

# **Walden University ScholarWorks**

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2016

# Employee Engagement in a Cardiac Catherization Lab

Rhonda J. Smith Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Health and Medical Administration Commons, and the Nursing Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

# Walden University

College of Health Sciences

This is to certify that the doctoral study by

#### Rhonda Smith

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Catherine Harris, Committee Chairperson, Health Services Faculty
Dr. Maria Revell, Committee Member, Health Services Faculty
Dr. Dana Leach, University Reviewer, Health Services Faculty

Chief Academic Officer Eric Riedel, Ph.D.

Walden University 2015

# Abstract

Employee Engagement in a Cardiac Catheterization Lab

by

Rhonda J. Smith

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

February 2016

#### **Abstract**

This study adds to the existing body of knowledge on employee engagement and workplace climate in the catheter laboratory setting. The study goals were to discover the current state of workplace satisfaction and then to share the results with the staff to determine what to improve and how to guide them through the Lean process. This study was guided by Kanter's structural empowerment theory, which holds that structural factors inside the workplace have a greater impact on employee work feelings and behaviors than do the employees' own personal tendencies. It was also guided by the Lean model, which aims to transform an organization's culture via a customer-focused method to constantly produce improvement opportunities, remove waste, and create value. This project utilized a descriptive research design. The catheter laboratory staff were e-mailed a link to complete a staff engagement and workplace climate survey. The survey was based off of a prior staff satisfaction survey used by the organization for consistency, but was not validated in the process. This survey provided a means to establish employee attitudes on several aspects analyzed by a 7 point-Likert scale. Of the 19 staff members who received the survey, 11 completed it, yielding a 60% response rate. Overall, the staff indicated that they were satisfied with their job and enjoyed working in their department. The findings from this survey were shared with the catheter laboratory staff and they chose to work on improving teamwork with departments outside of cardiology. The results of this study reinforce existing literature that demonstrates that employees who are engaged in the workplace are happier and more productive. The concept of staff engagement has been linked to higher quality patient outcomes, greater financial viability, increased productivity, and higher employee satisfaction.

# Employee Engagement in a Cardiac Catheterization Lab

by

Rhonda J. Smith

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

February 2016

# Dedication

This is dedicated to my family, without your love and support I would not have been able to achieve this significant milestone. I love you with all my heart.

# Acknowledgments

I would like to thank my professors, family members, colleagues, and friends who have inspired and encouraged me to reach this point in my academic career.

# Table of Contents

List of Tables	iii
List of Figures	iv
Section 1: Nature of the Project	1
Introduction	1
Problem Statement	2
Purpose and Project	3
Practice/Research Question	3
Significance of the Project	3
Definition	4
Assumptions	5
Summary	6
Section 2: Review of Scholarly Evidence	7
Introduction	7
Literature Search Strategy	7
Concepts and Theories	8
Literature Review	9
Background and Context	17
Summary	18
Section 3: Methods	19
Introduction	19
Design	19

Plan	19
Sample/Population	20
Ethical Considerations	20
Data Collection/Analysis	21
Summary	23
Section 4: Evaluation and Discussion	24
Introduction	24
Evaluation/Findings	24
Descriptive Categories	25
Implications	28
Strengths and Limitations of the Study	30
Analysis of Self	30
Summary	31
Section 5: Evaluation	33
Introduction	33
Project Goals	33
Project Outcomes	34
Areas of Further Study	36
Conclusion	36
Plans for Dissemination	37
References	38

# List of Tables

Table 1. Descriptive Categories	26
Table 2. Thirteen Factors	27

# List of Figures

Figure 2.1. Early Kanter model.	42
Figure 2.2. Late Kanter model	42
Figure 2.3. Communication/Commitment graph	43

# Section 1: Nature of the Project

#### Introduction

Research demonstrates that employees who are engaged in the workplace are happier and more productive (Kanter, 1977/1993). Employee engagement and workplace climate are two subjects that have gained recent attention by healthcare researchers and leaders. Engaged employees lead to a healthcare organization that receives higher customer satisfaction scores (Hunter, Bedell, & Mumford, 2007). Increased customer satisfaction improves the financial aspect of an organization by reducing staff turnover and increasing productivity (Fairbanks, 2007). Staff members note improved performance, teamwork, satisfaction, and a greater sense of cohesiveness when they are a part of an engaged team (Fairbanks, 2007). Automatic Data Processing (2012) reported that lost productivity due to disengaged employees costs the U.S. economy \$370 billion annually. On the other hand, a positive organizational climate can improve employee/supervisor relations, autonomy, intellectual stimulation, and overall participation (Hunter et al., 2007).

The theory and model that was used to guide this project were Kanter's (1977/1993) structural empowerment theory and the Lean model (Miller et al., 2005). Kanter's empowerment theory was used as a framework to facilitate employee engagement, ultimately improving the workplace climate and staff satisfaction in the cardiac catheterization laboratory ("ccath lab"). Kanter (1977/1993) claimed that structural factors inside the workplace have a greater impact on the feelings and behaviors of employees at work than their own personal tendencies. The emerging

success of the Lean model in healthcare validates the method's relevance and value, because it changes how an organization operates (Toussaint & Berry, 2013). With Lean, everyone participates in the mission to determine how to enhance the daily work (Toussaint & Berry, 2013). Lean is expected to transform the organizational culture by using a customer-focused method that encourages improvement opportunities, in part, by removing wasteful actions and crafting value (Philips, 2011).

The leadership at the cath lab wanted to cultivate a positive workplace climate where staff members engage in group problem solving (Miller et al., 2005). In order to accomplish those two objectives, it was essential to understand the current state of staff engagement and the workplace climate. A staff engagement and workplace climate survey was conducted. The purpose of the survey was to determine employee attitudes about multiple factors. This project used Lean to define, measure, and analyze in order to improve and control the identified opportunities for change (Zarbo, 2011). The cath lab environment is demanding and requires an engaged and efficient team to get the job done (Kalisch, Lee, & Rochman, 2010). The Cath lab team is most successful when the workplace environment is positive and the staff is engaged (Amato-Vealey, Fountain, & Coppola, 2012). The purpose of this project was to (a) address the question what is the current state of workplace climate and staff engagement in the cath lab setting and to (b) add to existing knowledge on employee engagement and the workplace climate.

#### **Problem Statement**

Engaging staff to make decisions that affect their professional practice remains challenging for leaders (ADP, 2012). In the cath lab, procedure volumes fluctuate daily,

which make planning and staffing a challenge. The combination of stress, long days, and delays getting in-patient beds lead to increased staff frustration and dissatisfaction (Fairbanks, 2007). Amato-Vealey, Fountain, and Coppola (2012) showed an inverse relationship between delays admitting patients, and workplace climate and staff dissatisfaction. While there is a generous amount of research on staff satisfaction and workplace climate in other types of healthcare areas, there is very little research on those topics specific to the cath lab environment. Therefore, the opportunity exists to provide information on workplace climate and staff engagement in the cath lab setting.

# **Purpose and Project**

Healthy workplace climates lead to higher staff satisfaction have repeatedly emerged. Extensive literature supports the relationship between employee engagement and staff satisfaction (Amato-Vealey, Fountain, & Coppola, 2012; Fairbanks, 2007; Gonzales, Fields, McGinty, & Gallo, 2010; Johnson & Capasso, 2012; Kanter, 1977, 1993; Kramer, Maguire, & Brewer, 2011; Nowak, Rimmasch, Kirby, & Kellogg, 2012; Nugus, Holdgate, Fry, Forero, McCarthy, & Braithwaite, 2011; Probus & Peach, 2012). An engagement and climate study was conducted using a survey/questionnaire.

#### **Practice/Research Question**

The project addresses the following question: What is the current state of workplace climate and staff engagement in the cath lab?

#### **Significance of the Project**

This study adds to existing knowledge from the perspective of staff engagement in the cath lab setting. Kanter (1977) wrote about the Structural Theory of Organizational

Empowerment. The theory describes the importance of an organization providing opportunities for growth and ease of access to information. This concept exhibits multiple organizational benefits when healthcare leaders use this theory to empower their staff (Kanter 1977, 1993). Research has shown that engaged employees report having higher levels of job satisfaction, organizational commitment, and job performance (Christian et al., 2011), while workplace climate has been shown to positively impact employee/supervisor relations, autonomy and participation (Hunter et al., 2007). Concepts, engagement and climate, have been shown to negatively relate to staff turnover and turnover intentions (Christian et al., 2011). Studies have shown a positive correlation between staff empowerment, job satisfaction and job performance (ADP, 2012; Fairbanks, 2007; Kanter, 1977, 1993; Kalisch, Lee, & Rochman, 2010; Laschinger, Gilbert, Smith, & Leslie, 2010). Results of these studies provide valued awareness of the elements that influence staff's perception of their work environment. Hospital leaders can use these elements to enhance recruitment and retention strategies and positively affect staff workplace satisfaction. This is particularly important due to the focus the Centers for Medicare and Medicaid Services (CMS) and The Joint Commission (TJC) have placed on publically reported quality and patient safety data (The Joint Commission, 2010; U.S. Department of Health and Human Services, 2010).

#### **Definition**

Staff engagement: This is an employee's emotional commitment to the organization and their willingness to "go the extra mile" for their employer (ADP, 2012, para. 6).

Workplace climate: the perceptions and beliefs held by employees about their work environment (Hunter et al., 2007).

Workplace satisfaction: working conditions that fulfill the needs of staff (Ning, Zhong, Libo & Qiujie, 2009).

# Assumptions

Several studies support Kanter's theory of structural empowerment. These studies demonstrate a correlation between staff empowerment and engagement, job satisfaction, and patient outcomes. As a result of these studies, the following assumptions can be made:

A workplace climate that is empowering will most likely foster employee engagement.

Increased employee engagement can result in employees who are more satisfied with their workplace climate and therefore, have a deeper organizational commitment.

Organizations with higher staff satisfaction and commitment have better patient outcomes and organizational outcomes.

**Limitations.** While the sample size is adequate for the project, there may be concerns about generalizing this project's results to a larger cath lab department or to other procedural areas. Another limitation is that the data is obtained from just one cath lab.

#### **Summary**

The intent of this project was to contribute to existing knowledge specifically related to the cath lab setting. There is a generous amount of research on staff satisfaction in other areas of healthcare however, there is limited research related to the cath lab, employee engagement, and workplace satisfaction. The target audience for this project was the staff in the cath lab and pre & post area.

After the project question was identified, the following process evolved: (a) conduct a staff engagement and workplace climate survey, (b) analyze the results, (c) share the results with staff and, based on opportunities, empower the staff to decide what to improve. Section 2 discusses how the concept of staff engagement has been linked to higher quality patient outcomes, financial viability, increased productivity, and employee satisfaction. By using Kanter's structural empowerment theory and Lean there will be, a framework to help leaders engage and empower the staff leading to increased staff satisfaction and productivity. Section 3 outlines the methodology used in this study. The descriptive research design examined employee relationships that exist in a situation without any attempt to control the situation (Burns & Grove, 2009). Section 4 shows the results of this study reinforce existing literature that demonstrates employees who are engaged in the workplace are happier and more productive (Kanter, 1977/1993).

# Section 2: Review of Scholarly Evidence

#### Introduction

The purpose of this project was to determine the current state of workplace climate and staff engagement in the cath lab setting. Prior to implementing this project, it was important to understand the state of the current research on staff satisfaction, employee engagement, and workplace climate. According to Laschinger, Gilbert, Smith, & Leslie (2010), staff that shared in decision-making and were empowered to make changes are happier and more satisfied. The role of management is to support employees and allow them to make the most of their skills and complete their work in a significant manner. Kanter's structural empowerment theory provides a framework to help leaders empower staff and, in turn, the staff will be more satisfied and productive (Kanter, 1977/1993). Current research has limited information on employee engagement and workplace climate in the cath lab. In this section the following areas will be covered: (a) search strategy, (b) concepts and theories, (c) frameworks, (d) literature review related to methods, (e) background and context, and (f) summary and conclusions.

### **Literature Search Strategy**

An extensive review of the literature was conducted using the following online databases: Cumulative Index of Nursing and Allied Health Literature (CINAHL), MEDLINE, PubMed, ProQuest Dissertations and Theses, and Walden Dissertations. They were searched from 1980 to the present. The studies chosen were limited to full text articles and published within the last 10 years (2004 and 2014), with the exception of three foundational articles article published earlier than 2004 (Kanter 1977, 1993;

Rafferty, Ball & Aiken, 2001; and Rozich & Resar, 2002). The study articles and systematic reviews were identified using various combinations of keywords: *cath lab*, *procedural area, workplace satisfaction, healthy work environment, employee engagement, staff satisfaction, lean, and patient flow*. The combination of key words that resulted in studies used in the literature review are: "Procedural area AND staff satisfaction OR patient flow," "Cath lab AND staff engagement OR Lean." Of the 535 articles produced by the search, those limited to full text articles on the theme of the employee engagement and/or how workplace climate influences staff satisfaction amounted to 15 articles. These were chose for this literature review.

# **Concepts and Theories**

This project was guided by Kanter's (1977/1993) structural empowerment theory and the Lean model (Philips, 2011). Kanter (1977/1993) argue that there are formal and informal tools, or structural factors, that enable employees to complete their work in a meaningful way. Formal tools include access to information, support, and resources. Informal tools are more social: positive interactions with superiors, peers, and other team members in the workplace that lead to actual relationships (See Figure 2.1; Laschinger & Finegan, 2005). Kanter (1977/1993) maintains that these workplace structural factors have a greater impact on employee work feelings and behaviors than their own personal tendencies.

Lean is a conceptual model that originated from the automotive industry and is now widely used by many other industries as well as healthcare to identify unnecessary steps in the process; eliminate waste. Numerous studies correlate staff empowerment with

staff satisfaction and increased productivity (Fairbanks, 2007; Amato-Vealey, Fountain, & Coppola, 2012; Ning, Zhong, Libo, & Qiujie, 2009; Johnson & Capasso, 2012; and Nowak, Rimmasch, Kirby & Kellogg, 20102). Adopting Lean methodology in healthcare can help organizations improve processes, outcomes, reduce costs, and increase satisfaction among patients, providers and staff (Miller, Womack, Byrne, Fiume, Kaplan, & Toussaint, 2005).

Structural empowerment and Lean rely on those who are closest to the work to outline the current process, identify barriers, and then outline the ideal process (Zarbo, 2011). Therefore, lean is a logical choice to endorse Kanter's empowerment theory. The next several paragraphs synthesize information from studies that demonstrate support for the use of Lean and Kanter's Empowerment Theory in this project.

## Literature Review

Engagement. Engaged employees are empowered. Research demonstrates that employees who are engaged in the workplace are happier and more productive (Christian et al., 2011). Employee engagement refers to an employee's emotional commitment to or activity within the organization (ADP, 2012). Kanter (1977/1993) described a model where structural factors in the work setting are speculated to affect the capability of employees to get work done. Kanter also acknowledged the role that leaders play in the provision of these structural factors.

Rozich and Resar (2002) describe how nurses in a Wisconsin hospital were actively involved in an improvement project and developed an assessment tool to determine a units' ability to accept new admissions. The leaders charged the staff with

developing and testing a process. As a result there has been decreases in the percentage of time units communicate they cannot accept new admissions and an increase in staff satisfaction. Amato-Vealey, Fountain and Coppola (2012) showed an improvement in staff satisfaction by engaging the frontline staff to improve efficiency, and minimize delays impacting operating room (OR) patient flow. They describe how delays contribute to staff dissatisfaction and dissatisfaction can lead to employee disengagement, if not addressed (Amato-Vealey, Fountain, & Coppola, 2012).

Ning, Zhong, Libo and Qiujie (2009) show the dissatisfaction of the front line staff in their study. 650 full-time nurses were surveyed and the survey tools used were the Demographic Data Questionnaire, Conditions of Work Effectiveness Questionnaire-II, and Job Satisfaction Scale. Ninety-two percent (of the participants responded and the results showed a statistically significant positive correlation between empowerment and HWE (r = 0.547, P < 0.01) (Ning et al., 2009). Unfortunately the nurses in this study perceive themselves to have lower access to resources, education, and opportunities for shared decision-making leading to staff dissastifaction (Ning et al., 2009). This study shows the exact opposite view of Kanter's model. Laschinger and colleagues (2004) link structural empowerment with portions of work life, which stimulate work engagement. These studies help to support Kanter's (1977/1993) claim that social structure factors in the workplace empower workers to get their jobs done.

Laschinger and Finegan (2005) explored work life and engagement/burnout among nurses working in urban academic hospitals across the province of Ontario. In the study, the authors sought to link structural empowerment with six areas of work life

(workload, control, reward, community, fairness, and values) to physical and mental health (Laschinger & Finegan, 2005). The model in Figure 2.2 demonstrates the study claim; when employees are provided with the support, resources, and access to information to perform their jobs, they are more likely to voice control over their workload, feel rewarded for accomplishments, or concur management practices were fair (Laschinger & Finegan, 2005). This would lead to greater work engagement and less burnout resulting in better physical and mental health (Laschinger & Finegan, 2005).

Catharine B. Fairbanks (2007) explores how the participants from a Vermont hospital described an increased sense of unity, teamwork, and satisfaction with their project. The front line staff led initiatives and shared in decision-making. This hospital leadership team found that supporting the process, fostering trust, communication, transparency, and empowering front line staff; positively impacts workplace climate (Fairbanks, 2007). Six Sigma and Lean methods were used to facilitate improvement of patient flow in the surgical area. This project resulted in improved patient satisfaction scores in the following areas; how well staff worked together (from 95.8–97.2%) and ambulatory overall scores improved from the 84<sup>th</sup> percentile to the 97<sup>th</sup> percentile (Fairbanks, 2007).

Probus and Peach (2012) also support Kanter's theory. They used the Lean process to empower front line staff to lead a patient flow redesign process. Allowing this to be a staff driven process decreases the amount of resistance to change staff have. This project took place in the ED of small community hospital in Tennessee. This hospital is a part of the LifePoint Hospital system. The team conducted the redesign process in three

consecutive sessions and included ancillary departments as appropriate. Then they conducted a three day pilot, assessed the results, and made the needed changes. Probus and Peach indicate the key to success of this project was getting staff buy-in which was achieved with what Kanter describes as the direct effect of empowerment, a positive impact on accountability and productivity (Laschinger, Finegan & Shamian, 2001).

Research demonstrates that employees who are engaged in the workplace are happier and more productive (Kanter, 1977, 1993). Staff members note a greater sense of cohesiveness, teamwork, and satisfaction in their accomplishments when they are a part of a high-performing team (Fairbanks, 2007).

Workplace climate. Workplace climate, on the other hand, refers to the perceptions and beliefs held by employees about their work environment (Hunter et al., 2007). Kanter (1977, 1993) states work climates that provide access to information, support, and resources are empowering and enable employees to be more satisfied and productive. The argument can also be made that structured improvement processes, such as lean, empower employees and therefore positively impact the workplace climate.

Kramer, Maguire, and Brewer (2011) show a positive correlation between employing constructs that promote empowerment, collaboration and decision making and nurses perception of work climate. In this study workplace climate is synonymous with work environment. There are eight work processes essential to a healthy work environment (HWE): (a) peers are clinically competent, (b) collaborative interdisciplinary relationships, (c) clinical autonomy, (d) educational support, (e) perception of adequate staffing (f) supportive leadership, (g) control of nursing care, and

(h) provision of safe patient centered care (Kramer, Maguire, & Brewer, 2011). The survey tool used, Essentials of Magnetism II (EOMII), measured the extent to which the eight steps are present in the work environment. This tool yielded a Cronbach alpha range of 0.83 - 0.97 supporting the validity of this tool. This study also builds upon Kanter's premise that structural factors in the workplace have a direct impact on nurses' ability to get the work done (Kanter, 1977, 1993). The question is not should or if but, how can HWE be developed and maintained on all units because of the correlation with staff satisfaction (Kramer, Maguire, & Brewer, 2011).

The article written by Zarbo (2012) is titled *Creating and sustaining a lean culture of continuous process improvement*. The main focus of this article is how to create a workplace culture that promotes and supports lean thinking. Zarbo (2012) uses Deming's fourteen management principles as the theoretical framework for this article. Deming's theory is based on developing people, encouraging respect and a culture where employees are empowered, accountable, and recognized for their knowledge and expertise. The principles of lean empower employees to be in charge of their own jobs, design their standard work flow, and make changes to the work flow as needed. This theory also requires leaders to create a workplace culture that supports and nurtures quality. When quality is the primary influence in the culture, it will improve the workplace climate (Zarbo, 2012). From this article the argument can be made that the lean methodology supports Kanter's empowerment theory. The connection lies with empowering those closest to the work to make decisions about improvements to the process.

Stoller et al. (2010) explored a business review that shows improving collaborative relationships results in better outcomes. There were four separate respiratory therapy (RT) departments in a hospital system and they all worked independent of each other. The departments met together to determine common quality metrics and goals. Using the performance management cycle, a structured improvement process, they developed a scorecard to monitor progress toward goal achievement in the areas of quality/innovation, service, productivity and employee engagement (Stoller et al., 2010). This collaboration resulted in the four departments standardizing RT care across the groups, sharing educational resources, and developing a cross-departmental float pool to cover staffing needs. (Stoller et al., 2010). The RT employees were empowered to share their ideas in a collaborative manner and resulted in an improvement in their workplace climate and better care for their patients. This study's findings also support lean methodology, design their standard work flow and make changes to the work flow as appropriate (Zarbo, 2012).

Amato-Vealey, Fountain, and Coppola (2012) argue the negative impact of patient flow delays. When patients cannot be discharged from the post–recovery unit the surgical department is less efficient, staff is overwhelmed, physicians are aggravated, interdepartmental relationships are tense, and patient and families satisfaction decreases. A major contributing factor to delays in discharge from the post-surgical recovery unit is the fact that the patient's length of postoperative stay cannot be accurately forecast (Tucker, Singer, Hayes, & Falwell, 2008). Amato-Vealey, Fountain, and Coppola (2012) showed an improvement in staff satisfaction, workplace climate, and patient satisfaction.

Results were achieved by engaging the frontline staff and using six-sigma to identify ways to improve efficiency (Amato-Vealey, Fountain, & Coppola, 2012). Similar to lean, six-sigma is a structured way to systematically define, measure, analyze, control, and maintain improvements to any process. Ultimately, this leads to frontline staff having a positive perception of their workplace climate because they were empowered to share in decision making for the process that affected their workflow (Kanter 1977/1993; Zarbo, 2012).

Johnson and Capasso (2012) wrote an article about an ED improvement project where the team selected two low scoring Press Ganey questions to improve. This team used value stream mapping to outline the current process and a waste walk to identify any unnecessary steps in the process (Johnson & Capassao, 2012). Front-line staff was engaged to identify areas for improvement and formulate the future state to help make an impact to their workplace climate. The findings support use of a standard process to implement and sustain change and having staff engaged in the improvement process affects workplace climate. The scores for the two specific Press Ganey questions went from the 55<sup>th</sup> percentile to the 92<sup>nd</sup> percentile and 45<sup>th</sup> percentile to 89<sup>th</sup> percentile respectively (Johnson & Capassao, 2012). Leaders that recognize the benefit of engaging and empowering staff will help their hospitals obtain significant financial, quality, and customer satisfaction outcomes (Johnson & Capassao, 2012). Investing time and resources in training staff is the way leaders encourage desired behavior, which is the genesis of the work place climate (Zarbo, 2012).

Nowak, Rimmasch, Kirby and Kellogg, (2012) found that reducing patient delays and wait times improve both patient and organizational outcomes and service excellence. This project was approached from a hospital wide perspective and drilled down to the unit level. There was a steering committee formed to consult on the over all patient flow initiative at the organizational level and it was decided to pilot the changes at one of the smaller hospitals within the Intermountain Healthcare system. Team members representing several of the hospitals in the Intermountain system completed the project work. This team was empowered to select an electronic bedboard to assist with transparency and develop a centralized patient placement process to decrease variability and increase the quality of care and staff collaboration. It is important to note that the staff in this project commented they now trusted their team members to appropriately place patients on the appropriate unit. As Laschinger, Finegan and Shamian, (2001) pointed out when there is no trust, people will not work well together. Covey (2006) discussed how trust improves every dimension of an organization; communication, climate, collaboration, approach, engagement, and associations with all stakeholders.

Today's healthcare leaders experience growing pressure to deliver quality results at a reduced cost, and with limited resources (Philips, 2011). In 2009, a study was conducted that demonstrated shared decision making as one of the most significant predictors of job satisfaction for all healthcare workers (Kalisch, Lee & Rochman, 2010). Healthcare leaders need to cultivate a workplace climate where all levels of staff are engaged and empowered to strive for higher quality. Healthcare leaders that are committed to changing the workplace climate are investing in their customers and staff

(Zarbo, 2012). Leaders have a responsibility to craft this devotion toward a workplace climate of continuous quality improvement (Zarbo, 2012). This places focus on the customer, both internal and external, and nurturing staff as the resource to deliver quality. Research has shown that a positive workplace climate can have favorable impacts on employee/supervisor relations, autonomy, intellectual stimulation, and overall involvement (Hunter et al., 2007). When quality is the force driving the workplace climate, it will increase efficiency and productivity, decrease costs, and improve customer satisfaction (Zarbo, 2012).

# **Background and Context**

This quality improvement project took place in a 537-bed not-for profit acute care hospital in Atlanta, GA. The unit is a three-room cath lab and nine-bed pre & post recovery unit that performs 200 heart and vascular procedures each month. The types of procedures vary from cardiac procedures, related specifically to the heart, to vascular procedures, dealing with the peripheral circulatory system. Each procedure, varies in complexity, and total procedure time can take anywhere from one to four hours. The patients are a combination of inpatients and outpatients, with the inpatients admitted into the hospital and the outpatients presenting from home. The mission of this organization is a commitment to the health and wellness of the community. In order to do this efficiently the organization needs to know the expectations of patients, clients, customers, and stakeholders to design a process that meets their requirements (Kelly, 2011).

Inefficiencies morph into a vicious cycle, resulting in decreased customer satisfaction and poor patient outcomes. When there is an efficient process, opportunity exists to perform

more procedures, increase patient satisfaction, and give team members a greater sense of teamwork and pride in their daily work (Fairbanks, 2007).

The student's role in this project was to facilitate staff engagement, empowerment and a positive workplace climate as part of the practicum experience. Employee engagement and workplace climate are two topics that have gained recent awareness by leaders and researchers. This author is a stout believer in engaging and empowering staff to achieve their goals. This belief may lend to author bias.

### **Summary**

As has been presented earlier in this study, the concept of staff engagement has been linked to higher quality patient outcomes, financial viability, increased productivity, and employee satisfaction. By using Kanter's structural empowerment theory and Lean there will be, a framework to help leaders engage and empower the staff leading to increased staff satisfaction and productivity. The intent of this project is to contribute to existing knowledge particularly related to the cath lab and other like hospital departments. Current research has limited information related to employee engagement and workplace satisfaction in the cath lab. Therein lies the gap however; results from research completed in other settings can be applied to the cath lab. Section 3 will provide more detail on how this project was completed.

#### Section 3: Methods

#### Introduction

The cath lab leadership seeks to foster a positive workplace climate where staff participates in group problem solving. In order to accomplish these two objectives it is important to understand the current state of the workplace climate and staff engagement. A staff engagement and workplace climate study was conducted using a survey. This project also used Lean to focus on defining, measuring, and analyzing to improve and control the identified opportunities for change (Zarbo, 2011). This project addresses the following question: What is the current state of workplace climate and staff engagement in the cath lab setting?

This section covers the overall approach and rationale used for this project. It describes the plans for conducting the research, the participants, the methods used in data collection and analysis, and the ethical considerations,.

# Design

This project used a descriptive research design to examine employee relationships in real-life situations (Burns & Grove, 2009). The data were collected using a survey sent to participants electronically. The idea of the survey was to determine employees attitudes on several aspects related to employee satisfaction. However, there was no randomization of subjects and there were no statistical controls (Burns & Grove, 2009).

#### Plan

The survey was sent to all staff electronically via the online program, Survey

Monkey. The staff was told they would receive e-mail with a link to the survey and that it

would take them about 20 minutes to complete. There was a visual cue (progress bar) to help staff see the percentage of the survey they had completed. Staff was reminded about the survey weekly for a 2–3-week period to encourage maximum participation. The staff was also encouraged to communicate to the researcher if they did not receive the e-mail or were having trouble accessing the survey. If a staff member had difficulty accessing the survey the link was re-sent or the staff member used another computer.

## Sample/Population

The populations that were expected to be impacted by this unit-based project were the 19 full-time and part-time staff of the cath lab department. The cath lab is where patients come for cardiac catheterizations, pacemaker insertions, and other cardiovascular procedures. The pre and post care area of the cath lab is where employees get patients ready for their procedure and then get them ready to go home, or to be transported back to their previous department. There are 19 staff members who received the survey. There were 10 staff who responded to yield a 52.6% response rate. If the response rate was less than 50% the representativeness of the sample would be in question (Burns & Grove, 2009). With this survey the response rate was 60% (about 12 staff).

#### **Ethical Considerations**

Prior to implementation of the study, approval through Walden University's (approval # 01-26-15-0368968) Institutional Review Boards (IRBs) was obtained. The organization's IRB review the study and determined this study met the criteria for exemption and did not require IRB approval. Once approval was received from the IRB, plans to begin the project included: scheduling meetings with representatives from

Human Resources to explain the study and procure any assistance that may be needed to complete the project. The standard race and gender questions were removed to add additional participant confidentiality.

### **Data Collection/Analysis**

The form of data collection was the engagement and climate survey. This survey includes 13 factors, 52 scale items, 6 demographic questions, and one short answer question. The factors included: 1. Job Satisfaction, 2. Learning & Development, 3. Compensation & Benefits, 4. Performance Management & Reviews, 5. Work/Life Balance, 6. Resources, 7. Change & Innovation, 8. Pride/Organizational Commitment, 9. Direct Supervisor/Manager, 10. Senior Leadership, 11. Communication, 12. Collaboration, and 13. Fairness. Each factor includes one negatively worded item (i.e., I am NOT paid fairly for my work) that will be reverse scored as positive (i.e., I am paid fairly for my work) before results are calculated (Burns & Grove, 2009). The response scale for these items is a 7-point Likert-type scale with the numbers associated as follows: 1= strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = moderately agree, and 7 = strongly agree. Once the survey closed the findings were analyzed.

When conducting a survey it is important to know if a question is measuring what it is designed to measure this is referred to as validity. The definition of valid means sound, rational, justifiable (Burns & Grove, 2009). When a survey is described as valid that means the researcher and others are of the opinion that the survey is measuring what it is designed to measure (Burns & Grove, 2009). Reliability is synonymous with

dependability and consistency. If a tool is not reliable it is also not valid (Burns & Grove, 2009).

Data obtained from a survey is typically ordinal which limits analysis to nonparametric and descriptive statistics (Burns & Grove, 2009). Descriptive statistics are numbers that summarize the distribution of scores on a measured variable (Stangor, 2010). Distribution can also be described as the point around which the data is centered, also known as central tendency or spread (Stangor, 2010). The most effective way to determine the central tendency is to calculate the average. That entails calculating the sum of all the scores of each question and dividing the sum by the number of participants (Stangor, 2010). 2009). The purpose of the survey was to assess the current state of employee engagement and workplace climate. The demographic data was looked at to facilitate comparisons across the group. The comparison groups are full-time staff versus part-time staff and supervisors versus nonsupervisors. Then all survey factors were ranked in order by their score. The data for each question was entered into an excel spreadsheet. The associated likert-scale response number was entered under the cell heading for that question. Then information from the survey was verified to validate its match on the spreadsheet. The average response for each question was calculated. According to Burns and Grove (2009) the values obtained from the survey are averaged to yield a single score. The scores on the scale range from 7 to 1 with the interpretation of the scores as follows: 7-5 identifies areas of strength and 4.9-1 identifies areas of opportunity. Section 4 describes the findings in greater detail.

### **Summary**

This section outlined the methodology used in this study. The descriptive research design examined relationships that exist in a situation without any attempt to control the situation (Burns & Grove, 2009). The population impacted by this project was the 19 full-time and part-time staff that work in the cath lab department. The form of data collection was an electronic survey to assess the current state of employee engagement and workplace climate. 10 staff responded to yield a 52.6% response rate. The average score for each question was calculated. Then all survey factors were ranked in order by their score. Finally a likert-scale response number was assigned and entered under the cell heading for each question. Section 4 shows the results of this study reinforce existing literature that demonstrates employees who are engaged in the workplace are happier and more productive (Kanter, 1977/1993).

#### Section 4: Evaluation and Discussion

#### Introduction

The purpose of this paper was to add to the existing body of knowledge on employee engagement and workplace climate in the cath lab setting. Once the project question was identified, the process included the following: (a) conduct a staff engagement and workplace climate survey, (b) analyze the results, (c) share the results with staff and, based upon opportunities, empower the staff to decide what to improve. The point of the survey was to obtain employees' attitudes about multiple factors. The project addressed the following question: What was the state of workplace climate and staff engagement in the cath lab setting? The results showed that, overall, members of the cath lab staff were satisfied with their jobs and felt they had a healthy workplace environment. Section 4 presents the details of the evaluation/findings, its implications, and the strengths and limitations of the project.

# **Evaluation/Findings**

An engagement and climate study was conducted that included a survey/questionnaire. The purpose of the survey was to have a tool to determine employee attitudes on multiple factors. The survey contained 13 factors, 52 survey items, 6 demographic questions and one short answer question. The response scale ranged from 1 to 7, with 1 indicating Strongly Disagree and 7 indicating Strongly Agree. There was a neutral option. Nineteen employees received the survey, and 11 participated in the survey yielding a 60% (58%) participation rate. Microsoft Excel Data Analysis Toolpak

(2016) was used to organize and analyze the data. For the purpose of this study and protection of the participants they were assigned a number (P1, P2, etc...) which was used to report the survey results.

# **Descriptive Categories**

The descriptive categories shown in Table 1 were used instead of standard demographic information. This was done because the participant sample size was small and would provide additional anonymity. The descriptive categories included: I was provided a mentor upon hire - this meant the participant was assigned mentor. The mentor was a peer that worked in a different department and provided support during the first year of employment; employment status - this meant the participant held a full-time or part-time status; supervisory status - meant the employee holds a supervisory position; current tenure - meant how many years the employee has been employed by Northside; future tenure - meant how many years the participant plans to remain at Northside; and recommend a position at Northside to a qualified friend or family member - this meant the participant would recommend a family member or friend seek employment at Northside. The eleven participants held various nursing and technician positions within the organization.

I was provided a mentor upon hire was the first category. Most of the participants reported they were assigned a mentor upon hire. While twenty-seven percent of participants reported they were not assigned a mentor upon hire. Employment status was the next category. Of the eleven participants only one was not a full-time employee. This participant reported their employment status as a "flat-rate" employee. Consequently,

91% of the participants reported employment status as full-time. Supervisory status was the third category. Two participants reported they were in a supervisory role (22%), seven reported they were not in a supervisory role (78%), and two participants did not answer this question. Current tenure was the fourth category. Thirty percent of participants reported having a current tenure of 0-1 years, 60% reported 1-3 years as their current tenure, ten percent reported 3-5 years and one participant did not answer this question. The fifth category was future tenure. The breakdown was as follows; 18.2% reported 3-5 years as future tenure, 9.1% reported 5-7 years, 36.4% reported 10-15 years, 9.1% reported 15-20 years, and 27.2% reported their tenure as indefinite. The final category is recommending a qualified friend or family member and 91% of the participants reported "yes" they would recommend a friend or family member to work at Northside.

Table 1

Descriptive Categories

Participant Response
73% - Yes; 27% - No
91% - Full-Time; 9% - Flat rate
22% - Yes; 78% - No; 2 – no answer
30% = 0-1; 60% = 1-3; 10% = 3-5; 1 – no answer
18.2% = 3-5; 9.1% = 5-7; 36.4% = 10-15; 9.2% = 15-20; 27.2%
= indefinite
91% - Yes; 9% - No

There were 13 factors or main topics in the study. Table 2 shows the main factors and the survey questions that support the respective factors.

Table 2

Thirteen Factors

Factor	Supportive Survey Questions	
Job Satisfaction	1, 14, 27, 40	
Learning & Development	2, 15, 28, 41	
Compensation & Benefits	3, 16, 29, 42	
Performance Management & Reviews	4, 17, 30, 43	
Work/Life Balance	5, 18, 31, 44	
Resources	6, 19, 32, 45	
Change & Innovation	7, 20, 33, 46	
Pride/Org. Commitment	8, 21, 34, 47	
Direct Supervisor/ Manager	9, 22, 35, 48	
Senior Leadership	10, 23, 36, 49	
Communication	11, 24, 37, 50	
Collaboration	12, 25, 38, 51	
Fairness	13, 26, 39, 52	

Major findings from the engagement survey included no differences were found between any of the descriptive categories that were investigated. Almost all responses indicated the department is a positive place, with solid interdepartmental teamwork.

Although interdepartmental teamwork is good, teamwork outside the department is listed as one of the biggest opportunities for improvement.

#### **Implications**

Studies have shown a positive correlation between staff empowerment, job satisfaction and job performance (ADP, 2012; Fairbanks, 2007; Kanter 1977,1993; Kalisch, Lee, & Rochman, 2010; Laschinger, Gilbert, Smith, & Leslie, 2010). Results of these studies provide valued awareness of the elements that influence staff's perception of their work environment. Hospital leaders can use these elements to positively affect staff workplace satisfaction. Amato-Vealey, Fountain, and Coppola (2012) showed an improvement in staff satisfaction, workplace climate, and patient satisfaction from a patient flow project. Engaging the frontline staff and using six sigma to identify ways to improve efficiency achieved the results. Similar to lean, six-sigma is a structured way to systematically define, measure, analyze, control, and maintain improvements to any process.

The results from this survey support Kanter's (1977/1993) structural empowerment theory and claim that social structure factors in the workplace empower workers to get their jobs done. This theory provides a framework to help leaders empower staff. Kanter (1977/1993) argued that structural factors or formal and informal tools enable employees to complete their work in a meaningful way. Formal tools include access to information, support, and resources. Informal tools are more social: positive interactions with superiors, peers, and other team members in the workplace that lead to actual relationships (Laschinger & Finegan, 2005). The study published by Laschinger &

Finegan, (2005) declares that when employees are provided with formal tools to perform their jobs, they are more likely to verbalize control over their workload, feel rewarded for accomplishments, or concur management practices were fair. Kanter (1977/1993) declares that workplace structural factors have a greater impact on employee workplace feelings and behaviors than their own personal tendencies.

Workplace climate in this study is synonymous with work environment. Workplace climate refers to the perceptions and beliefs held by employees about their work environment (Hunter et al., 2007). Work climates that provide access to information, support, and resources are empowering and enable employees to be more satisfied and productive. The case can also be made that structured improvement processes, such as lean, empower employees and therefore, positively impact the workplace climate. The results from this study supports findings from Kramer, Maguire, & Brewer (2011). They show a positive relationship between employing constructs that promote empowerment, collaboration and decision-making and nurses' perception of work climate. In this study there are eight work processes essential to a healthy work environment (HWE): (a) peers are clinically competent, (b) collaborative interdisciplinary relationships, (c) clinical autonomy, (d) educational support, (e) perception of adequate staffing, (f) supportive leadership, (g) control of nursing care, and (h) provision of safe patient centered care (Kramer, Maguire, & Brewer, 2011). The data from this project shows the area of improvement is Cooperation between different departments and floors (M = 3.73). The recommendation is to empower the staff to

determine the best way to improve cooperation between different departments and floors using a structured process such as Lean.

#### Strengths and Limitations of the Study

There are strengths and limitations to this project. The strengths of this project are the amount of anonymity, and protection this project offered participants, through the use of the online survey. Another strength of this study is the reliability of the study evidence by the 60% response rate. The limitations of this project; there was no randomization, no static control, the participation group is small and limited to one department in the hospital which may impact the ability to generalize the findings. Future studies would be enriched to include participants from eath labs across our healthcare system or the city and southeastern region of the US. A longitudinal study would demonstrate how the project results would materialize over time.

### Analysis of Self

This project enabled me to function in the role of scholar and project manager. It reinforced the persistent need for attention to detail and time management. The main reason I pursued this project was because this cath lab staff demonstrated poor communication, trust and teamwork were nonexistent, and there was no literature on employee engagement in the cath lab setting. The environment of the cath lab is demanding and stressful and therefore important to retain experienced staff. From a personal perspective I had the opportunity to see the staff build trust, improve their communication and become a stronger team. As this growth took place it positively impacted the workplace environment and lead to the staff being more satisfied and

productive at work. Furthermore, this project reinforced the need for continued work related to healthy workplace environments and staff engagement. This study met its goal; to add to the existing body of knowledge related to employee engagement and workplace climate.

#### **Summary**

The intent of this study was to add to the existing body of knowledge related to employee engagement and workplace climate in the cath lab setting. The first task was to discover the current state of workplace satisfaction, then share the results with the staff to determine what to improve and guide them through the lean process to accomplish it. The results of this study reinforce existing literature that demonstrates employees who are engaged in the workplace are happier and more productive (Kanter, 1977/1993). Kanter (1977/1993) claimed that structural factors inside the workplace have a greater impact on employee work feelings and behaviors than their own personal tendencies. Staff members note a greater sense of cohesiveness, performance, teamwork and satisfaction in their accomplishments when they are a part of an engaged team (Fairbanks, 2007). Engaged employees lead to a healthcare organization receiving higher customer satisfactions scores (Hunter, Bedell, & Mumford, 2007). Hospital leaders can use Kanter's theory to enhance recruitment and retention strategies and positively affect staff workplace satisfaction. Management must not only make it simple for employees to communicate their feedback but, also be willing to respond quickly to their input builds trust and credibility with their employees (Lilienthal, 2002). This is particularly important due to

the focus CMS and TJC have placed on publically reported quality and patient safety data (The Joint Commission, 2010; U. S. Department of Health and Human Services, 2010).

#### Section 5: Evaluation

#### Introduction

The cath lab leadership sought to foster a positive workplace climate in which staff could participate in group problem solving. In order to accomplish these two objectives, it was important to understand the current state of the workplace climate and staff engagement. A study was conducted using a survey. This project also used Lean to focus on defining, measuring, and analyzing the data from the employee survey to improve and control the low scoring areas (Zarbo, 2011). The project addressed the following question: What was the state of workplace climate and staff engagement in the cath lab setting?

### **Project Goals**

This study added to existing knowledge from the perspective of staff engagement in a cath lab setting. Kanter (1977) wrote about the Structural Theory of Organizational Empowerment. The theory describes the importance of an organization providing opportunities for growth and ease of access to information. This concept exhibits multiple organizational benefits when healthcare leaders use this theory to empower their staff (Kanter 1977,1993). As stated previously, this cath lab staff demonstrated poor communication and trust and teamwork were nonexistent. After the completion of this study the staff exhibited increased trust, improved communication, and became a stronger team. As this growth took place it positively impacted the workplace environment and lead to the staff being more satisfied and productive at work. According to Christian et al. (2011), engaged employees report having higher levels of job satisfaction,

organizational commitment, and job performance while workplace climate has been shown to improve employee/supervisor relations, employee autonomy, and employee participation (Hunter et al., 2007). Concepts, employee disengagement and poor workplace climate have been shown to damage staff turnover and turnover intentions (Christian et al., 2011). Studies have shown a positive correlation between staff empowerment, job satisfaction and job performance (ADP, 2012; Fairbanks, 2007; Kanter, 1977, 1993; Kalisch, Lee, & Rochman, 2010; Laschinger, Gilbert, Smith, & Leslie, 2010). Results of these studies provide valued awareness of the elements that influence staff's perception of their work environment. Hospital leaders can use these elements to enhance recruitment and retention strategies and improve the satisfaction of staff in their workplace. This was particularly important due to the focus the Centers for Medicare and Medicaid Services (CMS) and The Joint Commission (TJC) have placed on publically reported quality and patient safety data (The Joint Commission, 2010; U.S. Department of Health and Human Services, 2010).

### **Project Outcomes**

The results from this survey support Kanter's (1977/1993) structural empowerment theory and his claim that social structure factors in the workplace empower workers to get their jobs done. This theory provides a framework that can help leaders empower staff. Kanter (1977/1993) argued that structural factors or formal tools (according to Laschinger and Finegan (2005), access to information, support, and resources that lead to actual relationships) and informal tools (that is, more social tools, including positive interactions with superiors, peers, and other team members in the

workplace) enable employees to complete their work in a meaningful way. The study published by Laschinger and Finegan (2005) claimed that when employees are provided with formal tools to perform their jobs, they are more likely to verbalize control over their workload, feel rewarded for accomplishments, or concur management practices were fair. Kanter (1977/1993) declares that workplace structural factors have a greater impact on employee workplace feelings and behaviors than their own personal tendencies.

Workplace climate in this study is synonymous with work environment. Workplace climate refers to the perceptions and beliefs held by employees about their work environment (Hunter et al., 2007). Work climates that provide access to information, support, and resources are empowering and enable employees to be more satisfied and productive. The case can also be made that structured improvement processes, such as lean, empower employees and therefore, positively impact the workplace climate. The results from this study supports findings from Kramer, Maguire, and Brewer (2011). They show a positive relationship between employing constructs that promote empowerment, collaboration and decision-making and nurses' perception of work climate. In this study there are eight work processes essential to a healthy work environment (HWE): (a) peers are clinically competent, (b) collaborative interdisciplinary relationships, (c) clinical autonomy, (d) educational support, (e) perception of adequate staffing, (for) supportive leadership, (g) control of nursing care, and (h) provision of safe patient centered care (Kramer, Maguire, and Brewer, 2011). The data from this project shows the area of improvement is Cooperation between different

departments and floors (M = 3.73). The recommendation is to empower the staff to determine the best way to improve cooperation between different departments and floors using a structured process such as Lean.

### **Areas of Further Study**

Future studies would be enriched to include participants from cath labs across our healthcare system or the Metro Atlanta Area and southeastern region of the US. A longitudinal study would demonstrate how the project results would materialize over time. This is particularly important because travel agencies are actively recruiting cath lab trained staff and we have a vested interest in retaining our staff and providing a positive workplace environment.

#### Conclusion

The intent of this study was to add to the existing body of knowledge related to employee engagement and workplace climate in the cath lab setting. The first task was to discover the current state of workplace satisfaction, then share the results with the staff to determine what to improve and guide them through the lean process to accomplish it. The results of this study reinforce existing literature that demonstrates employees who are engaged in the workplace are happier and more productive (Kanter, 1977/1993). Kanter (1977/1993) claimed that structural factors inside the workplace have a greater impact on employee work feelings and behaviors than their own propensities. Staff members note a greater sense of cohesiveness, performance, teamwork and satisfaction in their accomplishments when they are a part of an engaged team (Fairbanks, 2007). Engaged employees lead to a healthcare organization receiving higher customer satisfactions

scores (Hunter, Bedell, & Mumford, 2007). Hospital leaders can use Kanter's theory to enhance recruitment and retention strategies and positively affect staff workplace satisfaction. Management must not only make it simple for employees to communicate their feedback but, also be willing to respond quickly to their input builds trust and credibility with their employees (Lilienthal, 2002).

### **Plans for Dissemination**

The dissemination of this study would be presented to the Director of the Heart and Vascular Institute to demonstrate the positive effect improving employee engagement had on staff's perception of job satisfaction and workplace climate. The results of this study imply a positive relationship exists between employee engagement and job satisfaction. The assumption was that as staff were empowered they would be more engaged in the workplace and therefore report higher job satisfaction scores. A survey was used to obtain employee attitudes on multiple factors. We will carry on the success of this study by continuing to use a structured way to systematically define, measure, analyze, control, and maintain improvements to any process.

#### References

- Automatic Data Processing. (2012). Employee satisfaction vs. employee engagement:

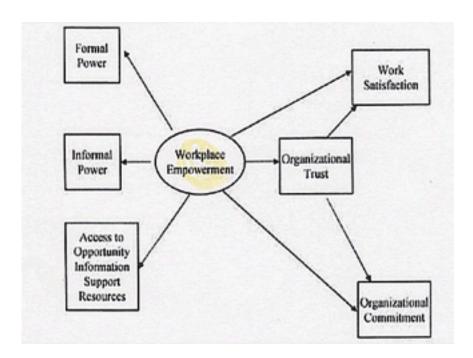
  Are they the same thing? ADP Research Institute. A White Paper
- Batalden, P. B., & Davidoff, F. (2007). What is "quality improvement" and how can it transform healthcare. *Quality and Safety in Health Care*, 16(1), 2-3.
- Burns, N., & Grove, S. K. (2009). *The practice of nursing research: Appraisal synthesis and generations of evidence* (6th ed.). St. Louis, MO: Saunders Elsevier.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, *64*, 89-136.
- Fairbanks, C. B. (2007). Using six sigma and lean methodologies to improve OR throughput. *AORN*, 86(1), 70-82.
- Hodges, B. C., & Videto, D. M. (2011). *Assessment and planning in health programs* (2nd ed.). Sudbury, MA: Jones & Bartlett Learning.
- Hunter, S. T., Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. *Creativity Research Journal*, *19*(1), 69-90.
- Kalisch, B. J., Lee, H., & Rochman, M. (2010). Nursing staff teamwork and job satisfaction. *Journal of Nursing Management*, *18*, 938-947.
- Kanter, R. M. (1977, 1993). *Men and women of the corporation*. New York: Basic Books.
- Kelly, D. L. (2011). *Applying quality management in healthcare* (3rd ed.). Chicago, IL: Health Administration Press.

- Kettner, P. M., Moroney, R. M., & Martin, L. L. (2008). *Designing and managing programs: An effectiveness based approach* (3rd ed.). Thousand Oaks, CA: Sage.
- Laschinger, H. K., & Finegan, J. (2005). Empowering nurses for work engagement and health in hospital setting. *The Journal of Nursing Administration*, *35*(10), 439-449.
- Laschinger, H. K., Finegan, J. E., & Shamian, J. (2001). The impact of workplace empowerment, organizational trust on staff nurses' work satisfaction and organizational commitment. *Healthcare Management Review*, 26(3), 7-23.
- Laschinger, H. K., Finegan, J. E., Shamian, J., & Wilk, P. (2004). A longitudinal analysis of the impact of workplace empowerment on work satisfaction. *Journal of Organizational Behavior*, *25*, 527-545. http://dx.doi.org/10.1002/job.256
- Laschinger, H. K., Gilbert, S., Smith, L. M., & Leslie, K. (2010). Towards a comprehensive theory of nurse/patient empowerment: Applying Kanter's empowerment theory to patient care. *Journal of Nursing Management*, 18, 4-13.
- Laschinger, H. K., & Leitner, M. P. (2006). The impact of nursing work environments on patient safety outcomes: The mediating role of burnout/engagement. *The Journal of Nursing Administration*, 36(5), 259-267.
- Lilienthal, P. (2002). If you give your employees a voice do you listen. Retrieved from <a href="https://secure.asq.org/perl/msg.pl">https://secure.asq.org/perl/msg.pl</a>

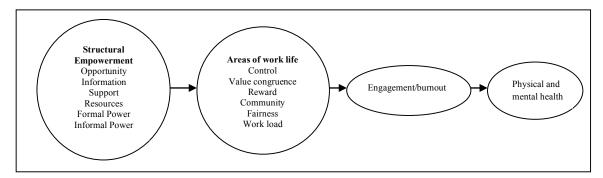
- Miller, D., Womack, J. P., Byrne, A. P., Fiume, O. J., Kaplan, G. S., & Toussaint, J. (2005). Going lean in health care. (IHI Calls to Action Series No. 7). Retrieved from
  - http://www.entnet.org/Practice/upload/GoingLeaninHealthCareWhitePaper.pdf
- Mind Tools, Ltd. (2013). Retrieved from www.mindtools.com/pages/article/newLDR\_86.htm
- Ning, S., Zhong, H., Libo, W., & Quijie, L. (2009). The impact of nurse empowerment on job satisfaction. *Journal of Advance Nursing*, 65(12), 2642-2648. http://dx.doi.org/10.1111/j.1365-2648.2009.05133.x
- Petri, L. (2010). Concept analysis of interdisciplinary collaboration. *Nursing Forum*, 45(2), 73-82.
- Philips Healthcare. (2011). Successfully deploying lean in healthcare. Retrieved from http://www.philips.com/healthcareconsulting
- Probus, D., & Peach, S. (2012). Lean-driven improvements slash wait times, drive up patient satisfaction scores. *ED Management*, 24(7), 79-81.
- Rafferty, A. M., & Aiken, L. H. (2001). Are teamwork and professional autonomy compatible, and do they result in improved hospital care. *Quality in Health Care*, 10(2), 32-37.
- References Amato-Vealey, E. J., Fountain, P., & Coppola, D. (2012). Perfecting patient flow in the surgical setting. *AORN*, 96(1), 46-57.

- Rozich, J. D., & Resar, R. K. (2002). Using a unit assessment tool to optimize patient flow & staffing in a community hospital. *The Joint Commission Journal on Quality Improvement*, 28(1), 31-41.
- Stangor, C. (2010). Introduction to psychology (v. 1.0) flatworld knowledge. Retrieved from http://www/flatworldknowledge.com
- Terry, A. J. (2012). *Clinical research for the doctor of nursing practice*. Sudbury, MA: Jones & Bartlett Learning.
- Toussaint, J. S., & Berry, L. L. (2013). The promise of lean in healthcare. *Mayo Clinic Proceedings*, 88(1), 74-82.
- Tucker, A. L., Singer, S. J., Hayes, J. E., & Falwell, A. (2008). Front-line staff perspectives on opportunities for improving the safety and efficiency of hospital work systems. *Health Services Research*, *43*, 1807-1829. http://dx.doi.org/10.1111/j.1475-6773.2008.00868.x
- Xyrichis, A., & Ream, E. (2008). Teamwork: A concept analysis. *Journal of Advanced Nursing*, 61(2), 232-241.
- Zarbo, R. J. (2012). Creating and sustaining a lean culture of continuous process improvement . *American Journal of Clinical Pathology*, *138*, 321-326. http://dx.doi.org/10.1309/AJCP2Y1XGKTSNQF

# Appendix A: Figures



*Figure 1.* Figure 2.1: Earlier model derived from Kanter's theory linking nurse work empowerment and organizational trust. (Laschinger, Finegan, & Shamian, 2001, p. 13)



*Figure 2.* Figure 2.2: Later model derived from Kanter's theory linking structural empowerment to the six areas of work life. (Laschinger & Finegan, 2005, p. 441)

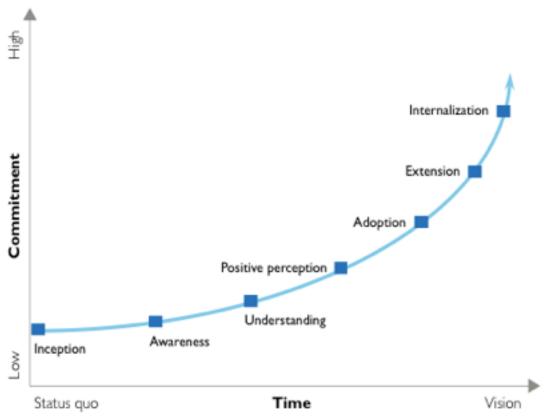


Figure 3. Figure 2.3: Communication/Commitment graph. (Philips Healthcare, 2011)

## Appendix B: Invitation Email

Invitation Email - Northside Hospital Cardiology Employee Climate Survey

You are invited to take part in a research study of the organizational climate and the employees' level of engagement. The researcher is inviting full-time and part-time employees to be in the study.

A researcher named Rhonda Smith, who is a doctoral student at Walden University, is conducting this study. You may already know the researcher as Manager of Cardiology Services, but this study is separate from that role.

The purpose of this study is to inform the department, and Northside as a whole, on how the employees are feeling about multiple different facets of work. The findings will be used to improve the organization in as many ways as possible.

If you are interested in participating in this study please click the link below. The first 2 pages are the informed consent and the pages to follow are the actual survey. The survey will take you about 20-30 min to complete.

# Appendix C: Survey

# Northside Hospital Cardiology Employee Climate Survey (In order by category)

**Directions:** Please answer the following questions as truthfully as possible. **Your individual responses will be anonymous**; they will NOT be shared with any of your direct supervisors or anyone in your department. Your answers will only be used in an effort to better Northside Hospital as an organization for current and future employees. Using the response scale below, indicate your agreement or disagreement with each item, as honestly as you can, by picking the appropriate response for each statement.

7 = Strongly Agree 6 = Moderately Agree 5 = Slightly Agree 4 = Neutral 3 = Slightly Disagree 2 = Moderately Disagree 1 = Strongly Disagree							
Job Satisfaction		_	_		_	_	_
Overall, I am satisfied with my job.	1	2	3	4	5	6	7
2. I am given the responsibility and freedom to do my job.	1	2	3	4	5	6	7 7
<ol> <li>I do not get a sense of personal accomplishment from my work. (R)</li> <li>My job makes good use of my skills and abilities.</li> </ol>	1	2	3	4	5	0	7
4. My job makes good use of my skins and abilities.	1	2	3	4	3	0	/
Learning and Development							
5. When people start in new positions at Northside Hospital							
they are given enough guidance and training.	1	2	3	4	5	6	7
6. Northside Hospital provides opportunities to help me							
further develop my skills.	1	2	3	4	5	6	7
<ol><li>I am encouraged to continually improve myself and my performance.</li></ol>	1	2	3	4	5	6	7
8. There are not enough opportunities for my career to							
progress here at Northside Hospital. (R)	1	2	3	4	5	6	7
Compensation and Benefits							
9. I am not paid fairly for my work (R)	1	2	3	4	5	6	7
10. My pay is favorable compared to employees I know							
at other hospitals around Atlanta	1	2	3	4	5	6	7 7 7
11. Northside Hospital's benefits meet my needs	1	2	3	4	5	6	7
12. I understand how merit increases are determined	1	2	3	4	5	6	7
Performance Management and Reviews							
13. Northside Hospital's performance review process accurately							
measures my job performance			3				7
14. The way my performance is evaluated is fair	1		3				7
15. My performance is reviewed and evaluated often enough	1	2	3	4	5	6	7
16. The way my performance is evaluated does not provide me with							
clear guidelines for improvement (R)	1	2	3	4	5	6	7
ciear guidennes for improvement (K)	1	4	3	4	J	U	′

Work/Life Balance							
17. Northside Hospital's policies and practices give me the							
flexibility to manage my work and personal life	1	2	3	4	5	6	7
18. My supervisor/manager does not support my efforts to balance							
my work and personal life (R)	1	2	3	4	5	6	7
19. I have a social life outside of work	1	2	3	4	5	6	7
20. I am able to stay involved in non-work interests and activities	1	2	3 3 3	4	5	6	7
Resources							
21. I have access to the right equipment, resources,		_	_		_		_
or information to do my job well	1	2	3	4	5	6	7
<ul><li>22. The technology used at Northside Hospital is efficient</li><li>23. Our policies and procedures are efficient and well-designed</li></ul>	1	2	3 3 3	4	5	6	7
24. My department does not have an adequate	1	2	3	4	5	U	,
amount of staff to achieve our goals (R)	1	2	3	4	5	6	7
Change & Innovation							
25. Change is handled well at Northside Hospital	1	2	3	4	5	6	7
26. The way Northside Hospital is run has improved over the last year	1	2	3	4	5	6	7
27. Northside Hospital is innovative and forward thinking	1	2	3	4	5	6	7
28. Northside Hospital does not learn from its past mistakes	1	2	3	4	_	_	7
and/or successes (R)	1	2	3	4	3	6	/
Pride/Organizational Commitment							
29. Overall, I do not enjoy working in my department (R)	1	2	3	4	5	6	7
30. Northside Hospital's culture is special – something you don't	1	2	2	4	_	_	7
just find anywhere 31. All things considered, I find this to be a great place to work	1	2	3	4	5	6	7
32. I am proud to tell people that I work for Northside Hospital	1	2	3 3 3	4	5	6	7
Direct Supervisor/Manager							
<ol> <li>My supervisor/manager keeps our department's employees informed about what is going on</li> </ol>	1	2	3	1	5	6	7
34. My supervisor/manager is consistent and fair	1	2	3	4	5	6	7
35. My supervisor/manager does not make his/her expectations clear ( <b>R</b> )	1	2	3 3	4	5	6	7
36. I believe what I am told by my supervisor/manager	1	2	3	4	5	6	7

Senior Leadership (Directors and VP's) 37. Senior leadership provides a clear direction							
for Northside Hospital's future	1	2	3	4	5	6	7
38. I do not believe what I am told by senior leadership (R)							
39. Senior leadership communicates openly about important matters	1	2	3	4	5	6	7
40. Senior leadership shows a genuine interest in the							
well-being of Northside Hospital's employees							
Communication							
41. At Northside Hospital, we discuss and debate issues							
respectfully to get better results	1	2	3	4	5	6	7
42. Changes that affect me are discussed prior to					_		_
being implemented	1	2	3	4	5	6	7
43. In my department, we do not openly communicate about		_	2		_	_	7
issues that impact each other's work ( <b>R</b> ) 44. When I offer a new idea, I believe it will be fully considered	1	2	3	4	3	6	1
even if it is not implemented	1	2	3	1	5	6	7
even if it is not implemented	1	2	5	7	5	U	,
Collaboration							
45. There is a sense that we are all on the same team							
at Northside Hospital	1	2	3	4	5	6	7
46. Here at Northside Hospital, there is a lack of cooperation							
between different departments and floors (R)	1	2	3	4	5	6	7
47.We have opportunities to contribute to important							
decisions in my department	1	2	3	4	5	6	7
48. People in my department work well together	1	2	3	4	5	6	7
Fairness							
49. Issues of low performance are not adequately addressed							
in my department ( <b>R</b> )	1	2	3	4	5	6	7
50. Promotions in my department are based on a person's ability	1	2	3	4	5	6	7
51. There is equal opportunity for all staff in this organization	1	2	3	4	5	6	7
52. Discrimination of any kind is prevented and discouraged	1	2	3	4	5	6	7 7 7 7

53. Please feel free to elaborate on any responses you have given. Also, if you have any comment about something specific to your work or an issue you do not feel was represented in the survey items please feel free to provide any additional information now.

Demographics										
54. I was provided a mentor/pathfinder upon being hired.										
☐ Yes	□ No									
55. Employment Status: (Choose One)										
☐ Full-Time	☐ Contrac	et								
☐ Part-Time	☐ Resour	ce Pool								
☐ Temporary	☐ Flat Ra	te Agreement								
56. Are you in a supervi	sory role? (Add back	into Survey Monkey	after Pilot)							
☐ Yes	□ No									
57. Current Tenure										
□ 0-1 year	☐ 1-3 years	☐ 3-5 years	☐ 5-7 years							
□ 7-10 years	□ 10-15 years	□ 15-20 years	☐ 20+ years							
58. Future Tenure										
□ 0-1 year	☐ 1-3 years	☐ 3-5 years	☐ 5-7 years							
☐ 7-10 years	□ 10-15 years	☐ 15-20 years	☐ 20+ years							
☐ Indefinitely	•	•	•							
59. I would recommend	a position at Northsi	de Hospital to a qualif	ied friend or family member							
☐ Yes	□ No		•							