception of nursing academic practice partnerships (APPs). The researcher received several emails asking what it meant to be a partner in an APP. The concept of APPs may not be as understood as the researcher imagined. The lack of previous research on APPs limited the associations that could be created from this research to existing nursing literature on this topic. If more research existed then the researcher could have tailored the survey to provide more clarity for the participants.

Importance for Nursing Education and Academic Practice Partnerships

The purpose of this study was to enhance the knowledge of academic practice partnerships (APPs) in nursing and examine the process in which APPs generate synergy and sustainability. The study provides a foundation of knowledge on nursing APPs. Characteristics of partnerships have been described and can be utilized in further research. The strong correlations amongst the variables can provide information for the development and sustainability of APPs as described below.

Characteristics of partnership functioning within the partnership functioning, partnership synergy, and sustainability framework were consistent with the nursing literature reviews and gray literature on academic practice partnerships (APPs). Table 6 reveals the relationships of partnership functioning with the guiding principles and strategies of academic practice partnerships in relation to the IOM recommendations that was created and published by the AACN-AONE APP Steering Committee (Beal et al., 2012). Leadership, efficiency, administration and management, and non-financial resources are correlated with each strategy. For example, the leadership partnership functioning concept encompasses the strategy that states "develop a plan to nurture the relationships established" (p. 330); whereas, "discuss and articulate in writing the mutual vision, goals, and expectations of the partnership" (p. 330) incorporates the partnership functioning concepts of administration and management. The relationship between the guiding principles, strategies, and partnership functioning concepts aligned with IOM Future of Nursing Recommendations provided in this Table 6 elucidates the potential for APPs to develop the partnership infrastructure to support the implementation of the guidelines and strategies provided.

Table 8

Strategies for Building and Sustaining Academic-Practice Partnerships in Relationship to IOM Recommendations and Partnership Functioning Constructs

Guiding Principles	Strategies	IOM & Partnership Functioning Constructs
Collaborative relationships between academia and practice are established and sustained	Develop intentional and formalized relationships at the senior level first and then at every level throughout the organization. Senior leader is responsible for the partnership but may delegate on-going operations to someone else in the organization	IOM # 7 Leadership
	Discuss and articulate in writing the mutual vision, goals, and expectations of the partnership.	IOM # 7 Administration and Management
	Organizations are encouraged to have their own internal expectation of the partnership. Develop specific and measurable goals with set evaluation periods.	IOM # 7 Administration and Management
	Develop a plan to nurture the relationships established	IOM # 7 Leadership
	Review and update all work annually	IOM # 7 Administration and Management
Mutual respect and trust are the cornerstones of the academic/practice partnership	Commit to open, transparent, and honest communication	IOM # 7 Leadership
	Plan for and commit to frequent contact and engagement between partners	IOM # 7 Administration and Management
	Articulate and commit to a mutual investment and commitment to the partnership, its goals, activities, and evaluation	IOM # 7 Leadership
	Discuss and create plan for conflict resolution	IOM # 7 Leadership

Table 8, continued

Guiding Principles	Strategies	IOM & Partnership Functioning Constructs
Knowledge is shared among partners through such mechanisms as	Commitment to lifelong learning	IOM #6 Non-financial resources
	Shared knowledge of current best practices	IOM # 7 Non-financial resources
	Examples include joint conferences, workgroups, taskforces, development of guidelines Mutual access to knowledge. Example: Academia provides library access for its practice partners Joint preparation for national certification, accreditation, and regulatory reviews. Interprofessional education Joint research Joint committee appointments. Joint development of competencies.	IOM # 7 Leadership, Administration and management, Non-financial resources, and Efficiency
A commitment is shared by partners to maximize the potential for each RN to reach the highest level within their individual scope of practice	A culture of respect and trust.	IOM #1 Leadership
	Shared governance and decision making	IOM # 7 Administration and management
	Participation on statewide and national committees to develop policy and strategies for implementation.	IOM # 7 Non-financial resources
A commitment is shared by partners to work together to determine an evidence based transition program for students and new graduates that is both sustainable and cost-effective via	Mutual development, implementation, and evaluation of residency programs.	IOM #3 Leadership, Administration and management, Non-financial resources, Efficiency
	Leveraging competencies from practice to education and vice versa.	IOM #6 Non-financial resources
	Mutual/shared commitment to lifelong learning for self and others. Example: academia can provide practice setting with options to audit classes.	IOM #6 Leadership, Efficiency

Table 8, continued

Guiding Principles	Strategies	IOM & Partnership Functioning Constructs
A commitment is shared by partners to develop, implement, and evaluate organizational processes and structures that support and recognize academic and educational achievements via	Lifelong learning for all levels. Commitment to seamless academic progression.	IOM # 4 Leadership, Administration and management, Non-financial resources, and Efficiency
	Joint funding and in-kind resources for all nurses to achieve a higher level of education	IOM #5 Efficiency
	Joint faculty appointments.	IOM #6 Leadership
	Support for increasing diversity in the workforce at staff and faculty levels.	IOM #6 Leadership
A commitment is shared by partners to support opportunities for nurses to lead and develop collaborative models that redesign practice environments to improve health outcomes, including	Joint interprofessional leadership development. Joint mentoring programs/opportunities. Academia and practice collaborate to redesign roles and measure effectiveness of such approaches.	IOM #2 Leadership, Administration and management, Non-financial resources, and Efficiency
A commitment is shared by partners to establish infrastructures to collect and analyze data on current and future needs of the RN workforce via	Joint identification of useful workforce data. Joint collection and analysis of data. Joint business case development. Assurance of transparency of data	IOM #8 Leadership, Administration and management, Non-financial resources, and Efficiency

Note. Adapted from " Academic practice partnerships: A national dialogue," by J.Beal et. al, 2012, *Journal of Professional Nursing*, 28(6), 330-331. Copyright © 2014 Elsevier.

The strong relationships among the study variables are important for the future of academic practice partnerships (APP). As reported in the findings, leadership and efficiency (sub-parts of partnership functioning) had higher sum mean scores than in Cramm et al. (2013) study; whereas, the sum mean scores for synergy were rated lower. Research participants responded to each synergy question that started with the same

phrase "By working together, how well are these partners able to…," These lower synergy sums may correspond to the dark reality of the present state of academic practice partnerships (APPs). As stated in Chapter II, the relationships of academia and practice are not always favorable; Warner and Burton (2009) describe the present relationship dynamic of academe and service as "parallel play with siloed policy and political realities. Behaviors range from toleration to coordination, which are usually structured, superficial, and mechanistic..." (p. 330). This reality may help explain the lower levels of synergy despite having higher levels of leadership and efficiency, especially when there is a wide variety of formality of the partnerships (De Geest et al., 2013).

In light of these findings, it may be beneficial for APPs to intentionally examine the creation and function of elements that support synergy. As described in Chapter II, Stephen Covey (2008) related synergy to a good jazz band. Each diverse instrument is needed to create a beautiful blend of sound; however, each jazz member has to agree to play the same song and stay on the same beat for this to occur. This is very similar to any type of partnerships including APPs. For synergy to be created their needs to be leadership to bring the group together, commitment from each partner and members need to agree on a mutual vision as well as goals, and prioritized projects. When synergy occurs, this research study supports that it is more likely for sustainability to occur.

It is important to note the statistically significant pathway of synergy to sustainability. This research study was able to fill the void of research on academic practice partnership sustainability as proposed by Nabavi et al. (2012), as well as provide support for the goal of sustainability set forth by the guidelines and interactive toolkit provided by the AACN-AONE Academic Practice Partnership Steering Committee

(2012; 2013). More work is needed to understand the creation of synergy that supports the potential sustainability of a partnership. The statistically significant negative pathway of efficiency to both synergy and sustainability is not consistent with previous research on samples in community health and does not support general logic. Further research in the area of partnership functioning would be beneficial to gain appreciation of the constructs that support the development of synergy and sustainability in APPs.

In consideration of practical evaluation measures of individual academic practice partnerships, the short version of the Partnership Self-Assessment Tool (PSAT-S) could potentially be used. The PSAT-S is shown to be a reliable tool and APPs could utilize this tool as internal instrument to assist with the periodic evaluation of their own effectiveness. Results from the survey could drive internal action plans to improve their process, synergy, and potentially sustainability.

More knowledge about academic practice partnerships (APPs) is vital to nursing education. Nursing education relies on their practice partners for vital aspects of their operations. First and foremost, clinical site support as described in this study and previous nursing literature are essential for pre- and post- licensure education (AACN-AONE Academic-Practice Partnerships Steering Committee website, 2013; Beal, 2012; De Geest et al., 2013; Nabavi et al., 2012). Second, is advancing nursing education. With many driving forces such as the IOM Future of Nursing Recommendations (2010), Magnet© designation (Sherwood & Drenkard, 2007), and the nursing faculty shortage (Beal, 2012) many practice partners are providing support to both academic institutions and their employees to encourage nurses to advance their nursing education (Beal, 2012; Nabavi, 2012). Third, is around the area of scholarship. Many partnerships support each

other's scholarly endeavors which are often important in the area of Magnet© designation (Beal, 2012; Sherwood & Drenkard, 2007). Lastly, many nursing academic institutions are challenged financially and are being asked to do more with less. APPs are a method of confronting these challenging issues with a diverse skill set. Through more knowledge about APP functioning, synergy, and sustainability, APPs can intentionally enhance the efficiency and effectiveness of their work.

Recommendations for Further Research

This research study is foundational in furthering research on this topic; nevertheless, there are numerous opportunities for further research on nursing academic practice partnerships (APPs). For example, this study could be repeated on a more homogenous sample of highly structured/formal APPs. This sample would be more similar to the samples in previous community health studies (Cramm & Nieboer, 2012; Cramm et al., 2011; Cramm et al., 2013) which may provide more congruent results. Another potential way for furthering research on APPs is to develop a formal registry for APPs to enhance the sampling method for further research. With a formal registry a randomized sample could be obtained for future research.

Because of the lack of research on academic practice partnerships (APPs), not much is known about them. As mentioned in the limitation section, the researcher received many emails from potential participants asking what it meant to be an active partner in an academic practice partnership. Qualitative work could be conducted to provide more contextual information about APPs and frame the concepts within the theoretical framework. In addition, it would be interesting to conduct a qualitative study to provide the lived experience of "parallel play" and "political realities" (Warner &

Burton, 2005, p. 330). This type of qualitative work would help provide a framework and direction for future quantitative studies.

Lastly, future research around the short version Partnership Self-Assessment Tool (PSAT-S) could be utilized. The tool appears to be reliable in English in this study; however, future studies need to be conducted to continue to assess this tool. In addition, this tool may need to be tailored more to academic practice partnerships to reveal the intricacies of the specific sample.

Conclusion

In conclusion, the purpose of this cross-sectional, descriptive research study was to enhance knowledge about the process by which nursing academic practice partnerships (APP) generate partnership synergy and sustainability. APPs are more and more prevalent in the United States and around the world as institutions join together to solve complex problems. The partnership functioning, partnership synergy, and sustainability framework was utilized to explore three research questions. A total of 106 participants from both academia and practice participants from the United States participated in this national study. After analyzing the data utilizing descriptive, correlational, and regression statistics, the full conceptual model was not supported; however, almost all the data points were significantly related and the paths between efficiency and synergy, as well, as synergy and sustainability were supported. Implications for nursing education and academic practice partnerships were provided, as well as recommendations for further research. The process of partnership functioning in APPs needs further exploration to gain a better understanding of the development of partnership functioning that leads to synergy and sustainability.

REFERENCES

AACN-AONE Academic-Practice Partnerships Steering Committee website. (2013). http://nlnjournals.org/doi/abs/10.1043/1536-5026%282005%29026%5B0294%3ABONPAE%5D2.0.CO%3B2?journalCode=nhcp

AACN-AONE Academic-Practice Partnerships Steering Committee website. (2013). http://www.aacn.nche.edu/about-aacn/committees-task-force/aacn- aone-task-force-on-academic-practice-partnerships

AACN-AONE Academic-Practice Partnerships Steering Committee website. (2013). http://www.aacn.nche.edu/about-aacn/committees-task-force/aacn- aone-task-force-on-academic-practice-partnerships

AACN-AONE Task Force on Academic-Practice Partnerships. (2012). Guiding principles. Retrieved from http://www.aacn.nche.edu/leading-initiatives/academic-practice-partnerships/GuidingPrinciples.pdf

AACN-AONE Task Force on Academic-Practice Partnerships. (n.d.). *Summary of Academic-Practice Partnerships Survey Results*. Retrieved from http://www.aacn.nche.edu/leading-initiatives/academic-practice-partnerships/SummarySurveyResults.pdf

American Association of Colleges of Nursing. (1990). *Resolution: Need for collaborative relationships between nursing education and practice*. Retrieved from

American Association of Colleges of Nursing. (1997). *Education and practice collaboration: Mandate for quality education, practice, and research for health care reform*. Washington, DC: Author.

American Association of Colleges of Nursing. (2005). *Faculty shortages in baccalaureate and graduate nursing programs: Scope of the problem and strategies for expanding the supply* [White paper]. Retrieved from http://www.aacn.nche.edu/publications/white-papers/faculty-shortages

American Association of Colleges of Nursing. (2012). *Nursing faculty shortage*. Retrieved from http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-faculty-shortage

Barger, S. A., & Das, E. (2004, March-April). An academic-service partnership: Ideas that work. *Journal of Professional Nursing*, *20*(2), 97-102. http://dx.doi.org/10.1016/j.profnurs.2004.02.005

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182. http://dx.doi.org/0022-3514/86/$00.75

Beal, J. A. (2012). Academic-Service Partnerships in Nursing: An Integrative Review. *Nursing Research and Practice*, *2012*, 1-9. http://dx.doi.org/10.1155/2012/501564

Beal, J. A., & Alt-White, A. (2012, March 24). *The importance of academic-practice partnerships*. Paper presented at the AACN 2012 Spring Meeting, Washington, DC. Abstract retrieved from http://www.aacn.nche.edu/leading-initiatives/academic-practice-partnerships/March-2012-AACN-AONE.pdf

Beal, J. A., Alt-White, A., Erickson, J., Everett, L. Q., Fleshner, I., Karshmer, J., ... Gale, S. (2012). Academic practice partnerships: A national dialogue. *Journal of Professional Nursing*, *28*(6), 327-332. http://dx.doi.org/10.1016.j.profnurs.2012.09.001

Beal, J. A., Green, A., & Bakewell-Sachs, S. (2011). The time is right - The time is now....Academic-service partnerships need to be revisited. *Journal of Professional Nursing*, *27*(6), 330-331. http://dx.doi.org/10.1016/j.profnurs.2011.10.005

Bennett, J. A. (2000). Mediator and moderator variables in nursing research: Conceptual and statistical differences. *Research in Nursing & Health*, *23*, 415-420. http://dx.doi.org/10.1002/1098-240X(200010)23:5<415::AID-NUR8>3.0.CO;2-H

Bleich, M. R., Hewlett, P. O., Miller, K. L., & Bender, K. (2004, September-October). Beyond tradition: Synergy intellectual and material capital to forge the new academic-service partnership. *Journal of Professional Nursing*, *20*, 285-294. http://dx.doi.org/10.1016/j.profnurs.2004.07.007

Boland, M. G., Kamikawa, C., Inouye, J., Latimer, R. W., & Marshall, S. (2010, September-October). Partnership to build research capacity. *Nursing Economics*, *28*, 314-321, 336. Retrieved from http://www.nursingeconomics.net/cgi-bin/WebObjects/NECJournal.woa

Covey, S. (2008). The nature of synergy. Retrieved from http://www.franklincovey.com/academyarchive/AdamAcademyArchivePDFS/Aug08ProgramVideoGuide233tipsheets/Program%20Video%20Tip%20Sheets/The7HabitsSignatureProgram/TheNatureofSynergy.pdf

Cramm, J. M., & Nieboer, A. P. (2012). Disease-management partnership functioning, synergy and effectiveness in delivering chronic-illness care. *International Journal for Quality in Health Care*, *24*, 279-285. http://dx.doi.org/10.1093/intqhc/mzs004

Cramm, J. M., Strating, M. M., & Nieboer, A. P. (2011). Development and validation of a short version of the Partnership Synergy Assessment Tool (PSAT) among professionals in Dutch disease-management partnerships. *BMC Research Notes*, *4*. Retrieved from http://www.biomedcentral.com/content/pdf/1756-0500-4-224.pdf

Cramm, J. M., Strating, M. M., & Nieboer, A. P. (2013). The role of partnership functioning and synergy in achieving sustainability of innovative programmes in community care. *Health and Social Care in the Community*, 209-215. http://dx.doi.org/10.1111/hsc.12008

De Geest, S., Dobbels, F., Schonfeld, S., Duerinckx, N., Svienbjarnardottir, E. K., & Denhaerynck, K. (2013, in press). Academic service partnerships: What do we learn from around the globe? A systematic literature review. *Nursing Outlook*, 1-11. Retrieved from http://www.nursingoutlook.org/article/S0029-6554(13)00012-2/abstract

De Geest, S., Sullivan, E. M., Rich, V., Spichiger, E., Schwendimann, R., Spirig, R., & Van Malderen, G. (2010). Developing a Financial Framework for Academic Service Partnerships: Models of the United States and Europe. *Journal of Nursing Scholarship*, *42*, 295-304. http://dx.doi.org/10.1111/j.1547-5069.2010.01344.x

Engberg, S. (2008). Systematic reviews and meta-analysis: Studies of studies. *Journal of Wound, Ostomy, and Continence Nursing, 35*, 258-265. http://dx.doi.org/10.1097/01.WON.0000319122.76112.23

Everett, L. Q., Bowers, B., Beal, J. A., Alt-White, A., Erickson, J., Gale, S., ... Swider, S. (2012). Academic-practice partnerships fuel future success. *Journal of Nursing Administration, 42*, 554-556. http://dx.doi.org/10.1097/NNA.0b013e318274b4eb

Fawcett, J. (2005). *Contemporary Nursing Knowledge* (2nd ed.). Philadelphia, PA: F.A. Davis Company.

Fralic, M. F. (2004, September-October). Hardwiring the "Three-Legged Stool": Nursing's vitaleducation/practice/research triad. *Journal of Professional Nursing, 20*, 281-284. http://dx.doi.org/10.1016/j.profnurs.2004.07.004

Frank, B. (2008). Enhancing nursing education through effective academic-service partnerships. In M. H. Oermann (Ed.), *Annual review of nursing education 2008*, p. 25-43). New York, NY: Springer Publishing.

Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Education Research: An Introduction* (8th ed.). Boston, MA: Pearson.

Good Reads. (n.d.). http://www.goodreads.com/quotes/178425-the-single-biggest-problem-with-communication-is-the-illusion-that

Health Resources and Services Administration. (2008). *Meeting the challenges facing the nurse workforce in a changing health care environment*. Retrieved from http://www.hrsa.gov/advisorycommittees/bhpradvisory/nacnep/Reports/sixthreport.pdf

Hewlett, P. O., & Bleich, M. R. (2004). The reemergence of academic-service partnerships: responses to the nursing shortage, work environment issues, and beyond. *Journal of Professional Nursing*, 20, 273-274. http://dx.doi.org/10.1016/j.profnurs.2004.07.001

Horns, P. N., Czaplijski, T. J., Engelke, M. K., Marshburn, D., McAuliffe, M., & Baker, S. (2007, March/April). Leading through collaboration: A regional academic/service partnership that works. *Nursing Outlook*, *55*, 74-78. http://dx.doi.org/

Institute of Medicine. (2010). *The future of nursing: Leading change, advancing health*. Retrieved from http://www.iom.edu/Reports/2010/The-Future-of- Nursing-Leading-Change-Advancing-Health.aspx

Jones, C. B., Havens, D. S., & Thompson, P. A. (2008, March-April). Chief nursing officer retention and turnover: A crisis brewing? Results of a national survey. *Journal of Healthcare Management*, *53*, 89-105. Retrieved from

Kirschling, J. M., & Erickson, J. I. (2010). The STTI Practice-Academe Innovative Collaboration Award: Honoring innovation, partnership, and excellence. *The Journal of Nursing Scholarship*, *42*, 286-294. http://dx.doi.org/10.1111/j.1547-5069.2010.01352.x

Lasker, R. D., Weiss, E. S., & Miller, R. (2001). Partnership synergy: A practical framework for studying and strengthening the collaborative advantage. *Milbank Quarterly*, *79*, 179-205. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2751192/pdf/milq_203.pdf

MacPhee, M. (2009, May/June). Developing a practice-academic partnership logic model. *Nursing Outlook, 57,* 143-147. http://dx.doi.org/10.1016/j.outlook.2008.08.003

Merriam-Webster. (n.d.). http://www.merriam-webster.com/dictionary/partnership

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analysis: The PRISMA statement. *PLoS Medicine, 6*(7). http://dx.doi.org/e100097

Morton, P. G. (2013, May/June). Academic practice partnerships: Reclaiming our roots. *Journal of Professional Nursing, 29,* 125-126. Retrieved from http://www.professionalnursing.org/article/S8755-7223(13)00057-4/abstract

Nabavi, F. H., Vanaki, Z., & Mohammadi, E. (2012). Systematic review: Process of forming academic service partnerships to reform clinical education. *Western Journal of Nursing Research, 34,* 118-141. http://dx.doi.org/10.1177/0193945910394380

O'Neil, B., & Krauel, P. (*20*04, September-October). Building transformational partnerships in nursing. *Journal of Professional Nursing,* 20, 295-299. http://dx.doi.org/10.1016/j.profnurs.2004.07.006

Polit, D. F., & Beck, C. T. (2008). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (8th ed.). Philadelphia, PA: Wolters Kluwer.

Salahuis, S. S., Strating, M. M., Bal, R. A., & Nieboer, A. P. (2011). A framework and a measurement instrument for sustainability of work practices in long-term care. *BMC Health Services Research, 11*. Retrieved from http://www.biomedcentral.com/1472-6963/11/314

Shaw, G. B. (n.d.). George Bernard Shaw Quotes. Retrieved June 19, 2013, from http://www.goodreads.com/author/quotes/5217.George_Bernard_Shaw

Sherwood, G., & Drenkard, K. (2007, May-June). Quality and safety curriuclua in nursing education . *Nursing Outlook*, *55*, 151-155. Retrieved from http://www.sciencedirect.com/science/article/pii/S0029655407000 619

Smith, E. L., & Tonges, M. C. (2004). The Carolina nursing experience: A service perspective on an academic-service partnership. *Journal of Professional Nursing*, *20*(5), 305-309. http://dx.doi.org/10.1016/j.profnurs.2004.07.008

Stanley, J. M., Hoiting, T., Burton, D., Harris, J., & Norman, L. (2007). Implementing innovation through education-practice partnerships. *Nursing Outlook*, *55*, 67-73. http://dx.doi.org/10.1016/j.outlook.2007.01.009

Tri-Council for Nursing. (2010, May 14). *Tri-Council for Nursing Issues New Consensus Policy Statement on the Educational Advancement of Registered Nurses* [Press release]. Retrieved from http://www.nln.org/newsreleases/tri-council.pdf

Warner, J. R., & Burton, D. A. (2009, November-December). The policy and politics of emerging academic-service partnerships. *Journal of Professional Nursing*, *25*, 329-334. http://dx.doi.org/10.1016/j.profnurs.2009.10.006

Weiss, E. S., Anderson, R. M., & Lasker, R. D. (2002, December). Making the most of collaboration: Exploring the relationship between partnership synergy and partnership functioning. *Health Education and Behavior*, *29*, 683-698. http://dx.doi.org/10.1177/109019802237938

APPENDIX A

LETTER OF SUPPORT TO USE THEORETICAL MODEL

Dear Chris-Tenna Perkins,

Thank you for your email message. Your proposed research sound really interesting and the theoretical model of partnership functioning, synergy and sustainability really applies to the nursing academic-practice partnerships. Of course you may utilize the framework and instruments used to assess them. I am curious if the same mechanisms found in the Netherland apply to the APP in the US. It is interesting to compare our results. I think I used references to all validation studies regarding the instruments. These will provide you the questions used to asses partnership synergy, functioning and sustainability. If you still have additional questions please feel free to contact me. Also I would like it if you keep me updated on your work, look forward to reading the results!

Kind regards,

Jane Cramm

Jane Murray Cramm PhD

Institute of Health Policy and Management

Erasmus University Rotterdam

P.O. Box 1738

3000 DR Rotterd

APPENDIX B

INSTITUTIONAL REVIEW BOARD ACCEPTANCE

UNIVERSITY of NORTHERN COLORADO

Institutional Review Board

DATE: August 19, 2013

TO: Chris-Tenna Perkins, PhD in Nursing candidate

FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [500843-1] PARTNERSHIP FUNCTIONING AND SUSTAINABILITY IN NURSING ACADEMIC PRACTICE PARTNERSHIPS: THE MEDIATING ROLE OF PARTNERSHIP SYNERGY

SUBMISSION TYPE: New Project

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS

DECISION DATE: August 19, 2013

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

Chris-Tenna -

Best wishes with your research. Don't hesitate to contact me with any IRB-related questions or concerns.

Sincerely,

Dr. Megan Stellino, UNC IRB Co-Chair

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

APPENDIX C

CONSENT

UNIVERSITY of NORTHERN COLORADO

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH

UNIVERSITY OF NORTHERN COLORADO

Project Title: Partnership Functioning and Sustainability in Nursing Academic Practice Partnerships: The Mediating Role of Partnership Synergy

Researcher: Chris-Tenna M. Perkins, RN, PhDc, ANP, CNE, School of Nursing

Research Advisor: Kathleen LaSala, PhD, APRN, PNP-BC

Phone Number: (804) 363-7850, e-mail: chrissieperkins98@gmail.com

The United States is presently challenged with numerous high profile issues in health care. The nursing profession is composed of the greatest number of healthcare providers in the system and has the opportunity to effect extensive change. Creating and sustaining academic practice partnerships is a method to meet these profound challenges more efficiently; however, nursing partnerships have not been studied. The purpose of this study is to enhance knowledge about the process by which nursing academic practice partnerships (APP) generate partnership synergy and sustainability.

To participate in this study you will need to be an active participant in an academic practice partnership. You are asked to complete a survey that is attached to this email. In the survey you will be asked to provide information about yourself, your institution, and the academic practice partnership in which you participate. In addition, you will be asked questions related to partnership functioning, synergy, and sustainability.

In addition to completing the survey, you are asked to forward this survey to all participants in your academic practice partnership. Participants should have enough working knowledge to understand the purpose, operation, and results of the group. When forwarding the survey please copy the researcher at the email listed above to provide the researcher with the total number of eligible participants.

Risks to you are minimal. The survey will take approximately 20 minutes to complete. Only the researcher will examine individual data. Results of the study will be presented in aggregate form only. The researcher will strive to protect anonymity and confidentilaty of your responses by keeping all electronic data password protected and any hardcopy data under lock and key. Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time.

Having read the above and having had an opportunity to ask any questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you will give us permission for your participation. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Sponsored Programs, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-2161.

APPENDIX D

SAMPLE E-MAIL REQUESTING PARTICIPATION THROUGH QUALTRICS

Colleagues,

This email is to request your participation in a national research study examining Academic Practice Partnerships. The purpose of this study is to enhance knowledge about the process by which nursing academic practice partnerships (APP) generate partnership synergy and sustainability. Please review the attached consent form then click on the link below to start the survey. Your participation is greatly appreciated.

Participation is requested from **all** participants in your partnership that possess enough working knowledge to understand the purpose, operation, and results of the group. Once you have completed this survey you will receive an email thanking you for your participation and asking you to forward the survey link to all participants in your partnership. This is an important part of your participation. Please **forward** this email to everyone in your group. When forwarding the survey please copy the researcher (chrissieperkins98@gmail.com) to provide the researcher with the total number of eligible participants.

Sincerely,

Chris-Tenna M. Perkins, RN, PhDc, ANP, CNE

University of Northern Colorado PhD in Nursing Education, Doctoral Candidate

APPENDIX E

SAMPLE EMAIL REQUESTING PARTICIPATION OUTSIDE OF QUALTRICS

Colleagues,

This email is to request your participation in a national research study examining Academic Practice Partnerships. The purpose of this study is to enhance knowledge about the process by which nursing academic practice partnerships (APP) generate partnership synergy and sustainability. Please review the attached consent form then click on the link below to start the survey. Your participation is greatly appreciated.

Participation is requested from **all** participants in your partnership that possess enough working knowledge to understand the purpose, operation, and results of the group. Please forward this survey to everyone that participates in your partnership.

Click here to start the survey.

Sincerely,

Chris-Tenna M. Perkins, RN, PhDc, ANP, CNE

University of Northern Colorado PhD in Nursing Education, Doctoral Candidate

APPENDIX F

SAMPLE THANK YOU EMAIL REQUESTING PARTICIPANTS TO FORWARD PARTICIPATION REQUEST

Thank you so much for your time and participation in this study. Please forward the following email request to all members of your partnership. Participation is requested from **all** participants in your partnership that possess enough working knowledge to understand the purpose, operation, and results of the group.

Colleagues,

This email is to request your participation in a national research study examining Academic Practice Partnerships. The purpose of this study is to enhance knowledge about the process by which nursing academic practice partnerships (APP) generate partnership synergy and sustainability. Please review the attached consent form (APP Consent) then click on the link below to start the survey. Your participation is greatly appreciated. Click here to start the survey.

Participation is requested from all participants in your partnership that possess enough working knowledge to understand the purpose, operation, and results of the group. Please forward this survey to everyone that participates in your partnership.

Sincerely,

Chris-Tenna M. Perkins, RN, PhDc, ANP, CNE

University of Northern Colorado PhD in Nursing Education, Doctoral Candida

APPENDIX G

SURVEY QUESTIONS

Please answer the following questions about yourself.

1. Are you a part of an active academic practice partnership?
   a. Yes
   b. No (if no, you may stop the survey now)

2. What is the name of the institution where you are employed? _____

3. Are you a licensed registered nurse (RN)?
   a. Yes
   b. No

4. What is your current age?

   a. 20-29
   b. 30-39
   c. 40-49
   d. 50-59
   e. 60-69
   f. 70-79

5. What is your gender?
   a. Female
   b. Male

6. What is your ethnicity?
   a. Hispanic or Latino
   b. Not Hispanic or Latino

7. What is your race? (Mark one or more races.)
   a. White
   b. Black or African- American
   c. Asian
   d. American Indian or Alaska Native
   e. Native Hawaiian or Other Pacific Islander
   f. Other _____

8. Highest academic degree?
   a. Associate
   b. Bachelors
   c. Masters
   d. Doctorate/clinical
   e. PhD
   f. Other

9. What is your current role?
   a. Academic Administration
   b. Academic Faculty
   c. Practice setting manager
   d. Practice setting educators
   e. Practice setting Chief Administrator
   f. Practice setting staff
   g. Other _____

Institutional Data

Academia: If you are from academia please answer questions 10-12. If you are from practice, please move forward to question 13.

10. Accreditation
    a. NLNAC
    b. CCNE
    c. Other _____

11. Types of nursing programs you institution offers (select all that apply)
    a. Associate
    b. BSN
    c. Master's
    d. DNP
    e. PhD
    f. Other _____

12. Total number of students in your nursing program?
    a. 1-100
    b. 101-200
    c. 201-300
    d. 301-400
    e. 401-500
    f. 501-600
    g. Greater than 601

Practice: If you are from a service institution please answer questions 13-16. If you are from academia please move forward to question 17.

13. How would you describe your institution?
    a. Hospital
    b. Sub-acute
    c. Community
    d. Home care
    e. Long-term care
    f. Psychiatric- mental health
    g. School-based health care
    h. Other _____

14. What type of accreditation does your institution maintain?
    a. The Joint Commission
    b. Other: _____

15. Is your institution considered part of an academic health center?
    a. Yes
    b. No

16. Does the institution have Magnet© recognition?
    a. Yes
    b. No
    c. In candidacy

Partnership Data

The next questions relate to the characteristics of the academic practice partnership that you are considering when completing this survey.

17. What is the name of the institution or name of the partnership that you are considering when completing this survey? _____

18. How long has the partnership been in existence?
    a. 0-1 year
    b. 1-3 years
    c. 4-6 years
    d. 7-10 years
    e. Greater than 10 years

19. What types of work does your partnership focus on? (select all that apply)
    a. Advancing education in nursing
    b. Advancing nursing scholarship
    c. Advancing nursing practice
    d. Community service
    e. Other _____

20. Does your partnership intentionally collaborate on the eight IOM Future of Nursing Recommendations? (Select all that apply)

Recommendation 1: Remove scope of practice barriers.
Recommendation 2: Expand opportunities for nurses to lead and diffuse collaborative improvement efforts.
Recommendation 3: Implement nurse residency programs.
Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020.
Recommendation 5: Double the number of nurses with a doctorate by 2020.
Recommendation 6: Ensure that nurses engage in lifelong learning.
Recommendation 7: Prepare and enable nurses to lead change to advance health.
Recommendation 8: Build an infrastructure for the collection and analysis of interprofessional health care workforce data.
None

The following questions are from the Partnership Self Assessment Tool (short-version).

Leadership

Please think about all of the people who provide either formal or informal leadership in this partnership. Please rate the total effectiveness of your partnership's leadership in each of the following areas:

21. Taking responsibility for the partnership
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

22. Inspiring or motivating people involved in the partnership
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

23. Empowering people involved in the partnership
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know
24. Recruiting diverse people and organizations into the partnership
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

Efficiency

25. How well your partnership uses the partners' financial resources?
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

26. How well your partnership uses the partners' in-kind resources?
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

27. How well your partnership uses the partners' time?

    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

Administration and Management

We would like you to think about the administrative and management activities in your partnership. Please rate the effectiveness of your partnership in carrying out each of the following activities:

28. Coordinating communication among partners
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

29. Organizing partnership activities, including meetings and projects
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

30. Evaluating the progress and impact of the partnership
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

31. Minimizing the barriers to participation in the partnership's meetings and activities
    a. Excellent
    b. Very good
    c. Good
    d. Fair
    e. Poor
    f. I don't know

Non financial resources

A partnership needs non-financial resources in order to work effectively and achieve its goals. For each of the following types of resources, to what extent does your partnership have what it needs to work effectively?

32. Skills and expertise
    a. All of what it needs
    b. Most of what it needs
    c. Some of what it needs
    d. Almost none of what it needs
    e. None of what it needs
    f. Don't know

33. Data and information
    a. All of what it needs
    b. Most of what it needs
    c. Some of what it needs
    d. Almost none of what it needs
    e. None of what it needs
    f. Don't know

34. Connections to target populations
    a. All of what it needs
    b. Most of what it needs
    c. Some of what it needs
    d. Almost none of what it needs
    e. None of what it needs
    f. Don't know

35. Influence and ability to bring people together for meetings and activities
    a. All of what it needs
    b. Most of what it needs
    c. Some of what it needs
    d. Almost none of what it needs
    e. None of what it needs
    f. Don't know

Synergy

Please think about the people and organizations that are participants in your partnership.

36. By working together, how well are these partners able to identify new and creative ways to solve problems?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

37. By working together, how well are these partners able to include the views and priorities of the people affected by the partnership's work?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

38. By working together, how well are these partners able to develop goals that are widely understood and supported among partners?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

39. By working together, how well are these partners able to identify how different services and programs in the community relate to the problems the partnership is trying to address?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

40. By working together, how well are these partners able to respond to the needs and problems of the community?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

41. By working together, how well are these partners able to implement strategies that are most likely to work in the community?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

42. By working together, how well are these partners able to obtain support from individuals and organizations in the community that can either block the partnership's plans or help move them forward?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

43. By working together, how well are these partners able to carry out comprehensive activities that connect multiple services, programs, or systems?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

44. By working together, how well are these partners able to clearly communicate to people in the community how the partnership's actions will address problems that are important to them?

a. Extremely well
b. Very well
c. Somewhat well
d. Not so well
e. Not well at all
f. I don't know

Sustainability

As a result of participating in a partnership, solutions to common problems often cause change to the process in which the organizations complete their work. The following questions are related to the degree in which the work habits have been altered as a result of the partnership.

45. The new practice is regarded as the standard way to work.

a. Agree strongly
b. Agree
c. Undecided
d. Disagree
e. Disagree strongly
f. I don't know

46. The new work practice is easy to describe.

a. Agree strongly
b. Agree
c. Undecided
d. Disagree
e. Disagree strongly
f. I don't know

47. All colleagues involved in the new work practice are knowledgeable about it.

a. Agree strongly
b. Agree
c. Undecided
d. Disagree
e. Disagree strongly
f. I don't know

48. The work practice has replaced the old routine once and for all.
    a. Agree strongly
    b. Agree
    c. Undecided
    d. Disagree
    e. Disagree strongly
    f. I don't know

49. Performing the new routine always goes swimmingly well.
    a. Agree strongly
    b. Agree
    c. Undecided
    d. Disagree
    e. Disagree strongly
    f. I don't know

50. We are accustomed to the work practice.
    a. Agree strongly
    b. Agree
    c. Undecided
    d. Disagree
    e. Disagree strongly
    f. I don't know

51. We automatically work according to the new work practice.
    a. Agree strongly
    b. Agree
    c. Undecided
    d. Disagree
    e. Disagree strongly
    f. I don't know

52. We have adjusted our old habits to the new work practice.
    a. Agree strongly
    b. Agree
    c. Undecided
    d. Disagree
    e. Disagree strongly
    f. I don't know