The impact of positive reinforcement strategies on increased job performance in a Virginia University facilities management department

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The Impact of Positive Reinforcement Strategies on Increased Job Performance in a Virginia University Facilities Management Department

Brandon K. Artis

A thesis submitted to the Graduate Faculty of
JAMES MADISON UNIVERSITY
In Partial Fulfillment of the Requirements for the degree of Master of Science

Adult Human Resource Development/Adult Education

May 2012
Dedication

I dedicate my research to my mother, Laveta Artis, for her unwavering encouragement throughout this endeavor. Your continuous support allowed me to refocus and push through long hours and late nights in the library. I am pleased with the final product and hope that I have continued to make you proud as well.
Acknowledgements

My first attempts to tackle this undertaking were intimidating. There were multiple people who I would like to give a nod of thanks to for their role in this endeavor, whether they realized it or not.

Without being cliché, I must first thank God. I spent just as many hours praying I would get this thesis done as I did actually writing it.

Secondly, a big thanks goes to my thesis chair, Dr. Jane Thall. Over the last two years, she has continually brought out the best in me academically. Dr. Thall always seemed to know just when to apply the gas and brake. Without her, I would have crashed a long time ago. Along with Dr. Thall, I must thank my other committee members, Dr. Carmen Bosch and Mr. Randell Snow. While I have known Dr. Bosch only a short time, she always provided honest and critical feedback. On the other hand, I have known Mr. Snow since I was an undergraduate student. He has been a quasi-academic adviser for me over the last five years, and it was great to have a familiar face come full circle with me.

Third, I must think my statistics professor, Geoff Estes, for always remaining professional and available. I also learned to like (tolerate) statistics and SPSS.
Fourth, a huge thank you goes to my fellow colleagues: Bradford Nickerson, Cherelle Johnson, Chervon Moore, Diane Smith, Elaine Roberts, Kendra Scott and Sukaynah Alsaleem. The feedback that you all provided was priceless. After working intensely together over the last year, I began to feel like you all could read my mind the way you assisted me in clarifying my thoughts. It was much appreciated.

Last but certainly not least, I’d like to thank my friends and family who continued to motivated me when I hit writing blocks. Specifically, my brothers from other mothers: Jaret Lloyd, Jason Jackson and Justin Wilson, as well as my daily motivator, Angelina Sobel, who would not hesitate to take my cell phone, force me to cut off my television, and leave me surprise notes of encouragement.

If I am forgetting anyone, charge it to my head and not my heart. Please know that your contribution did not go unnoticed, and this finish product is the proof!
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Abstract

Maintaining employee motivation and engagement on the job is important to organizational productivity (Groen, Wouters, & Wilderom, 2011; Leoni, 2011; Vroom, 1964; Wolf & Zwick, 2008). This study investigated the impact of positive reinforcement strategies on increased job performance. The data was obtained from mid-career, non-supervisory individual contributor employees at a Virginia university Facilities Management department, using a quantita
tive survey. The employees were asked to reflect on their perception of their own job performance, as well as the type, amount, and frequency of feedback they received from their supervisors while on the job. The research found that positive reinforcement has minimal impact on job performance for this sample population. The study concluded that positive reinforcement is a minimally useful performance feedback tool for both supervisors and employees.

Keywords: positive reinforcement, increased job performance, mid-career, non-supervisory, individual contributor, employee, motivation, journeymen, feedback, employee perception
Introduction

Organizations in the current competitive global market are vexed with the issue of how to effectively maximize employee production in their respective industries (Groen, Wouters, & Wilderom, 2011; Kreitner & Luthans, 1984; Leoni, 2011; Vroom, 1964; Wolf & Zwick, 2008). Research suggests that there is no single, one-size-fits all solution that applies to every performance issue in the workplace. Recent studies have examined variables such as pay increase, education, emotional intelligence, trust propensity, and job involvement as possible factors that might have an impact on employee job performance (Chughati, 2008; Colquitt, Scott, & LePine, 2007; Green & Heywood, 2008; Newman, Joseph, & MacCann, 2010; Ng & Feldman, 2009). These variables will not be the focus of this research.

Human Resource Development departments are engaged in using theory and practice while experimenting with solutions to increase and maintain the productivity of their employees. One solution that has proven successful with increasing the performance and potential of employees is positive reinforcement (Cherrington, Reitz, & Scott, 1971; Colbert, 2008; Dewettinck, 2003; Feeny, 1973; Keller & Szilagyi, 1976). The benefits and struggles an organization may face while utilizing positive reinforcement to enhance performance will be examined in the following sections.

Problem Statement

An ineffective employee that leaves a company, whether voluntarily or involuntarily, costs an organization time and money (Keller, 2004; Laser, 1980; Ramlall, 2004). The organizational cost is compounded when several employees are not meeting
productivity standards. Beatty and Schneier (1975) argue that the issue of sub-par production from employees is “the most pervasive problem in organizations” (p. 66). It is also expensive to hire and train new employees. A 2004 study by the Employment Policy Foundation showed that average employee turnover within a twelve month period ending in August 2004 climbed to an average total of $13,355, which increased by 6.8 percent since December 2002 (www.epf.org). One solution is to spend more time, money, and effort on the employee screening process (Keller, 2004) on the front end of the employee hiring process. Conversely, another cost-effective solution is to focus on retention, and find a way to improve the behavior of the under-performing employees (Hausknecht, Rodda, & Howard, 2009; Ramlall, 2004). Positive reinforcement is one tool that has proven itself valuable in organizations (Bembridge, Levett-Jones & Jeong, 2010; Lombardi, Verma, Brennan & Perry, 2009; Wieck, Dols & Landrum, 2010; Wirth & Sigurdsson, 2008).

How can a company get optimal performance from mid-career, non-supervisory individual contributor employees while keeping them happy and motivated? A solution to this problem may aid in the revival of a failing organization (Van Dalen, Henkens, & Schippers, 2008). This researcher is investigating if positive reinforcement will yield increased job performance from these employees that is more closely aligned with the desired company’s standard of performance, or even higher. The results of this study will be useful to organizations in various industries (Reyes, 1981), because organizations need a way to ensure they continue to remain profitable and expand in a competitive market (Seelos & Mair, 2007; Fogel, Morck, & Yeung, 2008).
The success of an organization depends on the productivity and performance of its employees. Maximizing the output of the employees at every level of the organization increases the likelihood of achievement overall. The mid-career, non-supervisory individual contributor employee is the focus of this research, however, a brief overview of other career levels will be discussed as well. The researcher classifies employees into four main categories of work experience: entry-level, mid-career/non-supervisory, manager/supervisor level and the top management team.

**Entry-level Employees**

Companies began to require their new employees to participate in new hire orientations or another form of training in response to increasing demands on organizational labor to remain competitive in the marketplace during the last two decades (Dunn & Jasinski, 2009; Laser, 1980). These new hire orientation programs are important, because they assist with the transition and socialization of employees into their new organizations and environments (Anderson, Cunningham-Snell, & Hiagh, 1996; Caruth, Caruth, & Pane Haden, 2010; Chase, 1999; Dunn & Jasinski, 2009; Saks & Gruman, 2011). This is the time that the new employees get a more in-depth look at their job expectations.

Entry-level employees comprise the base level of the employment hierarchy. There are many things for new employees to absorb in order to be successful within their organizations. While they tend to be frightened and apprehensive, a good orientation program can ease tension, reduce turnover, and make a good first impression on the new employee (Anderson, Cunningham-Snell, & Hiagh, 1996; Caruth, Caruth, & Pane Haden,
It is not uncommon for new hires to actually decrease productivity and profits in the first few weeks. More specifically, the company must pay the employee’s salary, while the employee has yet to become productive and incurs additional expenses in the form of onboarding training and resources (Rollag, Parise, & Cross, 2005). This initial training period poses a risk for the organization. If the employee achieves his or her full potential, the organization receives a return on their investment; if the employee does not increase their productivity or prematurely leaves the organization, the organization nets a loss on their investment (Lynch & Buckner-Hayden, 2010). High employee turnover is expensive and counterproductive to the organization’s bottom line.

**Middle Management Employees**

Employees closer to the top of the management hierarchy are typically the ones most invested in contributing to the organization’s bottom line. Between the top management team and the individual contributor on the front line, there exists a middle management level. These managers have worked hard in order to progress further along the employment spectrum. As employees progress through different career stages, their skill capacity must also change in order to continue performing successfully (Charan, Drotter, & Noel, 2000; Dai, Tang, & De Meuse, 2011). Whatever the initial motivation was to achieve their current rank, be it money, promotional benefits, or the thrill of a new management position (Hill, 2004), the supervisor’s dedication to stay with the company aided them to reach this juncture. The supervisors typically prove to be responsible, reliable, and respectable while having developed their own personal thoughts about
managing and personal leadership tendencies (Hill, 2004). Given more time and experience, these employees may one day have the opportunity to be in top management.

**Top Management Employees**

The top management is at the peak of the employment hierarchy. This group is responsible for making decisions regarding the overall direction of the organization. They are usually credited with the organization’s successes and failures, and one research posits that the organization is a reflection of its top management (Hambrick & Mason, 1984). Knowing the characteristics of successful top management teams may be beneficial to organizations. These demographic characteristics can vary from one organization or firm to another. The author did not find any studies on the absolute qualities of the top management team that result in a successful organization. Nevertheless, research shows that the homogeneity, which sometimes results in groupthink, or heterogeneity, known to promote creativity and innovation, within this particular group tends to influence an organization’s strategic decision making and competitive behavior (Andrews, 1971; Dutton & Duncan, 1987; Hambrick, Cho, & Chen, 1996; Hambrick & Mason, 1984; Wiersema & Bantel, 1992). Six traits of top management that show a propensity for strategic change are youth, short organizational tenure, high team tenure, high educational level, academic training in the sciences and heterogeneity in educational specialization (Wiersema & Bantel, 1992). This mix of traits and other qualities are essential when considering the responsibility placed upon top management.
**Mid-career Employees**

The mid-career employee, as the title implies, is within the middle of the hierarchy. This is still an important career stage where employees are evaluated on their assets and liabilities. Their experience and knowledge is valuable to the organization. Supervisors praise the mid-career employee for certain skills, like his or her tendency to be dependable and honest. On the other hand, supervisors also view the mid-career employee as being inflexible and unable to be trained (Berger, 2009; Chiu, Chan, Snape & Redman, 2001; Van Dalen, Henkens & Schippers, 2008). Research shows that mid-career employees may be more apprehensive about pursuing training and development outside of their company quarters due to the effect it would have on their family and personal commitments (Feldman & Ng, 2008). This limits the employee’s training solely to in-house opportunities and leaves them at a disadvantage in comparison to their counterparts who take advantage of additional off-site training. Conversely, Eby, Allen, and Douthitt (1999) note that family obligations should actually be a motivating factor in constantly upgrading the skills for mid-career employees, because it increases their marketability allowing them to select from more career opportunities that may fit the specific needs and schedules of familial commitments.

**Purpose of the Study**

This research seeks to investigate the employment layer between the front line individual contributor and the top management of an organization. The focus is on the middle of the employment hierarchy: the mid-career, non-supervisory individual contributor employee (Cohen, 1991; Dai, Tang, & De Meuse, 2011; Day, Sin, & Chen,
2004; Harpaz & Snir, 2003). This individual has advanced past the new hire stage, but has not yet developed the skills and experiences necessary or does not aspire to be a supervisor. This is a critical stage for the employee and the company. The employee is very familiar with his or her job and has gained plenty of experience at this point in his or her career, which now places the focus on other factors, like commitment to the organization, as determinants of performance (Cohen, 1991). Challenges that arise in this stage for the employee are visible in the form of how to manage issues like role ambiguity or role conflict, which both contribute to stress and can lead to employee burnout (Karatepe & Uludag, 2008; Katz & Kahn, 1966). An organization will continue to see benefits in the form of competitive advantage if they manage and develop the potential of their human capital, which is an important resource to the company (Luthans, Avey, Avolio, Peterson, 2010). The mid-career, non-supervisory individual contributor employee’s (Cohen, 1991; Dai, Tang, & De Meuse, 2011; Day, Sin, & Chen, 2004; Harpaz & Snir, 2003) human capital value should be fostered for the benefit of the employee and the organization.

The author hopes that this study will provide the answer to this research question:

**RQ1:** What is the impact of positive reinforcement strategies on the increased job performance of mid-career, non-supervisory individual contributor employees at a medium-sized university facilities management department?

**Assumptions, Limitations and Scope**

The author assumes that the participants will answer the questions honestly and to the best of their ability to maintain validity and reliability of the data. Also, it is assumed
that participants will not allow personal bias interfere with their attitudes while completing this questionnaire. The study has limitations in the fact that it is not a longitudinal study and will be drawing conclusions from self-report data. A longitudinal study would allow for a positive reinforcement program to be implemented, and offers the ability to compare employee performance reviews from before and after the implementation of the program to measure the true difference in performance. The survey questionnaire will be implemented within a Facilities Management department at a medium-sized Virginia university.

**Key Terms and Definitions**

The following key terms are derived from the research questions and corresponding hypotheses.

<table>
<thead>
<tr>
<th>Key Term</th>
<th>Definition</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Reinforcement</td>
<td>“a means by which supervisors can inform subordinates on how they are progressing in relation to set goals, recognize or acknowledge improved or good performance, and/or correct any errors or deficiencies in subordinate performance”</td>
<td>(Brewer, Socha and Potter, 1996, p. 786)</td>
</tr>
<tr>
<td>Increased Job Performance</td>
<td>the manner or quality of functioning on the job</td>
<td>(Amaratunga, Baldry, &amp; Sarshar, 2000; B.W. Associates, 1994)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Mid-career Employee</td>
<td>identifiable in terms of age or tenure; in terms of tenure as a person at a certain job between 5-15 years</td>
<td>(Cohen, 1991)</td>
</tr>
<tr>
<td>Non-supervisory</td>
<td>positions that do not demand increased work effort and responsibility or have immediate potential to fulfill the desire for upward mobility</td>
<td>(adapted from Harpaz &amp; Snir, 2003, p. 301)</td>
</tr>
<tr>
<td>Individual Contributor Employee</td>
<td>frontline employees that guide the daily activities within the organization; skills consist of time management and how to complete tasks with deadlines, and functional/technical skills/administrative duties</td>
<td>(Dai, Tang, &amp; De Meuse, 2011; Day, Sin, &amp; Chen, 2004)</td>
</tr>
<tr>
<td>Andragogy</td>
<td>“the art and science of helping adults learn”</td>
<td>(Knowles, 1970, p. 43)</td>
</tr>
<tr>
<td>Theory of Motivation</td>
<td>finds there is some relationship between the variables of job attitudes and output or productivity on the job relating to job satisfiers and dissatisfiers</td>
<td>(Herzberg, 1959)</td>
</tr>
</tbody>
</table>
Table 1.1: Definition of Key Terms

<table>
<thead>
<tr>
<th>Social Learning Theory</th>
<th>people learn much of their behaviors in a social context through imitation of others</th>
<th>(Bandura, 1969, 1977)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hierarchy of Needs</td>
<td>a person desires to use their strengths and abilities, and if they do not use them, these talents will begin to weaken and lessen within the individual</td>
<td>(Maslow, 1969)</td>
</tr>
<tr>
<td>Expectancy Theory</td>
<td>contains three components: Expectancy (one’s belief that their effort will yield good performance), Instrumentality (the belief that their good performance will yield desirable outcomes), Valence (the value the individual places on those desired outcomes)</td>
<td>(Vroom, 1964; Chiang, et al, 2008; Radosevich, et al, 2009)</td>
</tr>
</tbody>
</table>

The remaining chapters are outlined here to assist in navigating the document. The literature review will delve deeper into the literature that exists on the variables as well as the theories that direct this research endeavor. There are multiple theories that lend unique aspects to the reason why the author believes positive reinforcement is a practicable solution to increasing job performance. The methodology section will discuss the structure of the research and the methods employed to complete it. This detailed account explores the process for obtaining the sample, distributing the data collection tool, and the procedures of the research, allowing future duplication of this same study.
The data analysis section analyzes the findings from the data collected. Finally, this research study concludes by providing recommendations and implications of the findings.
Literature Review

Several components guide this research experiment. Research exists on the variables of positive reinforcement and increased job performance separately, but there are not many correlational studies on these two variables. The mid-career, non-supervisory individual contributor employee (Cohen, 1991; Dai, Tang, & De Meuse, 2011; Day, Sin, & Chen, 2004; Harpaz & Snir, 2003) is a very specific target population. This variable alone is comprised of three distinct criterions. This chapter dissects the variables to better identify their relationship to this research. However, the next section reviews literature relating to the different theories applicable to the variable, positive reinforcement, and how they all work together to frame this experiment.

Each section begins with an overview of each theory, past and/or current relevant research with the experiment, any limitations or criticisms, and how the theory relates to employee motivation. The author chooses not to examine motivation as a separate variable, as the literature on this variable is extensive and has widely been acknowledged by organizational theorists over the course of the last 40 years. However, employee motivation as it relates to positive reinforcement will be covered. Conclusions can be drawn on how positive reinforcement can be utilized to motivate an employee and increase their job performance. Therefore, the tool of positive reinforcement is given the distinction of being a variable instead of motivation.
Learning Theories and Motivation

**Figure 2.1: Theoretical Framework: Theories that frame Positive Reinforcement**

**Knowles’ andragogy.** As the development and experiences of children and adults are evidently different, so are the processes to teach children and adults. Knowles (1970) is well known for his ideas pertaining to andragogy, which he defines as “the art and science of helping adults learn” (p. 43). While Knowles is typically credited with coining the term “andragogy”, a German teacher named Alexander Kapp was actually the
first to use the term (Nottingham Andragogy Group, 1983; Reischmann, 2000). Regardless, Knowles’ efforts and findings are significant to the field.

Early research in adult education was heavily rooted in psychology and educational psychology, with insignificant conditional distinctions between children and adults (Merriam, 2001). Andragogy is a contrast to pedagogy, which is “the art and science of teaching children” (Knowles, 1970). Andragogy makes four key assumptions about adults related to their self-concept, experience, readiness to learn and orientation to learning, which all influence their learning ability. These assumptions are what differentiate andragogy from pedagogy.

**Self-directed learning.** The first assumption is that adults are self-directed in their learning. The physical, psychological and behavioral climate of the learning is a key as well (Knowles, 1970). Factors that should be taken into account are the equipment readily available, a stress free and psychologically supportive environment, and the norms set forth by the behavior of the teacher. Much like in Maslow’s Hierarchy of Needs (1943, 1969, 2000), Andragogy supports the fact that adults have learning needs to be satisfied. However, these learning needs are not concrete as are some elements of Maslow’s hierarchy. The adult learners are in charge of the process to diagnose their own needs. After the diagnosis of the needs, the self-directed learner then plans the path of their learning, because “human beings tend to feel committed to a decision to the extent that they have participated in making it (or planning it)” (Knowles, 1970, p. 48).

**Experience.** The second assumption relates to the fact that adults have more experience than children. This proves to have both pros and cons for their learning
experience. Children tend to identify their experience by external means (something that happens “to them”), while adults tend to identify their experiences internally (they “are what they have done”) (Knowles, 1970). For this reason, adults place value on their experiences and do not like it to be taken for granted. This second assumption about experience directly relates to learning in three ways:

1. Adults have more to contribute to the learning of others; for most kinds of learning they are themselves a rich resource for learning.

2. Adults have a richer foundation of experience to which to relate new experiences (and new learnings tend to take on meaning as we are able to relate them to our past experience).

3. Adults have acquired a larger number of fixed habits and patterns of thought, and therefore tend to be less open-minded (Knowles, 1970, p. 50).

**Readiness to learn.** The third assumption about andragogy relates to adults readiness to learn. Knowles uses the research of Havighurst as the foundation for this third assumption.

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, which failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks (Havighurst, 1961, p. 2).
These developmental tasks (or teaching moments) and stages are evident in childhood development. However, further research shows that this same process still continues throughout adult stages of life (Havighurst, 1961; Knowles, 1970). Havighurst (1961) developed a classification of three phases and ten social roles that adults advance through, and advancing through these phases/roles cause new developmental tasks to emerge, affecting the adult’s readiness to learn. This makes both the timing of the learnings (that which is learned) and the grouping of the learners important considerations when preparing to teach adults, because the material will be most relevant when it is presented at a pivotal teaching moment for the learner and this moment may not be presented for each learner at the same time (Knowles, 1970).

**Problem-centered learning.** The final core assumption about adult learners is that they are more problem-centered. Knowles (1970) states that children tend to be subject-centered, meaning they are learning something new with the intention of using it in a future application; adults are problem-centered or performance-centered, because they are learning something with the intention to apply it immediately to their situation (p. 53). This factor is important in the design of curriculum for adult learners as well. The material should be more focused so that the adult learner can directly relate it to a specific task, as opposed to broad or generic terms to classify material.

**Empirical andragogical research.** A 2008 study of pre-service teachers online learning preferences shows andragogical approaches to learning are not always the most effective teaching method for adults (Tasir, Noor, Harun & Ismail, 2008). The sample was 433 pre-service teachers between the ages of 21-30. The study concluded that andragogical techniques should be used in moderation according to the learners’
preferences. In an online learning environment, principles of andragogy are important (self-directed learning) while aspects of pedagogy are still desired (guidance from lecturers). A blended learning technique was desired in this case.

**Criticism of Knowles’ andragogy.** Some critics of andragogy argue that Knowles neglects to address the impact of a person’s environment in their learning. Grace (1996) acknowledges “the organizational and social impediments to adult learning” were overlooked and Knowles exhibits a narrow focus with the principles (p. 386). Other critics note that the differences between andragogy and pedagogy are not as distinct (Houle, 1972; London, 1973). Houle (1972) notes that some of the principles of andragogy can also be applied to children and learning, therefore making them a set of techniques. London (1973) corroborates the sentiments and adds that the distinction of andragogy from pedagogy is an attempt by scholars to enhance their caliber and merit among respected colleagues in the field.

**Andragogy as it relates to positive reinforcement.** The author relates both self-direction and prior experience to having potential impacts on employee motivation. The Oddi Continuing Learning Inventory (OCLI) and the Self-Directed Learning Readiness Scale (SDLRS) are two instruments designed specifically to assess variables such as self-efficacy, on-the-job learning, self-discipline and a tendency to be goal-oriented (Merriam, Caffarella & Baumgartner, 2007). Guglielmino and Roberts (1992) recognize the potential implications of assessing this information for use in matching employees with certain types of jobs. Also, knowing the amount of prior knowledge an employee possesses in a particular area is beneficial to managers (Merriam, et al., 2007). The author
feels this information can assist with learning transfer to certain job tasks and functions, which may correlate to increased job performance.

**Herzberg’s theory of motivation.** An important step in finding out how to motivate employees is to determine what it is they want. Herzberg (1959) examines the question, “What does the worker want from his job?” to offer ways for management to motivate their employees. Three techniques used to answer this question are: 1) a set of factors derived by the researcher, then allowing the participants to rank the list; 2) have the participants spontaneously create their own list of factors of what they like or dislike in their job, and rank them using a frequency table; 3) a multiple item questionnaire or inventory allows statistical analysis of the data as well as view correlational trends that emerge (Herzberg, 1959). Each method is a different means to produce a similar end.

The results showed that both internal and external satisfiers and dissatisfiers existed, and there is some relationship between the variables of job attitudes and output or productivity on the job (Herzberg, 1959). The satisfiers became known as motivators, because from a managerial point of view, they appeared to be factors that motivated the employee to perform well; the dissatisfiers became known as hygiene factors, because they did not contribute to long-term satisfaction, however they did stave off dissatisfaction (Herzberg, 1959). According to Herzberg’s (1959) qualitative study of 203 engineers and accountants, the top two factors that emerge from the results are achievement (successful completion of a job, solutions to problems, seeing results of one’s work) and recognition (from a supervisor, another individual in management, client, peer, or general public), respectively.
**Additional research on motivation.** The notion of a third motivating drive has recently been proposed. The first two drives of biological needs, providing intrinsic motivation, and rewards/punishments, providing extrinsic motivation, are accompanied by a third drive, the performance of the task, which also provides intrinsic motivation (Deci, 1972; Harlow, Harlow & Meyer, 1950; Pink, 2009). Deci (1972) proposed that extrinsic motivators, such as monetary rewards, would provide short-term positive effects, but are detrimental to the long-term intrinsic motivation of a person. Pink (2009) acknowledges two general ideas from experiments he conducted: rewarding an activity will get you more of it; punishing an activity will get you less of it. Experiments supported the notion that intrinsic motivation and creativity can be stifled when introducing extrinsic controlling factors as rewards (Deci, Ryan, & Koestner, 1999; Lepper, Greene, & Nesbitt, 1973; Pink, 2009).

**Criticism of Herzberg’s theory of motivation.** Herzberg (1959) received criticism on the grounds of his methodology and his supposition that money could be a dissatisfier (Evans & McKee, 1970; Hardin, 1965; Opsahl & Dunnette, 1966; Vroom, 1964; Wall, 1972). Herzberg (1968) went on to rebut these criticisms distinguishing between what he identifies as motivation and movement. Movement is “humankind’s animal nature”—an internal drive combined with all the learned functions that aid in the operation of satisfying basic biological needs. The motivation for movement is different; this function is on the part of the person who is providing the incentive for change, not the person who is moving to receive the incentive. Motivators are internally derived desires, not movement in response to externally generated incentives (Herzberg, 1968). Despite the past criticism, Herzberg (1959, 1968) has staying power in current research.
The field of positive psychology can directly benefit from Herzberg (1959) due to the fact that he makes a distinction between the “alleviation of suffering and satisfaction”, which are separate and distinct processes (Sachau, 2007, p. 389).

**Theory of motivation as it relates to positive reinforcement.** The author draws on Herzberg (1959) and his theory’s practical implications for both managers and employees alike. The theory posits that managers are not likely to effect long-term results by using money to motivate their employees, and employees are not likely to achieve long-term happiness while striving to attain money and material possessions (Sachau, 2007). Therefore, if using money will only provide a short-term increase in job performance, then the research problem does not truly have a solution. Positive reinforcement elicits those internal drives of the employee to naturally want to achieve as well as receive the recognition from a supervisor, satisfying both internal and external drives.

**Bandura’s social learning theory.** There is a host of learning that occurs outside of the classroom environment and without the aid of licensed teachers. Bandura (1969, 1977, 1986) uses Social Learning Theory to express the fact that people learn much of their behaviors in a social context through imitation of others. A person’s own belief that they can achieve a task successfully will drive them to perform or not perform the task. Due to the fact that people are not born with internal blueprints on how to behave, these social cues can be learned through observations or experience from other people and the environment as well (Bandura, 1977; Kreitner & Luthans, 1984). Through vicarious learning, symbolism, and self-control, Social Learning Theory “translates into improved techniques for managing human resources” (Kreitner & Luthans, 1984, p. 56).
**Self-efficacy.** Bandura (1995) defined self-efficacy as “the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (p. 2), which can also be deemed a person’s belief in his or her own capability to succeed. There are four key sources of self-efficacy: mastery experiences, social modeling, social persuasion and psychological responses (Bandura, 1977a, 1977b, 1994, 1995). Mastery experiences means successfully performing a task, which builds confidence. Social modeling is seeing others similar to oneself successfully performing the task, which also builds confidence in the witness. Social persuasion involves a third party instilling confidence in a person with verbal encouragement or some other form of reinforcement. Psychological responses can affect the attitudes and emotions of a person, and learning to manage these responses can help a person become more confident should the feelings arise during unwanted situations. The author agrees that at least three of these four sources identified by Bandura (1977a, 1977b, 1994, 1995) can be beneficial within a positive reinforcement program.

**Criticism of Bandura’s social learning theory.** The limitations of social learning theory relate to the assumptions of learning transfer. It should not be assumed that the observing individual will know to practice the behavior on their own, nor that the behavior will be developed to satisfactory level solely from the initial observation (Warhurst, 2003). Furthermore, Social Learning Theory attributes the relationship between the individual and their environment as the social cue to elicit behavior. The theory does not take into account the possibility of genetic wiring, or the nature aspect in the nature v. nurture debate (Gage & Suzuki, 2006).
**Social learning theory as it relates to positive reinforcement.** The three reciprocal processes of vicarious learning, symbolism and self-control relate to the application of positive reinforcement in this study. Some authors believe that the line between modeling and systematic reinforcement is more distinct (Kreitner & Luthans, 1984). Bandura (1977) states there is no apparent evidence showing that reinforcers can shape human behavior, however there is evidence illustrating the benefits of “response strengthening” which will lend to motivational operations (p. 21). Reinforcers are not meant to create behaviors, but they are an adequate means to regulate behaviors that have been previously learned. Symbolism and self-control require using symbolic representations to elicit certain actions and manage the immediate environment, which will aid in controlling surrounding social cues that will allow a person to make appropriate decisions (Bandura, 1977; Kreitner & Luthans, 1984). This reciprocal process has important implications for the workplace, because once employees learn the correct skill or behavior, he or she is more likely to autonomously repeat that skill or behavior. Finally, positive reinforcement relates to the four key sources of self-efficacy as well. It directly relates to social persuasion. An encouraging or reinforcing action from a supervisor may increase an employee’s own confidence, until they do it enough to create their own mastery experiences and feel competent in themselves. Furthermore, with other employees in the office achieving the same success, social modeling may increase the self-efficacy of all employees in the work environment.

**Maslow’s hierarchy of needs.** Many people mistake every personal “want” as a personal “need” causing confusion as to what things are actual needs. One man is credited with the attempt to identify and rank human needs. Maslow (1969) states,
“Capacities clamor to be used, and cease their clamor only when they are well used… Not only is it fun to use our capacities, but necessary for growth. The unused skill or capacity or organ can become a disease center or else atrophy or disappear, thus diminishing the person.” (p. 122).

This idea means that a person desires to use their strengths and abilities, and if they do not use them, these talents will begin to weaken and lessen within the individual.

Maslow’s work on the needs and desires of people can be summarized in his hierarchy of needs.

Within this hierarchy, the physiological needs are the most basic of all. Maslow (2000) states “Homeostasis refers to the body’s automatic efforts to maintain a constant, normal state of the blood stream” (p. 253). These needs comprise the base of the hierarchy. These needs must be met first before an organism will strive to satisfy other higher order needs. These needs are typically known to consist of satisfying hunger, thirst, and sexual desires, but an actual complete list does not exist, due to the fact that these needs can be as broad or as specific as one chooses to describe, making them difficult to explicitly define (Cannon, 1932; Young, 1941; Maslow, 2000). The fact remains that however these needs are classified, a person will strive to satisfy them before moving on to the next level in the hierarchy.

Once a person’s physiological needs are satisfied, they then seek to fulfill their safety needs. A person at this level wants nothing more than to be safe. This drives them to the point where all other needs, even those that were just satisfied at the physiological level, become secondary to the individual. The need for safety is most visible in young
children because they are transparent, whereas adults tend to mask their fears or are better equipped to control their reactions in some situations (Maslow, 2000). It is evident that the environment is a critical factor in these observations with children. Children who are raised in a stable, safe, and loving home environment seem to react differently when presented with the stimuli which would normally provoke fearful reactions in an average child. In this regard, the children raised in loving environments tend to react more like a typical adult would, meaning they are better able to manage their reactions (Shirley, 1942; Maslow, 2000). However, adults have just as much of a desire to fulfill their safety needs as children before progressing to the next level.

Continuing to advance upward through Maslow’s hierarchy, the need for love is the next void a person desires to satisfy. The need for belonging and to attain affection from others becomes even more apparent, once the prior two levels of needs are fulfilled (Maslow, 2000). Interchanging the terms “love” and “sex” can cause confusion in the interpretation of this level in the hierarchy. Maslow (2000) makes a distinction that longing for affection and love is not the same as a person longing to fulfill sexual gratification, which can perhaps be more appropriately grouped as a physiological need (p. 261). Once the person feels the love of belonging, they are able to continue their course through the hierarchy.

Human needs increasingly become more particular with the advancement of each level. Satisfying esteem needs is the next desire a person seeks to fulfill. Maslow (2000) states that all people, with a few exceptions, “desire for a stable, firmly based (that which is soundly based upon real capacity, achievement and respect from others), usually high evaluation of themselves, for self-respect, or self-esteem, and for the esteem of others”
This directly builds on the need for love and belonging at the third level of the hierarchy. At this fourth level, not only does the person desire to be loved, but respected and recognized by others as well. Maslow further breaks down the overall need for esteem into two distinct categories: In the first subset, there is “the desire for strength, for achievement, for adequacy, for confidence in the face of the world, and for independence and freedom.” In the second subset, there is “the desire for reputation or prestige, recognition, attention, importance or appreciation” (p. 261). As the progression continues, the needs continue to become more specific and personalized to each individual in contrast to the broad needs of everyone at the base level.

After all the needs in the first four levels are satisfied, the fifth and final level of the hierarchy contains the need for self-actualization, or what Maslow simply defines as “What a man can be, he must be” (p. 261). Though self-actualization is widely known to be a staple in Maslow’s hierarchy, Kurt Goldstein is credited with the first use of the term. Goldstein (1963) states, “the drive which sets the organism going is nothing but the forces which arise from its tendency to actualize itself as fully as possible in terms of its potentialities” (p. 172). The fulfillment of this final level will be heavily based on individual desires; therefore there is no definitive requirement to satisfy it. However, the fulfillment of these levels of the hierarchy makes for a basically satisfied individual (Maslow, 2000).

Maslow (1965) elaborates on the top tier of his hierarchy and makes the acknowledgment that the self-actualized being does not exist in a moment. A person reaches this state through a process in which they should seek to 1) become totally self-absorbed in something 2) make the choice toward growth over fear 3) listen to the voices
from within and not concede to external authorities when making decisions 4) look inside themselves for honesty and truth and 5) work toward what they are good at and become the best they can be (Maslow, 1965).

**Empirical hierarchy of needs research.** Urwiler and Frolick (2008) used the hierarchy derived by Maslow (1943, 1969, 2000) to explain the benefits and need for using Information Technology (IT) to gain a competitive edge in organizations. Just as the hierarchy it is adapted from, this IT Value Hierarchy is a five stage progression with the most basic needs as the foundation and higher order needs at the top. The first three stages are Infrastructure and Connectivity Needs, Stability and Security Needs, and Integrated Information Needs (Urwiler & Frolic, 2008). The authors note these as commodities available to any IT division. When companies reach this level, they become complacent because they have achieved the familiarity they see in comparable competitor companies (Urwiler & Frolic, 2008). However, progressing to the last two stages of Innovative IT, Competitive Differentiation and Paradigm Shifting, is what will set IT companies apart from one another. The authors argue that all companies should strive to achieve this level of organizational maturity.

A study by Beer (1966) on the supervisory leadership styles of female clerks shows that Maslow’s Hierarchy of Needs does not always hold true. This researcher believed that motivation came from satisfying needs related to task-oriented work, which could be cultivated by an active leadership style (Beer, 1996). The participants in this study illustrated that satisfying one need level did not have a correlation on the motivation to fulfill needs at higher levels. The participant’s arrangement of the five levels in order of importance did not support Maslow’s (1943, 1965) theory. While self-
actualization and social needs were ranked high, esteem needs were ranked low. Therefore, there was no correlation found between need satisfaction and level of motivation.

**Hierarchy of needs as it relates to positive reinforcement.** The author of this research study notes that esteem needs and self-actualization can also relate to motivation. Achieving full potential can translate into actualizing full potential at work as well. This achievement is a self-motivating factor. However, the need to be recognized for achievements must be met before the employee can reach self-actualization. Due to these higher order needs, the author believes positive reinforcement has the potential to motivate an employee to increase their job performance according to Maslow’s Hierarchy of Needs.

**Vroom’s expectancy theory.** One man was the driving force behind the research on how individuals make decisions. Victor Vroom developed a theory of motivation premised in what people expect to happen. Vroom (1964) defines expectancy as “a momentary disbelief concerning the likelihood that a particular act will be followed by a particular outcome” (p. 20). Other authors have defined expectancies in terms of the risk of outcomes attained between the choices a person makes and certain events outside of their control (Atkinson, 1958; Rotter, 1955; Tolman, 1959). Vroom’s theory is still one of the most well known amongst his peers.

Vroom’s Expectancy Theory is made up of three components: expectancy, instrumentality and valence. Expectancy is one’s belief that their effort will yield good performance; Instrumentality is the belief that their good performance will
yield desirable outcomes; Valence refers to the value the individual places on those desired outcomes (Chiang, et al, 2008; Radosevich, et al, 2009; Vroom, 1964). Therefore, a person with low expectancy does not believe any amount of their individual effort will affect the outcome of their performance. On the other hand, a person with a high expectancy will argue that the more effort they put into a task, the greater the chance for success on their own part. Expectancies are further defined by their strength. Strength refers to the degree with which the person is certain that an act will occur. Maximum strength is the “subjective certainty” that the act will be followed by the outcome. Minimal strength (or zero) suggests the act will not be followed by a certain outcome (p. 20). Expectancy exists along a spectrum.

**Ego-involvement.** Vroom also argues for the possibility of what he describes as “ego-involvement” in job performance. Vroom (1962) classifies a person as having ego-involvement in a job as “to whatever extent his self-esteem is affected by his perceived level of performance” (p. 161). Vroom predicted that an ego-involved person would have more motivation to perform well at their job than someone who was not ego-involved, because their self-esteem is directly impacted. This prediction was tested in a study of an electronics manufacturing organization, and Vroom indeed found a positive correlation between ego-involvement and job performance, with a key determinant being the autonomy offered to the individual in the position. Personal ego and self-esteem both will affect motivation and effort according to Expectancy Theory.

**Goal interdependence.** Another element of employee motivation that has the potential to impact the employee’s job performance is the concept of goal interdependence (Vroom, 1964). Goal interdependence is the thought that interactions
between people will be satisfying if both persons are making progress toward achieving their goals. Conversely, the interactions will be unsatisfying if progress towards achieving their goals is disrupted. The “relationship of the goals of the interacting persons” can influence the nature of this social exchange (Vroom, 1964, p. 145).

Therefore, an employee and a manager both focused on organizational productivity have the same goal. The employee wants to succeed and the manager wants them to succeed as well. The conditions within which these goals are presented can frame this relationship. For example, a group incentive like profit sharing may promote promotively interdependent relationships while those like individual promotion or achievement will promote contriently interdependent relationships (Vroom, 1964).

**Empirical expectancy theory research.** Two studies (Deutsch, 1949; Jones & Vroom, 1964) both indicated higher production and partner satisfaction in the promotively interdependent groups. Locke and Latham (2004) argue that “goal setting is probably the best-supported theory of work motivation, and one of the best-supported management theories overall” (p. 388). This theory holds that an employee will be committed to a performance goal and will work until they either achieve it or make the conscious decision to refuse to further work toward the goal. Mento, Steele and Karen (1987) point out that “the presence of feedback enhances the effectiveness of goal setting” (p. 55).

One cannot assume that performance will constantly increase the more motivation continues to increase. Vroom (1964) proposes two other alternatives: a negatively accelerated curve approaching an upper limit, and the inverted U function (Vroom, 1964). The law of diminishing returns shows that “successive
increments in motivation of identical amounts result in smaller and smaller increments in performance until a point is reached at which there is no further increase in performance” (Vroom, 1964, p. 239). It is difficult to accurately determine amounts of motivation, which also makes it difficult to determine the value of its relationship to performance. Research (Birch, 1945; Patrick, 1934; Yerkes & Dodson, 1908) suggests the inverted U illustrating that performance decreases with higher levels of motivation, perhaps because the drive is not as strong under low levels of motivation, yet performance anxiety increases under high levels of motivation.

A study by Radosевич, et. al, (2009) on the process 115 business students used to revise their goals according to expectancy theory practices proved that feedback was significant in goal revision. These students revised their goals after being provided performance feedback 46.4% of the time. This study further showed that individuals prefer to minimize the discrepancies between their current performance and their goals as quickly as possible. Therefore, if individuals have a set goal and are provided subsequent feedback that they are not on track to reach that goal, they will do what is necessary to adjust their current performance to align with reaching their goal.

A study by Chiang, et. al, (2008) reviewed the moderating effects of communication satisfaction and its relationship to the expectancy theory of motivation. 289 Midwestern hotel employees were surveyed on their level of satisfaction on communication with their supervisors. Communication is used as a
moderator variable, which is “a qualitative (e.g., sex, race, class) or quantitative (e.g., level of reward) variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable (Baron & Kenny, 1986, p. 1174). Due to the scarcity of support from the literature, Vroom’s Expectancy Theory (1964) has been tried habitually with various moderator variables in an effort to more accurately predict the model outcomes (Seybolt & Pavett, 1979). The results of this study did not indicate any specific moderator effect of communication satisfaction on the expectancy theory model in relation to hotel employee motivation. The group with the higher satisfactory levels of communication did not have a positive effect on expectancy, instrumentation and valence in hotel employee motivation (Chiang, et. al., 2008). However, the results showed this group more likely to enhance their work productivity when highly motivated, proving that communication between supervisor and employee is still important and feedback is still necessary.

Criticism of Vroom’s expectancy theory. Though Expectancy Theory is determined a widely acceptable method in assessing individual motivation (Ferris, 1977), there is also literature that exposes the limitations of the theory. Behling and Starke (1973) did not test the theory as a whole, but instead examined seven basic assumptions that must hold true for the theory to be applicable. The findings of two similar studies show that individuals typically make decisions through processes that defy the assumptions of Expectancy Theory (Behling & Starke, 1973; Starke & Behling, 1975). Furthermore, Behling and Starke (1973) have found that the literature attempting to test the expectancy theory “have incorporated methodological and conceptual limitations that
make it difficult to draw meaningful conclusions about the descriptive validity of the basic expectancy idea” (p. 373). Despite criticism, Vroom’s Expectancy Theory has yet to be discredited to the point of obsolescence.

**Expectancy theory as it relates to positive reinforcement.** The potential relevance of Expectancy Theory to positive reinforcement relates to goal-setting and ego involvement. These two aspects can contribute to employee motivation and increased job performance. Once the employee sets a goal, they will be more motivated to achieve that goal. Feedback from a supervisor also assists them with setting and reaching these goals. The interdependence of employee productivity and organizational productivity is also a key factor. Again, ego-involvement relates to the employees personal self-esteem and their own desire to succeed. An ego-involved person is more likely to perform well at his or her job.

Thus far, the research study has employed the theoretical framework based on the interchange of five key components: Andragogy, Theory of Motivation, Social Learning Theory, Hierarchy of Needs, and Expectancy Theory. These five theories provide the theoretical foundation for the examination of the variable of positive reinforcement. The next section of the literature review will investigate the three variables operationalized in this research: positive reinforcement, increased job performance, and mid-career, non-supervisory individual contributor employees.
Variables

**Figure 2.2: Conceptual Framework: Impact of Positive Reinforcement on the Mid-career, Non-supervisory Individual Contributor Employee**

**Positive reinforcement.** Applying a positive reinforcer or reward stimulus to a situation increases the probability of the response to which it is associated in that situation (Hamner & Hamner, 1976; Skinner, 1969). Positive reinforcement has been defined in many terms by different authors (Arco & Millet, 1996; Brewer, Socha & Potter, 1996; Daniels & Rosen, 1984; Prue & Fairbank, 1981). Positive reinforcement is a form of feedback. As stated by Daniels and Rosen (1984), “feedback may be the most effective approach a business manager can provide to improve employee performance” (p. 192). This definition does not limit the tool to the business realm, however.

Positive reinforcement is widely applicable over the spectrum of many industries, and for that reason it has different interpretations. To Prue and Fairbank (1981), it is “information provided to an individual about the quantity or quality of their past work performance” (p. 2), while Arco and Millet (1996) define it as “qualitative or quantitative
information provided to an individual for the purpose of adjusting or maintaining their performance in specified ways” (p. 301), and finally Brewer, Socha and Potter (1996) interpret the term as “a means by which supervisors can inform subordinates on how they are progressing in relation to set goals, recognize or acknowledge improved or good performance, and/or correct any errors or deficiencies in subordinate performance” (p. 786). These three definitions are stated differently, yet they are all similar. For the purposes of this study, the researcher uses the definition by Brewer, Socha and Potter (1996). The researcher will proceed with more information on the history of how positive reinforcement emerged.

**Early work on stimulus-response reinforcement.** Early in the 20th century, subjective psychology was an important theory as to how people thought and behaved. Some leaders in this crusade were Wilhelm Wundt of Germany, Edward Titchener of Cornell, and William James of Harvard (Moore, 2011; Watson, 1924). Titchener was the last of these three men to pass away in 1927, leaving a void in subjective psychology. This void left room for Behaviorists to bring forth the idea of objective psychology. Watson (1924) defines Behaviorism as “a natural science that takes the whole field of human adjustments as its own” (p. 11). Behaviorists believe that the subject matter of human psychology is the behavior of human beings, and that consciousness and introspection should not be the focus of research because no experimental evidence exists to support these observations (Moore, 2011; Watson, 1924).

As Behaviorism began to gain strength, more concepts began to emerge. Both Pavlov and Watson became proponents of classical conditioning, or S-R behaviorism, and made significant contributions to the science of Behaviorism. In the 1890’s, Pavlov
began experiments on conditioned reflexes in dogs (Pavlov, 1928). He discovered that dogs would naturally salivate when their mouths touched food. However, when a bell was rang as food was presented, the bell, which previously had no affect on the dog, would begin to cause the dog to salivate even without food being presented. A limitation Pavlov discovered in his studies of S-R conditioning is that it could not be tested on human beings because their thought process would interfere with the notion of an automated reflex (Windholz, 1995).

Watson (1924) defined a stimulus as any object in the environment causing a physiological change in the organism’s conditions, and a response is anything the organism does. Watson is well known for his 1920 experiment in which he conditioned an infant, Albert B., to fear a laboratory rat and other small furry objects resembling it. Watson previously deduced that only two things naturally caused fear in infants: a loud sound and lack of support. By pairing the loud sound with the presentation of the rat, Watson conditioned the infant to also fear the rat (Beck, Levinson, & Irons, 2009; Watson, 1924). Watson met criticism of S-R behaviorism on two grounds: the spontaneity of behavior and the variability of the responses (Moore, 2011). Some behaviors seemed to develop without any known stimuli, and the frequency of responses differed.

Skinner is known for his Behaviorist beliefs as well, and perhaps even more for his views about Radical Behaviorism. Skinner (1974) attempted to find balance between subjective psychology and objective psychology. Whereas Behaviorists criticized Wundt and Titchener on their views of introspection as scientific practice, Radical Behaviorism embraces self-observation and self-knowledge while questioning how much of one’s
body can one actually observe; this idea states what is felt is not some unconscious event of another world, but is one’s own body (Skinner, 1974). Skinner also is known for his experiments in operant conditioning using food as a reinforcer to get pigeons to behave in a desired manner. Skinner (1974) states that a “positive reinforcer strengthens any behavior that produces it” (p. 46). These experiments and findings in operant conditioning are evidence of the value of positive reinforcement in this study as well. However, this research study and recent studies transcend beyond just the basic stimulus and response actions characteristic in these initial trials with animals.

The foundational studies by Pavlov (1890’s), Watson (1920), and Skinner (1930) proved that the behavior of infants and animals could be manipulated. In more recent studies, positive reinforcement applies some of these same principles from Behaviorism and focuses them almost exclusively in shaping human behavior in such arenas as organizational improvement, personal lifestyle improvement, controlling assessment for psychological testing and the emergence field of positive organizational behavior (Flora, 2004; Luthans, 2002a; Luthans, 2002b; Luthans, 2003; Luthans & Avolio, 2009; Luthans & Youssef, 2007a; Luthans, Youssef, & Avolio, 2007; McGinnis, Houchins-Juarez, McDaniel & Kennedy, 2010; Nakajima, Lehdonvirta, Tokunaga & Kimura, 2008; Nelson & Cooper, 2007; Wright, 2003; Youssef & Luthans, 2007). Though the specific purposes may differ, each study lends credit to common elements of feedback, motivation and the timing contingency.

**Current empirical research on s-r reinforcement.** The workplace is now seeing the benefits of positive reinforcement as well. Recent studies have utilized the tool in workplace behavioral safety/health and nursing (Bembridge, Levett-Jones & Jeong,
2010; Lombardi, Verma, Brennan & Perry, 2009; Wieck, Dols & Landrum, 2010; Wirth & Sigurdsson, 2008). One empirical research study showed that participants ranked reinforcement as the fourth most talked about factor that would lead them to wearing their protective eyewear (of 18 total factors) (Lombardi, Verma, Brennan & Perry, 2009). One author points out that reinforcement is more effective in increasing the frequency of a behavior while punishment is more effective in decreasing the frequency of a behavior (Catania, 2000). Therefore, behavioral safety practitioners and managers should encourage focus on performance feedback and highlight the success of their employees when they perform the desired behaviors (Wirth & Sigurdsson, 2008).

The nursing field is realizing the potential of positive reinforcement as well. One study shows that nursing managers are now being taught the importance of positive reinforcement while in training (Wieck, Dols & Landrum, 2010). The decreasing numbers of nurses have suggested managers should focus on retention rather than turnover. Due to the varying ages of nurses who all report to one manager, this study surveyed nurses to see what qualities they would like in their manager. The majority of younger nurses cited they want a manager who encourages and motivates them, suggesting that positive reinforcement would aid in the retention of this group. Using information and communication technology (ICT) is also becoming more essential in the nursing field. A study by Bembridge, Levett-Jones and Jeong (2010) found that nurses were more willing to share information with their coworkers when given positive reinforcement for their efforts. In this case, all
the nurses are educated by the new information, and this translates into better care for the patients.

**More positive reinforcement research.** Positive reinforcement is not to be confused with other approaches of motivational theories. There are two key differences to note about positive reinforcement: 1) it chooses to focus on maximizing reinforcement and reward while minimizing punishment and 2) it is results-oriented, not concerned with the psychological causes of a person’s behavior (Hamner & Hamner, 1976). A company desiring to implement a successful positive reinforcement program will need to do more than give well-timed compliments to employees. Hamner and Hamner (1976) outline four distinct stages:

1. Identify performance behaviors and criteria, and do a performance audit to verify there is a need.
2. Develop and set specific concrete behavioral goals for each worker.
3. Allow the employee to track his or her own performance.
4. The supervisor then reviews the employee’s self-report feedback and compares it to the specific behavioral goals outlined, and uses praise and positive reinforcement where applicable.

Employee motivation and feedback are important facets relating to management (Steers, Mowday, & Shapiro, 2004). Feedback and reinforcement can be given in different ways and have different outcomes. Supervisors and managers are the most common source of feedback (Daniels & Rosen, 1984) and these superiors tend to evoke
the most change in behaviors; more so than in peer-to-peer feedback. A workbook that managers employ at Emery Air Freight has upwards of 150 different types of feedback including non-verbal nods of approval to verbal encouragement for satisfactory performance (Feeny, 1973).

A verbal versus a non-verbal accolade will produce different results. While an employee may prefer verbal praise, this form of feedback is not always enough to change behavior. There are other factors that contribute to the reinforcement effectiveness such as the group size, the consequence associated with the behavior, and the nature of the task involved as well (Balcazar, Hopkins, & Suarez, 1986; Beatty & Schneier, 1975; Loewy & Bailey, 2007; Raj, Nelson & Kao, 2006). A study by Daniels and Rosen (1984) shows that educators tended to prefer private social rewards, like that of positive reinforcement or recognition, over tangible public reward, except in cases when that reward related to pay incentives.

The studies that follow illustrate facts about positive reinforcement that differentiate it from other possible solutions to the problem of increasing job performance in mid-career, non-supervisory individual contributor employees. Positive reinforcement makes assumptions about the workers which act as indicators if it may or may not be an effective tool for a particular worker. For example, an assumption is that an employee who derives job satisfaction through extrinsic rewards rather than being motivated solely from the desire to do the job may benefit more from an incentive than positive reinforcement (Beatty & Schneier, 1975; Daniels & Rosen, 1984; Pink, 2009). However, other assumptions relate to internal esteem factors instead of extrinsic reward factors.
Another assumption driving positive reinforcement is people naturally want to be appreciated, respected, and treated as intelligent adults (Grigsby, 2008; Knowles, 1970; London, Larsen & Thisted, 1999). Adults are commonly more receptive in the work environment when their boss treats them with respect as opposed to speaking in a condescending manner. The employee needs to be receptive and open to feedback for the supervisor to deliver the positive reinforcement. The tool will not have the chance to effect the change in employee behavior if it is never given a chance to reach the target due to other factors, like the employee not feeling respected by the supervisor and failing to listen to their feedback.

Managers and supervisors truly have to believe in positive reinforcement and take the process seriously to achieve their desired results. A study by Becker and Klimoski (1989) found that organizational and supervisory positive feedback does indeed have a relationship with increased job performance. Therefore, the effort applied by the managers will be reflected throughout the process. Managers must be well versed in the correct policies and procedures of their organization in order to know what to reinforce, in addition to understand their roles in this process. Neglecting to reinforce the desired behaviors or inadvertently encouraging undesired behaviors will only prolong the period of attempting to increase job performance. The conditions and timeliness of the delivery are important.

**Timeliness.** Timeliness of the reinforcer is a key element of this process. Managers are not likely to achieve their expected results of increasing job performance if they do not deliver the positive reinforcement in a time period that is clearly connected to the reinforcing action (Beatty & Schneier, 1975). A reinforcer given too early may have
an adverse effect. It is a reward for doing nothing. Conversely, a reinforcer given too late will not be associated with the behavior it was meant to reinforce. Therefore, special attention should be paid to the actions of the employee to ensure the delivery of the reinforcement is on time.

There is not an established frequency scale to abide by in deliverance of the reinforcers. One program suggests that while in the beginning stages of the reinforcing period, it is necessary to apply reinforcement at least two times a week. Anything in excess of twice a week would become taxing on the supervisor. Requiring the supervisor to constantly apply positive reinforcement would become a job within itself and the supervisor would become less effective (Feeny, 1973). Managers must understand the importance of timeliness of the delivery.

The focus on the reinforcement schedule is held in the highest regard. Some authors attest that the timing and schedules of reinforcement to the behavior should be given more attention than the actual reinforcer (Baron, Kaufman & Stauber, 1969; Katzell & Thompson, 1990; Kaufman, Baron & Kopp, 1966). These schedules of frequency can be in cycles of continuous, variable or fixed intervals. The frequency schedule will determine how quickly the behavior will become learned. Once the behavior has been conditioned, it is not the frequency, but rather the infrequency of the reinforcement that will prolong the desired behavior. Feeny (1973) then suggests using a descending scale of frequency to increase the likelihood of the employee continuing the behavior. Managers must abide by their positive reinforcement program and respect the suggested schedule.
Criticism of positive reinforcement. Not all authors agree that positive reinforcement is the best method to use. The following literature also illustrates the negative aspects of the tool. Some authors highlight the potential manipulative aspects of positive reinforcement that has roots in the well-known “carrot and stick” method of management (Beatty & Schneier, 1975; Hamner & Hamner, 1976; Katzell & Thompson, 1990; Pink, 2009). Some organizations are currently using this traditional method. Incentives and rewards are available to employees who behave in a desirable fashion per the organizational standard, while punishments are distributed to those who do not behave in the manner the organization deems acceptable. Behavioral psychologists also support this school of thought, considering this is a method of using consequences to shape behavior (Katzell & Thompson, 1990).

Finding the solution to employee motivation in the workplace could potentially save an organization time and money, in addition to provide long lasting effects for the future. Emery Air Freight was operating at standard 30 to 40 percent of the time before the implementation of their positive reinforcement program. After the new program was in place, the company standard was met 90 to 95 percent of the time and still maintains averages in that range today (Feeny, 1973).

The author reviewed literature on how to keep workers motivated (Beatty & Schneier, 1975; Feeny, 1973; Grigsby, 2008; Katzell & Thompson, 1990), but little research exists on this variable in relation to the mid-career, non-supervisory individual contributor employee. These employees, as previously stated, are the engines of organizational performance. For an organization struggling to maintain or increase the
motivation and performance of their employees, implementing a positive reinforcement program could be a place to start in reforming the current morale.

**Increased job performance.** Even the best employees can unknowingly hinder themselves at work if their job performance is not up to par at all times. Performance can be described as the manner or quality of functioning (Amaratunga, Baldry, & Sarshar, 2000; B.W. Associates, 1994). The individual employee may be experiencing barriers to prevent them from advancing at the rate they would like or at all. While striving to reach a higher level, frustration may arise due to stress, burnout, or factors such as personality and organizational commitment, which can eventually show through in their current performance (Barrick & Mount, 1991; Judge & Bono, 2001; Karatepe & Uludag, 2008; Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989; Salgado, 1997).

Job performance may have a connection to inherent traits that employees cannot control. Studies have examined the role of personality and the willingness to work. In two meta-analyses of the five personality dimensions (Extraversion, Emotional Stability, Agreeableness, Conscientiousness, and Openness to experience) and their relation to job performance, Conscientiousness, which has been defined in terms of dependability (Hogan, 1986) and volitional aspects, like those related to willingness to achieve and hardworking (Conley, 1985; Krug & Johns, 1986), was deemed to be a key factor in job performance (Barrick & Mount, 1991; Salgado, 1997). Furthermore, Barrick and Mount (1991) note “individuals who exhibit traits associated with a strong sense of purpose, obligation and persistence generally perform better than those who do not” (p. 18). Further research is needed to determine if a true relationship exists between personality
traits and job performance. However, burnout is another factor that has recently been investigated in affecting job performance.

**Burnout.** Burnout affects employees who do “people-work” of some kind and is related to the social work environment (Masalach, 2005; Masalach & Jackson, 1981), therefore it may not be a factor that every organization will have to consider. Karatepe and Uludag (2008) indicate the three parts contributing to employee burnout are emotional exhaustion, depersonalization, and diminished personal accomplishment. Providing mentors is one way to enhance the social environment. A thorough interview/screening process will assist in detecting burnout, because self-efficacious/intrinsically motivated employees are less likely to be affected by burnout (Karatepe and Uludag, 2008).

The organization has an obligation to their employees to remain dependable, make the job challenging, and ensure role clarity (Mowday, Porter, & Steers, 1982). In a study of food service employees, these three factors proved to be present in employees with an emotional commitment to their organization, of whom statistics show have higher job performance than employees who stay at the organization due to lack of better opportunities elsewhere (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989). These long-term affective commitments should be fostered.

The possibility of burnout is specifically important to mid-career, non-supervisory, individual contributor employees. Their younger counterparts are evaluating their contributions. Van Dalen, Henkens, and Schippers (2008) note that the perceptions of worker productivity differ among younger employees, older employees and managers.
Younger employees and managers view older employee productivity significantly lower than younger employees, while older employees do not detect a difference in their productivity from their younger counterparts (p. 319). Dissatisfaction with other aspects of the job may be factors that hinder employee job performance. Whatever the problem is, it must be diagnosed before an attempt can be made to solve it.

A performance audit is a tool that managers can use to reveal deficiencies in employee performance (Beatty & Schneier, 1975; Becker & Klimoski, 1989; Feeny, 1973; Hamner & Hamner, 1976). The performance audit procedure requires a thorough review of employee characteristics, two of which should be paid specific attention. Beatty and Schneier (1975) cite deficiency and motivation as the two causes of what usually contribute to problems in employee performance. If deficiency is the problem, perhaps there is an issue with the company’s screening, interview, and/or recruiting procedures. However, employee motivation is an internal matter to the employee. The manager may or may not be able to assist in some aspects with employee motivation.

**Job roles.** Job roles are changing, both for employees and managers. Team environments that manage their own work processes and interpersonal environment are now commonplace, specifically for jobs that produce a product or service (Cascio, 1995). Job performance in this situation would be based more on the completion of the project or task at hand as opposed to the contribution of each individual. The group manages itself in a sense. This emerging trend is beginning to “flatten hierarchies” in organizations and “the empowered worker will be a defining feature of such organizations” (Cascio, 1995, p. 930). Therefore, if the task gets completed by the deadline and to the
satisfactory level of supervisors, there would be no need for a supervisor to assess individual performance.

It is not uncommon for self-managing works groups to complete a peer evaluation so supervisors can better assess individual contributions and ensure no member of the group is loafing (Saavedra & Kwun, 1993). Studies by Latane, Kipling and Harkins (1979) examined the amount of effort expended by individuals while working within group settings. Formally coined as the “Ringlemann effect”, for the psychologist who conducted the experiment that produced the findings, Latane, et al. (1979) discuss the tendency of “social loafing”, which is “a decrease in individual effort due to the social presence of other persons” (p. 823). Thus, the completion of a task by a group does not correlate to equal effort or job performance by individuals. The self-functioning autonomous worker may reduce the need for as many managers in the organization.

On the other hand, a recent article by Stewart, Courtright and Barrick (2011) offers another view on the position of self-managed teams. These authors present a term they call peer-based rational control. This term is comprised of two separate definitions combined together. “Peer-based control represents a shared belief regarding what is valued in the environment” and rational control is the belief that “a desire to obtain rewards motivates individuals to pursue goals and comply with standards endorsed by peers” (Stewart, et al., 2011, p. 2). Therefore, a team member experiencing the effects of peer-based rational control will be motivated internally by their own personal goals and work harder to achieve those goals, creating increased contribution within the group (Stewart, et al., 2011). Though self-managing teams are becoming more common, there will always be the need for someone, be it an external manager or internal team member,
to assess performance (Amaratunga, Baldry, & Sarshar, 2000; Cascio, 1995; Santos, Belton, & Howick, 2002; Stewart, Courtright & Barrick, 2011).

**Mid-career, non-supervisory individual contributor employee.** The literature examining a mid-career, non-supervisory professional is not as abundant. Still, this is an important demographic. Many employees in the workforce fall within this category. Filling the gap for this target demographic will benefit organizations by learning how to better motivate them at work. The researcher will summarize each aspect individually in an attempt to piece together the profile of a professional at this career stage characterized by these attributes.

Cohen (1991) identifies the two measures contributing to the definition of a “mid-career” employee as age and tenure. This author states, “age is the most common career stage indicator, however organizational commitment development models also employ tenure as a career stage indicator” (Cohen, 1991, p. 255). In the study Cohen (1991) performed, he defined mid-career in terms of age as 30-39 years old and in terms of tenure as 3-8 years (p. 259). For this research, “mid-career employee” will be defined as an employee who has between 5-15 years of experience on the job.

Studies examining the perceptions of employees at different career stages produce varied results (Bensen & McNamara, 2009; Berger, 2009; Bird & Fisher, 1986; Chiu, Chan, Snape & Redman, 2001; Hassell & Perrewe, 1995; Kirchner & Durnette, 1954; Loretto, Duncan, & White, 2000; Ng and Feldman, 2008; Van Dalen, Henkens & Schippers, 2008). Bensen & McNamara (2009) recorded the differences between public and private sector agencies in their perception of employees at different career stages.
Results showed that the public sector tended to respond positively toward mid-career employees, while the private sector tended to respond negatively. However, mid-career employees within the private sector showed a higher tendency toward being leaders and supervisors of others than in the public sector (Bensen & McNamara, 2009). There is no indication if their title in the organization is related to the negative response.

Due to the perception that experience and length in a position are age indicators, some would assume that a person in mid-career would also be an older person. In regards to age, both older and younger workers tended to have a generally positive attitude toward older workers (Hassell & Perrewe, 1995). However, a survey in the Netherlands showed that both employers and employees rated the productivity of older workers significantly lower than younger workers, while employees 50 years of age and older did not notice any significant discrepancies in the perceived productivity between older and younger workers (Van Dalen, Henkens & Schippers, 2008). These overall perceptions also appeared to differ when comparing older workers and their hard qualities (flexibility, health, creativity, and trainability) to their soft qualities (social skills, honesty, dependability, and experience), because people perceived older employees as assets due to their soft qualities and liabilities in their hard qualities (Berger, 2009; Chiu, Chan, Snape & Redman, 2001; Van Dalen, Henkens & Schippers, 2008).

**Empirical research on career stage employees.** Research illustrates a difference between the perceptions of older employees and their actual performance. The results were varied depending on the industry. One study found that employee productivity increased as age increased until between the ages of 40-45, and remained stable, rather than decreasing, going forward across multiple industries (Aubert & Crepon, 2007). This
stable state that employees reach could also be deemed a career plateau, which is the point where the employee reaches a position where their level of responsibility and/or promotion is unlikely to increase further thought to be caused by slowed economic growth in conjunction with competition for upward mobility (Appelbaum & Finestone, 1994; Bardwick, 1988; Feldman, 1988; Ference, Stoner & Warren, 1977; Veiga, 1983). Mid-career employees tend to devote more of their personal time and finances to their families (Kondratuk, Hausdorf, Korabik, & Rosin, 2004). However, mid-career employee mobility should not be limited by family commitments, and career mobility is one way to prevent plateauing (Feldman & Ng, 2007).

**Non-supervisory employees.** Managerial employees are another sector of the workforce. There was no explicit definition of the term “non-managerial” in the reviewed literature. However, one study defined managerial as positions that “demand increased work effort and responsibility”, and that “also have the potential of fulfilling the desire for upward mobility” (Harpaz & Snir, 2003, p. 301). Therefore, the author uses the inverse of this definition to identify “non-supervisory”, which this study will define as “positions that do not demand increased work effort and responsibility or have immediate potential to fulfill the desire for upward mobility”.

**Individual contributor employees.** Individual contributor employees are the frontline employees that guide the daily activities within the organization. It is typical for an employee to spend their first few years at a company at the individual contributor level as they become familiar with their position, learn time management and how to complete tasks with deadlines, and increase their functional/technical skills which may also include administrative duties (Dai, Tang, & De Meuse, 2011; Day, Sin, & Chen, 2004). Statistics
show that among men and women with aspirations to become CEO’s (who have no children), 46% of men and 60% of women will still begin their careers at the individual contributor position (Carter & Silva, 2010). Therefore, career aspirations and familial obligations have no bearing on whether an employee will begin in this position.

The non-supervisory individual contributor employee is a position that is not only characterized by rank within an organization, but also by the knowledge, skills and abilities possessed (Buford, 2006; Dai, Tang, & De Meuse, 2011; Shah, 2009). Shah (2009) states that technical skills, which are sharpened at the individual contributor stage (Dai, Tang, & De Meuse, 2011), are not enough to classify a person as a manager. The transition of an individual contributor into a managerial position is possible with some effort on the part of the employee and the organization. The individual contributor must be prepared to upgrade their skills to take on the duties that will be required of them in the new position, and the organization must provide some type of orientation to assist with the development of the individual contributor in their new role (Buford, 2006; Dai, Tang, & De Meuse, 2011).

This chapter discussed how parts of five different theories knit together to form the theoretical framework of this study: Knowles’ self-directed learning in Andragogy, Herzberg’s internal and external satisfiers in his Theory of Motivation, Bandura’s use of reinforcers, symbolism and self-control in Social Learning Theory, Maslow’s esteem needs and self-actualization in his Hierarchy of Needs, and Vroom’s goal interdependence, goal setting, and ego-involvement in Expectancy Theory. These five theories can all have an effect on employee motivation and behavior, and the author believes positive reinforcement can affect motivation. Also, the chapter discussed the
variables of interest in this research. Positive reinforcement has roots in the S-R response first implemented by Behaviorists, and is acting being used in the fields of workplace safety and nursing. Job performance may be affected by burnout and changing job roles. Lastly, the mid-career, non-supervisory individual contributor employee can achieve success in a competitive workforce by continuing to upgrade their skills and maintaining marketability. The author believes that positive reinforcement will assist in increasing the job performance for this demographic. The next section will provide insight into the research methodology employed to collect data for the study.
Methodology

This research study is influenced by multiple theories. The specific variables of interest are positive reinforcement and its impact on the job performance of mid-career, non-supervisory individual contributor employees. Other studies did not directly measure the variables, positive reinforcement and increased job performance, but instead investigated the relationship between the variables of motivation, leadership and performance (Colbert, Kristof-Brown, Bradley, & Barrick, 2008; Dewettinck, Singh & Buyens, 2003).

While prior studies with similar research designs have measured the relationship between other factors such as job satisfaction, negative/aversive consequences and job performance (Bagozzi, 1980; Cherrington, Reitz, & Scott, Jr., 1971; Hamner, 1974; Reitz, 1971; Skinner, 1969), the researcher chose to refer to studies that primarily measure the relationship between positive reinforcement and job performance (Feeny, 1973; Keller & Szilagyi, 1976). A key difference in this research versus other related studies in this field is the target population. The sections that follow detail this research more in the areas of research design, sample, the data collection instrument, threats to internal validity and data analysis. Also, the rationale for the design and contingency plan are included.

The following suggest the questions of this research:

**RQ₁:** What is the impact of positive reinforcement strategies on the increased job performance of mid-career, non-supervisory individual contributor employees at a medium-sized university facilities management department?
The author predicts the outcomes of the research will yield the following:

**HQ₁**: If mid-career, non-supervisory individual contributor employees receive positive reinforcement, the result will be an increase in their job performance.

**HQ₂**: If managers/supervisors begin to use positive reinforcement on mid-career, non-supervisory individual contributor employees, then managers/supervisors will begin to see an increase in this group’s job performance.

The independent variable in this study is the application of positive reinforcement, while the dependent variable is the increase in the employee job performance. This is a quantitative study examining these two correlational variables. A written response instrument in the form of a survey/questionnaire with Likert-scaled questions assisted in gathering the necessary data to effectively test the hypothesis. The benefit derived from this instrument is that it will allow the sample population to remain anonymous. An assurance of anonymity mitigates the participants’ feelings that they might be penalized for their responses (Rosenbaum, Rabenhorst, Reddy, Fleming, & Howells, 2006).

**Research Formulation**

The researcher formulated this study from two past concurrent work experiences. Both organizations were call center environments with a diverse workforce. A surprisingly high number of employees at both locations had been working with the company for years, and had not advanced past the individual contributor level. Explanations varied for each person with reasons from personal preference, lack of the required pre-requisites, and conflicts with direct supervisors. Two factors remained constant for all of these employees despite the differences in age, location and goals: their
tenure with the organization and the tendency for the employees to be consistently high performers at one point, but they are now performing at a mediocre standard.

**Obtaining Site and Research Approval**

On September 9, 2011, the researcher attended a meeting with the Senior Vice President of Administration and Finance as well as the Director of the Facilities Management Department at the university, hereafter referred to as the “decision makers”. After thoroughly explaining the research protocol, design, instrumentation, anonymity of participants and reporting procedures, both men granted their approval to use the Facilities Management Department. The Director of the Facilities Management Department signed the official site approval letter on November 2, 2011 (see Appendix A).

One point that the decision makers stressed in this initial meeting was that the researcher should arrange to meet with the target population himself to discuss the research. Specific attention should be given to the points of anonymity to ensure the participants feel comfortable responding to the survey, and furthermore, responding truthfully. The decision makers did not want the risk of the participants thinking the research was being conducted on behalf of the department or the decision makers, which might have affected their participation or influence their responses.

Once site approval was granted, the next step for the researcher was to meet the requirements of James Madison University’s Institutional Review Board (IRB). The researcher submitted his research protocol on November 17, 2011. The researcher received notice from the IRB on November 29, 2011. Data collection began on December
12, 2011 and remained open for the duration of four weeks, concluding on January 9, 2011.

**Description of the Sample**

The intended population upon which to make generalizations were employees within university Facilities Management departments. Due to the large size of the Facilities Management department, which has 549 employees, the department is divided into 27 shops, or sub-departments. The researcher was granted access to survey the housekeeping and recycling/waste management shops. Random sampling was not feasible for this particular study, because not every member of the population had the chance of being selected. A purposive sample of participants, with a high likelihood of meeting the qualifications of the target population, was taken from the accessible population. Generalizations can be determined from these respondents applying to this specific sample population.

The decision makers advised using the housekeeping and recycling/waste management shops for multiple reasons. The first reason was the number of employees working in these shops. The target sample size was 50 employees, which the decision makers felt the researcher would have a high likelihood of obtaining. The second reason is the overall tenure of the employees. While the researcher explained the target population characteristics, the decision makers felt this group would yield an adequate number of participants. Finally, they suggested these shops because they felt these employees were competent with computer literacy, which would be the primary tool for data collection.
Data Collection Instrument

Prior studies similar in nature to this research and measuring the variables of positive reinforcement and/or job performance have implemented survey and questionnaire instruments (Chenington, Reitz, & Scott, 1971; Colbert, 2008; Dewettinck, 2003; Feeny, 1973, Keller & Szilagyi, 1976). This study adds another variable, that of the mid-career, non-supervisory individual contributor employee. For this reason, the researcher created the instrument in order to effectively and more thoroughly measure the variables for the study. The sample size was a minimum of 50 employees that fall within the parameters set for the study.

Other studies have used self-report data in their survey designs as well (Bagozzi, 1980; Cherrington, Reitz, & Scott, Jr., 1971; Keller & Szilagyi, 1976). Bagozzi (1980) implemented one of the first studies to measure job satisfaction and job performance in sales; he used a Likert-scale to assess job satisfaction, task specific self-esteem and achievement motivation in relation to employee job performance, which he obtained from company records. In another study of job satisfaction and job performance by Cherrington, Reitz and Scott, Jr. (1971), respondents were asked to assess the quantity of tests they scored in a given time period, the quality of their own performance in the task of grading the tests, and their own satisfaction with the task. Finally, Keller and Szilagyi (1976) also used a Likert-scale measuring self-report data to determine that positive leader rewards are more positively correlated to explaining employee behavior than punitive rewards.
There was no pre-existing instrument found that could be adapted to formulate this survey instrument, therefore the researcher personally created the survey. The instrument measures demographic information, the feedback the employee receives from his or her superiors and the self-assessment of the employees’ own job performance. The instrument was constructed within a survey program, Qualtrics. A function within Qualtrics called skip logic organized the participants as meeting the target sample population criteria or not. If the employee did not meet the criteria of the target population, then they were directed to the end of the survey.

The survey begins with four questions about demographics. The demographic information of the sample population was considered useful. These questions were viewed to determine if any correlational factors exist between the demographic information and the responses on the survey. Demographics may or may not prove to be related to the other variables being measured. However, it was more convenient to get the information while administering the instrument and analyze the usefulness afterwards than to never obtain the information from the participants. It could prove more difficult to locate the participants to make generalizations about demographic information later.

The next two questions relate to the target population. The questions specifically target two aspects of the target population: the mid-career employee, which the researcher adapted from Cohen’s (1991) definition as being a person employed with the company between 5-15 years, and non-supervisory employees, defined for this research as those employees in “positions that do not demand increased work effort and responsibility or have immediate potential to fulfill the desire for upward mobility” (adapted from Harpaz & Snir, 2003, p. 301). If the participant met these two criteria, the
researcher made the assumption that the participant meets the definition of an individual contributor employee, defined for this research as “frontline employees that guide the daily activities within the organization; skills consist of time management and how to complete tasks with deadlines, and functional/technical skills/administrative duties” (Dai, Tang, & De Meuse, 2011; Day, Sin, & Chen, 2004). If the employee did not meet the criteria for the target population as outlined in these questions, skip logic directed them to the end of the survey.

The remainder of the survey measured supervisor feedback (positive reinforcement) and increased job performance. The questions attribute a numerical value for each variable separately. There are ten questions dealing with feedback, of which seven of these were scored for statistical data. The answers to the questions were scored a point value from 1 to 4 with the options of strongly disagree, disagree, agree and strongly agree. The variable of job performance contained six questions, of which five were scored on a scale of 1 to 4, also rated from strongly disagree, disagree, agree and strongly agree. The program also aided in scoring the data. Qualtrics contains options that allow certain information to be extracted and isolated from the results. The data was then transferred into the Statistical Package for the Social Sciences (SPSS) for further analysis.

The instrument was tested for content validity. After clarifying the goal and variables to be measured in the research, the instrument was thoroughly reviewed by the researcher’s thesis chair and colleagues, who then judged the instrument. The survey was piloted to a group of subject matter experts (other graduate students conducting graduate research) who made recommendations for change to enhance accuracy and clarity. This
group also timed the survey instrument. All subject matter experts determined the instrument did indeed achieve the desired results, thus providing content-related validity. The researcher’s colleagues and thesis chair judged the instrument to verify there were no leading questions or other factors that would skew results in support for the proposed hypothesis. Once the instrument was complete, it was pilot tested by the researcher’s colleagues to obtain such information as the average time necessary to complete the instrument and verify Qualtrics did not malfunction. Reliability was measured by assessing how the respondents scored on questions asking similar things. If the respondents scored similarly on the questions, it can be inferred that the answers are reliable.

The survey questionnaire remained open for duration of four weeks from December 12, 2011 through January 9, 2012. At the conclusion of the fourth week, the survey closed and no further online data was accepted. The researcher did not receive the minimum number of 50 responses. Therefore, the researcher arranged two additional sessions to collect survey data in person with paper and pencil on January 11, 2012 and January 18, 2012. The final results yielded a sample size of 56 usable responses of the 114 total collected. No compensation was offered for participation in this study. All participants responded on their own accord. A bi-weekly email reminder was sent to the sample population two weeks into the study with the intent to get as many responses as possible.

Administration of the data collection instrument (See Appendix C) occurred via email throughout the housekeeping and recycling/waste management shops participating in the research. The researcher chose to deliver the survey instrument via this method.
because the option of anonymity and increased privacy tends to make participants feel more secure (Rosenbaum, Rabenhorst, Reddy, Fleming, & Howells, 2006). The researcher also planned contingency time to re-administer the survey in person with paper and pencil if the initial attempt did not yield enough respondents, and the decision makers agreed that this would be acceptable if necessary.

**Survey Instrument and Corresponding Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Corresponding Instrument Question</th>
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<tbody>
<tr>
<td>Demographics</td>
<td>1. I am a ________.</td>
</tr>
<tr>
<td></td>
<td>a) Male</td>
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<tr>
<td></td>
<td>b) Female</td>
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<tr>
<td></td>
<td>c) I would prefer not to say</td>
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<td></td>
<td>2. What is your age range?</td>
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<td></td>
<td>a) 18-25</td>
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<tr>
<td></td>
<td>b) 26-33</td>
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<tr>
<td></td>
<td>c) 34-41</td>
</tr>
<tr>
<td></td>
<td>d) 42-49</td>
</tr>
<tr>
<td></td>
<td>e) 50-57</td>
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<td></td>
<td>f) 58 and older</td>
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<td></td>
<td>3. What is your ethnicity?</td>
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<tr>
<td></td>
<td>a) Caucasian</td>
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<tr>
<td></td>
<td>b) Hispanic</td>
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<tr>
<td></td>
<td>c) African American</td>
</tr>
<tr>
<td></td>
<td>d) Asian</td>
</tr>
<tr>
<td></td>
<td>e) Pacific Islander</td>
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<tr>
<td></td>
<td>f) Other</td>
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<tr>
<td>4. What is your highest level of education completed?</td>
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<tr>
<td>----------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>a) GED or high school equivalent</td>
<td></td>
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<tr>
<td>b) High school diploma</td>
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<tr>
<td>c) Some college</td>
<td></td>
</tr>
<tr>
<td>d) Bachelors degree</td>
<td></td>
</tr>
<tr>
<td>e) Some graduate school</td>
<td></td>
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<tr>
<td>f) Masters degree</td>
<td></td>
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<tr>
<td>g) Doctoral degree</td>
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<tr>
<th>5. How long have you been employed with Facilities Management?</th>
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<tbody>
<tr>
<td>a) 0-2 years</td>
</tr>
<tr>
<td>b) 3-4 years</td>
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<tr>
<td>c) 5-15 years</td>
</tr>
<tr>
<td>d) 16+ years</td>
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</tbody>
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<tr>
<th>6. How many people do you directly supervise?</th>
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</thead>
<tbody>
<tr>
<td>a) None</td>
</tr>
<tr>
<td>b) 1-10 people</td>
</tr>
<tr>
<td>c) 11-24 people</td>
</tr>
<tr>
<td>d) 25+ people</td>
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<tr>
<th>7. My supervisor monitors my performance and discusses it with me.</th>
</tr>
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<tbody>
<tr>
<td>a) Often</td>
</tr>
<tr>
<td>b) Somewhat</td>
</tr>
<tr>
<td>c) Never</td>
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<tr>
<th>8. In what form does your current supervisor typically provide feedback to you about your job performance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Verbal</td>
</tr>
<tr>
<td>b) Written</td>
</tr>
<tr>
<td>c) Both</td>
</tr>
<tr>
<td>d) No feedback</td>
</tr>
<tr>
<td>e) Other__________</td>
</tr>
</tbody>
</table>
9. What form would you prefer your current supervisor to provide feedback?
   a) Verbal
   b) Written
   c) Both
   d) No feedback
   e) Other____________

10. How often would you prefer to receive feedback from your current supervisor?
    a) Less than Once a Month
    b) Once a Month
    c) 2-3 Times a Month
    d) Once a Week
    e) 2-3 Times a Week
    f) Daily

11. The feedback I typically receive is positive feedback.
    a) Strongly Disagree  b) Disagree  c) Agree
    d) Strongly Agree

12. When I receive feedback, it is explained clearly so that I understand exactly what is expected of me.
    a) Strongly Disagree  b) Disagree  c) Agree
    d) Strongly Agree

13. In the last six (6) months, I have received feedback from my supervisor.
    a) Strongly Disagree  b) Disagree  c) Agree
    d) Strongly Agree

14. Feedback from my supervisor is important to me completing my job tasks effectively.
    a) Strongly Disagree  b) Disagree  c) Agree
    d) Strongly Agree

15. Verbal praise from my supervisor for meeting a company goal is more important to me than receiving an award/certificate for meeting that goal.
    a) Strongly Disagree  b) Disagree  c) Agree
    d) Strongly Agree
16. The more feedback I receive from my supervisor, the better I tend to perform.  
   a) Strongly Disagree   b) Disagree   c) Agree  
   d) Strongly Agree

17. The factor that would motivate me to improve my job performance the most is:  
   a) The threat of being fired   
   b) A lighter workload  
   c) Receiving encouragement from a supervisor  
   d) Being directly monitored by a supervisor  
   e) Other

18. I would not perform as well at my job without some form of feedback.  
   a) Strongly Disagree   b) Disagree   c) Agree  
   d) Strongly Agree

19. In the last six (6) months, I have seen an improvement in my job performance.  
   a) Strongly Disagree   b) Disagree   c) Agree  
   d) Strongly Agree

20. My personal performance positively contributes to the overall performance of the department.  
   a) Strongly Disagree   b) Disagree   c) Agree  
   d) Strongly Agree

21. When I do not feel I am performing to department standards, I go to my supervisor to see how I can improve.  
   a) Strongly Disagree   b) Disagree   c) Agree  
   d) Strongly Agree

22. My job performance will continue to improve with constant feedback from my supervisors.  
   a) Strongly Disagree   b) Disagree   c) Agree  
   d) Strongly Agree
Table 3.1: Survey Questionnaire

Threats

As with any research design, there existed the possibility of threats that could affect the outcome of the study, however prior proper planning can assist in controlling or minimizing these threats so they do not seriously impact the results (Fraenkel & Wallen, 2009). The threats that had the potential to affect this research are mortality, location, and the attitude of the subjects. The efforts made to decrease these threats in this research will be discussed more in detail.

The threat of mortality exists in cases where the participants decide not to participate in the study, do not fully complete the survey, or are not available at the time of the survey administration, which also introduces bias because the researcher cannot determine if the other participants of the sample may have answered differently (Fraenkel & Wallen, 2009). The researcher attempted to limit this threat by allowing the survey period to span four weeks. This timeframe maximized the number of participants to reach the target sample size of 50 employees.

A second factor is location threat. The instrument was delivered via email, allowing participants to have the opportunity to complete the survey when and where they wished. However, not all the participants had the same access or accommodations to a computer. For that reason, some participants could have taken the survey at home with distractions, while others could have taken the survey on lunch break at work due to lack of access to a computer outside of work. The researcher reserved the option of re-
administering the survey if he did not reach the target sample size of 50 employees on his first attempt. In the second attempt, the researcher planned a different approach. The researcher chose a location for the participants to come and complete the surveys with a paper and pencil. The researcher then personally keyed all the data into the Qualtrics system. These options minimize the location threat, because the participants can complete the survey in the same location, under the same conditions with the same resources.

Finally, the attitudes of the subjects may threaten the research. One potential outcome is the Hawthorne effect, which is characterized by the potential of the subjects to perform better because the subjects are aware they are being studied (Fraenkel & Wallen, 2009). The Hawthorne effect is commonly a factor in intervention studies (Kompier, 2006; Wickström & Bendix, 2000). This study does not implement an intervention, however, the researcher acknowledges the possibility that the target population may skew their responses on the instrument if they think the decision makers will be made aware of their responses. The researcher attempted to minimize this threat through two means. The first attempt was to guarantee anonymity for the participants. The second attempt was for the researcher to meet with the target population personally to explain the purpose of the research and answer any questions. If the participants realized they would not be identified by their answers and were made aware of the purpose, then the researcher believed chances increased for completion of the survey in an honest and timely manner.

The researcher outlined the procedures for conducting this study. The process was to formulate the study, obtain site approval and submit the protocol to the IRB. This
section then discussed the sample population and data collection instrument more in detail. The section concluded with methods to minimize the threats to the research. The next section will describe the data analysis procedures and the results of the survey questionnaire.
Data Analysis

This study used a quantitative research design to analyze the impact of positive reinforcement strategies on the job performance of mid-career, non-supervisory individual contributor employees. A 22-item questionnaire was created in Qualtrics and distributed via email to a purposive sample within the housekeeping and recycling/waste management shops of a Facilities Management Department at a Virginia university. Of the 114 employee responses, 56 qualified for the study, 50 did not qualify for the study, and 8 were discarded because they did not fully complete the questionnaire to determine if they qualified or not. The next section will analyze the 56 responses that qualified for the study.

Data Storage and Analysis Procedures

The data was secured within the Qualtrics system, and the researcher was the only one with access to the password protected Qualtrics account. The data that was collected by hand was immediately submitted into Qualtrics by the researcher. Once the data was entered into the program, the researcher maintained possession of the original surveys and secured them in a personal file bin. Once the survey closed, the researcher used the SPSS software to conduct all the data analysis. Descriptive statistics and a correlational analysis were given the most attention. Frequency tables assisted in organizing the demographic information and general questions about the variables. A comparison of the means was most helpful for the Likert-scaled questions. For all the following statistical analysis, n=56.
Demographic Information

The demographic composition of the respondents may or may not have any correlation to the outcome of this particular study or the relationship of the variables. However, the researcher organized this information for potential use in future studies. Overall, the data illustrates the dominant characteristics of the participants as Caucasian females in the age range of 42-49 with their highest educational degree being a high school diploma.

The gender of the participants is illustrated in Table 4.1 and also can be found in bar graph form (see Appendix F). The majority of participants were females. Males represented less than one-third of the total population and just one participant chose not to disclose their sex and picked other.

This section will record some basic demographic information. I am a _________.

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<th>Cumulative Percent</th>
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<td>28.6</td>
</tr>
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<td>69.6</td>
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Table 4.1: Participant Gender

The ages of the participants can be seen in Table 4.2 and in bar graph form (see Appendix G). Every range option listed was represented within the participant sample.
The majority of the participants were older than 40 years of age. There were 14.3% of the participants between the ages of 18-25 years old. The researcher assumed the actual age of the youngest person to qualify for the study is 23 years old. To qualify for the study, the participant had to be working between 5-15 years in his or her position. If the participant began working at the minimum age to work (18 years old) and had the minimum amount of work experience to qualify (5 years) then the youngest age a person was who qualified is 23 years of age. There was no way to make an inference about the upper limit of age of participants.

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<td>58 and older</td>
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Table 4.2: Participant Age

The ethnic composition was overwhelmingly homogenous while the education level spanned the entire spectrum of options. Results showed that less than 10% of the participants were an ethnicity other than Caucasian (see Appendixes H and I). On the other hand, the education of the respondents varied. The results show that 84% of the
respondents’ highest degree earned was a high school diploma or a GED/high school equivalent. However, there were respondents who had attended college, some who earned a Bachelors degree, and even some who attended graduate school (see Appendixes J and K).

**Correlational Study Results**

**Participant Survey Responses for Positive Reinforcement Questions**

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Table 4.3: Mean Values for Positive Reinforcement Questions
Participant Survey Responses for Job Performance Questions

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<th>Participant</th>
<th>Mean Value</th>
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</tbody>
</table>
Table 4.4: Mean Values for Job Performance Questions

There were 10 survey questions about positive reinforcement, with 7 of them given values to compare in this study. The 7 questions were rated from strongly disagree, disagree, agree and strongly agree with each response given a value from 1 to 4 respectively. The replies of all 56 participants were recorded and input into the SPSS program, which then calculated a mean value for the questions pertaining to the variable of positive reinforcement for each participant. The mean
value for each individual participant response for the group of questions pertaining to positive reinforcement is listed (see Table 4.3). The mean value for all the participants’ responses to all the questions pertaining to positive reinforcement was 2.99, on the scale rating of 1 to 4 (see Table 4.5).

There are 6 survey questions about increased job performance, with 5 of them given values to compare in this study. The 5 questions were rated from strongly disagree, disagree, agree and strongly agree with each response given a value from 1 to 4 respectively. The replies of all 56 participants were recorded and input into the SPSS program, which then calculated a mean value for the questions pertaining to the variable of increased job performance for each participant. The mean value for each individual participant response for the group of questions pertaining to increased job performance is listed (see Table 4.4). The mean value for all the participants’ responses to all the questions on increased job performance was 2.73, on the scale rating of 1 to 4 (see Table 4.5).

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<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
</tr>
</thead>
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<td>Job Performance</td>
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<td>3.60</td>
<td>2.7321</td>
</tr>
</tbody>
</table>

Table 4.5: Descriptive Statistics for the Variables of Study

The results are statistically significant at an alpha level of .05. The researcher found $r = .290$ and $r^2 = .084$ (see Table 4.6). The $r$-value reveals that there is a weak
positive association between positive reinforcement and increased job performance. The \( r^2 \)-value means that 8.4% of the variability in increased job performance can be explained by the variation in positive reinforcement.

**Model Summary**

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<tr>
<th>Model</th>
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<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
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<td>.290a</td>
<td>.084</td>
<td>.067</td>
<td>.40397</td>
</tr>
</tbody>
</table>

*Table 4.6: r and \( r^2 \) values*

The means of both variables are illustrated on a scatterplot (see Figure 4.1). A regression line going through the middle of the data still leaves many data points spread away from the line. The data is moving in a positive direction, however it is not all clustered into a central area on or near the line. Therefore, the regression analysis shows a weak positive relationship between the two variables of positive reinforcement and increased job performance.

The hypotheses were:

**H\(_1\)**: If mid-career, non-supervisory individual contributor employees receive positive reinforcement, the result will be an increase in their job performance.

**H\(_2\)**: If managers/supervisors begin to use positive reinforcement on mid-career, non-supervisory individual contributor employees, then managers/supervisors will begin to see an increase in this group’s job performance.
Due to the results of the study based on this sample, the researcher rejects H$_1$ and H$_2$. These results show that increased job performance has a weak positive association with positive reinforcement.

**Figure 4.1: Regression Analysis**

**Internal/External Validity and Reliability**

Threats to internal validity will be present in two potential areas. The attitude of the subjects has potential to affect the study. If the participants in any way feel their answers will not remain anonymous, they may not be completely honest on the instrument or may not take the time to complete it at all. The participants also may attempt to perform better because they think a superior will look upon them more favorably. A second possible threat is that of subject characteristics. There is no sure way to tell what outside factors may be motivating the participants. The independent
variable may or may not have an effect in conjunction with one of these other motivating factors that varies from one participant to another.

This section analyzed the quantitative data results from this study. The demographic information was discussed, and it was discovered that the majority of the respondents were Caucasian women between 42-49 years of age with their highest education being a high school diploma. More demographic information was analyzed to allow a clearer understanding of the sample population. The procedure and tests used to analyze the data was then discussed. Using the mean values of the data measuring the variables of positive reinforcement and job performance, it was determined that there was a positive weak correlation between these two variables for this sample population. The next section will discuss what effect the results have on this study, as well as the future implications and research.
Conclusion

The purpose of this study was to examine the relationship between positive reinforcement strategies and their impact on the job performance of mid-career, non-supervisory individual contributor employees at a Virginia university Facilities Management Department. Finding a tool or method for organizations to use to increase employee job performance would be beneficial to organizations in multiple industries, if it was proven that it worked. This study used a quantitative questionnaire with Likert-scaled questions to measure the responses of employees. The findings, recommendations and conclusions the found are discussed further in this section.

Research Question and Hypotheses Revisited

The research question of this study was:

**RQ₁:** What is the impact of positive reinforcement strategies on the increased job performance of mid-career, non-supervisory individual contributor employees at a medium-sized university facilities management department?

The hypotheses were:

**H₁:** If mid-career, non-supervisory individual contributor employees receive positive reinforcement, the result will be an increase in their job performance.

**H₂:** If managers/supervisors begin to use positive reinforcement on mid-career, non-supervisory individual contributor employees, then managers/supervisors will begin to see an increase in this group’s job performance.
Quantitative data analysis of the questionnaire responses produced the following results:

\(A_1\): The job performance of mid-career, non-supervisory individual contributor employees is not significantly affected by positive reinforcement from a supervisor (see Figure 4.1 and Table 4.6).

\(A_2\): Managers will not see a significant increase in job performance attributed to positive reinforcement when applying it on mid-career, non-supervisory individual contributor employees.

The researcher did not find any existing studies that specifically examined the target population this study measures, however there is some discrepancy in the findings of other studies measuring the impact of positive reinforcement on employee job performance (Feeny, 1973; Keller & Szilagyi, 1976). The results did not directly address the validity of the conceptual framework (p. 30), which illustrated the different relevant learning theories contributing to aspects of positive reinforcement that are present in this study. However, the results do discredit the theoretical framework (p. 12), which also represents \(H_1\) and the relationship of positive reinforcement to the target population, which the researcher believed would yield an increase in job performance.

**Limitations**

This research has limitations as well. Due to the fact that the data instrument is based around the self-perception of the employee’s own job performance, it leaves room for the data to be skewed (Reio Jr. & Wisewell, 2000). The self-report data is a major component of this research. In this specific research design, there is no way to tell how
much or how little of their current job performance the mid-career, non-supervisory, individual contributor employee is attributing to positive reinforcement from a superior versus how much they are attributing to their own efforts. The potential is present for an employee to overemphasize his or her own efforts in their successful job performance, and underemphasize the role of positive reinforcement from a superior. There is not a hard line to dictate where one ends and one begins. The employee is making this determination in his or her own mind.

**Interpretation of Results**

The researcher has thought about possible reasons that the results of this study produced findings that did not align with other studies measuring positive reinforcement and job performance (Feeny, 1973; Keller & Szilagyi, 1976). One possible reason is that the population was significantly skewed. The majority of the participants were Caucasian women between the ages of 42-49 with a high school diploma. Therefore, the comfort level and dependability on their fellow coworkers was high. These women work in small, self-directed teams for the duration of their shift with little direct supervision. In regards to the housekeeping shop, the employees do not work in the same vicinity as their supervisor. The women know their location that they must tend to and are able to work out a system between themselves on how the work gets done.

The non-traditional work unit and the repetition of tasks do not allow much room for continuing upward mobility. The researcher assumes that employees who stay in these positions to achieve the mid-career, non-supervisory status have to be somewhat internally motivated by the job or some other factors (i.e., necessity for income, lack of
other employment opportunities, enjoyable work environment, etc). Also, the researcher did not explicitly define the term positive reinforcement, or its scope within the questionnaire. The employees were allowed to interpret this meaning for themselves. Again, the housekeeping shop participants may have skewed the data. These employees are typically recognized and respected by their clients for performing their jobs. It is common for the personnel in individual buildings to acknowledge the housekeeping staff for their hard work through compliments and gifts during certain periods of the year (i.e., housekeeping appreciation week, Christmas cookies, etc). The Senior Vice President of Administration and Finance also recognizes the employees of the entire Facilities Management department for their efforts with an annual banquet. Significant time and effort is put into this awards ceremony to make the employees feel appreciated. In both cases, the participants of the study may not interpret these actions as positive reinforcement. Further, the survey asks about positive reinforcement from a direct supervisor and not from other sources, nor the role of job satisfaction in job performance.

Third, this study targeted a specific population: mid-career, non-supervisory individual contributor employees in a Virginia university Facilities Management Department. Just as there are different categories in the employment hierarchy, there are different needs for the employee to be successful at each of these levels (Buford, 2006; Dai, Tang, & De Meuse, 2011). Perhaps positive reinforcement does work for other groups of employees in other industries, besides those in this specific sector. The researcher assumed the generalizability of the results would apply to all employment levels in various industries given its prior successes.
Finally, the managers/supervisors were not properly trained in how to use the tool of positive reinforcement to elicit results from their workers. Again, the process goes further than just the occasional “Good job, Jim” or pat on the back (Feeny, 1973), and there are factors like group size and the consequence associated with the behavior that will impact positive reinforcement as well (Balcazar, Hopkins, & Suarez, 1986; Beatty & Schneier, 1975; Loewy & Bailey, 2007; Raj, Nelson & Kao, 2006). The process is strategic with timing contingencies and reinforcement schedules that must be adhered to in order to produce the desired results. If managers were never delivering positive reinforcement properly, then all the employees are not getting a similar experience to examine the results. The experience and proper implementation of positive reinforcement by the supervisors is an important extraneous variable.

Implications for Practice

The researcher discussed possible reasons why the study did not yield the expected results. These reasons have implications for practitioners. Self-directed work teams could lead to more interactions between coworkers and peers. The direct supervisor, while still important, does not have as much of an impact on the daily interactions between the members of the teams. This forces the employees to rely more on each other for accountability, and peers rather than managers/supervisors would implement positive reinforcement. Also while the company as a whole may show appreciation to their workers, this positive reinforcement may not be translated as such from a direct supervisor. The employee could expect something outside of this blanket of recognition and reinforcement for something more individualized. In addition,
manager/supervisor’s current knowledge of how to use positive reinforcement should be assessed, and training should be provided as needed.

**Recommendations for Further Research and Action**

The results of this study provide evidence that there is not one best-fit solution to increasing job performance for an organization’s workforce. From the results of prior studies implementing a positive reinforcement program (Feeny, 1973; Keller & Szilagyi, 1976), the researcher felt confident the tool would prove useful in a majority of work settings. The results from this study proved otherwise. The data shows that there is a very weak positive relationship between positive reinforcement strategies and job performance for mid-career, non-supervisory individual contributor employees. There are other factors that appear to affect job performance more than positive reinforcement. This study did not attempt to explore those other factors, but other studies have reviewed some of these possibilities (Colbert, Kristof-Brown, Bradley, & Barrick, 2008; Dewettinck, Singh & Buyens, 2003) as well as the relationship between negative/aversive consequences, job satisfaction and job performance (Bagozzi, 1980; Cherrington, Reitz, & Scott, Jr., 1971; Hamner, 1974; Reitz, 1971; Skinner, 1969).

Future studies should consider using a longitudinal design that examines the actual performance reviews of the target population, controls the variables in respect to the industry and employment levels, and ensures the managers/supervisors are properly trained and implement an actual positive reinforcement program.

- Though self-report data has been used in other studies (Bagozzi, 1980; Cherrington, Reitz, & Scott, Jr., 1971; Keller & Szilagyi, 1976), it allows for bias
and inaccuracies on the part of the employee. Tracking their actual performance minimizes these potential discrepancies.

• Segmenting the industry and variables will define a clearer picture of exactly which industries and employees’ job performances are impacted by positive reinforcement. Hard evidence will assist practitioners in knowing whether it is wise to implement a positive reinforcement program in their own organizations.

• Properly training supervisors/managers will reinforce the importance of timing and techniques for implementing positive reinforcement. Also, standardizing the procedure will increase the likelihood that employees are receiving a similar experience regardless of who supervises them.

Other potential research areas that could contribute to this field are gender studies, self-directed work teams and a qualitative data collection method. This sample population was very skewed. The researcher was not aware of this when designing the study. The decision makers recommended two shops in the Facilities Management Department because those employees had the highest likelihood of meeting the researcher’s target demographic. Due to the similarity in responses of the sample population and the significant amount of women participants, a gender study on motivation may be useful. In similar fashion, it would be beneficial to understand how self-directed work teams are motivated. Knowing if this sect is driven internally, by their social environment, or through some other means would be assist in the design of future studies. Finally, a qualitative data collection method would allow researchers to get a more in depth view at how the participants interpreted the questions in comparison to
how the researcher intended, as well as why the participants responded the ways that they did.

The results of this study show how mid-career, non-supervisory individual contributor employees perceive positive reinforcement from their supervisor impacting their own job performance. This demographic gives little attribution to positive reinforcement in this relationship. Therefore, organizations should pay close attention to the demographic makeup of their company in regards to the overall productivity of the organization. It would be beneficial to put effort into the techniques that would create the greatest increase in change for the overall organization. There is no single solution that works for every employee in every industry. However, past studies have proven positive reinforcement as a tool that should not be dismissed as an option just yet. When future studies begin to build on the current foundation, a stronger case can be made for multiple options that will aid in increasing the productivity of all employees.
Appendices

Appendix A: Site Approval Letter

Institutional Review Board (IRB)
James Madison University

Site Coordinator Letter of Permission

November 2, 2011

Institutional Review Board
James Madison University
MSC 5728
JMAC-6, Suite 26
Harrisonburg, VA 22807

Dear Institutional Review Board,

I hereby agree to allow Brandon Artis, a graduate student from James Madison University, to conduct his research at the Facilities Management Department. I understand that the purpose of the study is to measure the impact of positive reinforcement on the increased job performance of mid-career, non-supervisory, individual contributor employees.

By signing this letter of permission, I am agreeing to the following:

☐ JMU researcher has permission to use the Facilities Management Department for his research
☐ JMU researcher has access to the data collected to perform the data analysis both for presentation to his thesis committee and/or for publication purposes

Sincerely,

[Redacted]

Facilities Management Director
Appendix B: Institutional Review Board Protocol

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<tr>
<th>Full Board or</th>
<th>Expedited</th>
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**James Madison University**

**HUMAN RESEARCH REVIEW REQUEST**

**Investigators:** This form is required for Full Board or Expedited review for all JMU research involving human subjects. If you are eligible for an exemption request, please use the alternate form at: [http://www.jmu.edu/sponsprog/irb/irbExemptRequest.doc](http://www.jmu.edu/sponsprog/irb/irbExemptRequest.doc)

**FOR IRB USE ONLY:**
- **Protocol Number:**
- **Received:** 1st Review:
  - **2nd Review:**
  - **3rd Review:**
- **Reviewer:**
  - [ ] Approved
  - [ ] Disapproved
  - [ ] Exempt
  - **Date:**

**External Funding:**
- [ ] YES
- [X] NO
  - If YES, **Sponsor(s):**

**Project Title:** Impact of Positive Reinforcement on Increased Job Performance of Mid-Career, Non-Supervisory Individual Contributor Employees

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<th>Maximum Number of Participants</th>
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<td>100</td>
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<tr>
<td>To: 04/18/12</td>
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<td>MM/DD/YY</td>
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<td>MM/DD/YY</td>
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</tbody>
</table>

**Responsible Researcher(s):** Brandon Artis

**Department:** Adult Education and Human Resource Development

**E-mail:** [artisbk@dukes.jmu.edu](mailto:artisbk@dukes.jmu.edu)

**Address:** 395 S. High St

**Telephone:** 757-374-0398

**Address and/or (MSC):** Harrisonburg, VA 22802
Please select:

- Visiting Faculty
- Adjunct Faculty
- Research Associate
- Administrator/Staff Member
- Undergrad Student
- Graduate Student

(if Applicable):

Research Advisor:

Jane Thall

e-mail: thalljb@jmu.edu

Department: Learning, Technology & Leadership Education

Address and/or (MSC):

MSC 6913

MEMH 3350B

Investigator: Please respond to the questions below. The IRB will utilize your responses to evaluate your protocol submission.

1. **YES** **NO** Does the James Madison University Institutional Review Board define the project as *research*?

The James Madison University IRB defines "research" as a "systematic investigation designed to develop or contribute to generalizable knowledge."

All research involving human participants conducted by James Madison University faculty, staff, and students is subject to IRB review.

Some, but not all, studies that involve human participants are considered research and are subject to full or expedited IRB review, including those:

- intended to satisfy the academic requirements for Independent Study, Bachelor’s Essay, Honors/Senior Thesis, or the Master’s Thesis;
- intended or expected to result in publication, presentation outside the classroom, or public dissemination in some other form;
- conducted outside the classroom and/or departmental research participant pool if they involve
  -- external funding
  -- minors (i.e., persons under the age of 18),
  -- a targeted population of adults whose ability to freely give informed consent may be compromised (i.e., persons who are socio-economically, educationally, or linguistically disadvantaged, cognitively impaired, elderly, terminally ill, or incarcerated),
  -- pregnant women and/or fetuses who may be put at risk of physical harm,
  -- a topic of a sensitive or personal nature, the examination or reporting of which may place the research participant at more than minimal risk, or
  -- any type of activity that places research participants at more than minimal risk.

Other studies are eligible to request exemption from IRB review, including those

- conducted solely within the confines of the classroom or within a departmental research participant pool if they
  -- are a general requirement of a course,
  -- have the sole purpose of developing the student's research skills, and
  -- will be overseen by a faculty member;

- conducted outside the classroom and outside departmental research participant pools, provided they do not involve minors, do not target special adult populations, do not pose a risk of physical harm to pregnant women and fetuses, do not deal with a topic of sensitive or personal nature, or do not involve any type of activity that places the participants at more than minimal risk (see details
above); and provided the investigator does not intend to publish the results or share them with
others in a public forum (i.e. conference presentations, senior theses).
• that are part of a larger research project that has current James Madison University IRB approval; or
• that are part of a larger research project that has current approval of a registered IRB at another institution,
provided that, if research participants are to be recruited at James Madison University, the University’s IRB
has given permission for such on-campus recruitment.

2. ☒ YES ☐ NO Are the human participants in your study living individuals?

3. ☒ YES ☐ NO Will you obtain data through intervention or interaction with these individuals?

"Intervention" includes both physical procedures by which data are gathered (e.g., measurement of heart rate or
venipuncture) and manipulations of the participant or the participant’s environment that are performed for research
purposes. "Interaction" includes communication or interpersonal contact between the investigator and participant (e.g.,
surveying or interviewing).

4. ☐ YES ☒ NO Will you obtain identifiable private information about these individuals?

"Private information" includes information about behavior that occurs in a context in which an individual can reasonably
expect that no observation or recording is taking place, or information provided for specific purposes which the individual
can reasonably expect will not be made public (e.g., a medical record or student record). "Identifiable” means that the
identity of the participant may be ascertained by the investigator or associated with the information (e.g., by name, code
number, pattern of answers, etc.).

5. ☐ YES ☒ NO Does the study present more than minimal risk to the participants?

"Minimal risk” means that the risks of harm or discomfort anticipated in the proposed research are not greater, considering
probability and magnitude, than those ordinarily encountered in daily life or during performance of routine physical or
psychological examinations or tests. Note that the concept of risk goes beyond physical risk and includes psychological,
emotional, or behavioral risk as well as risks to employability, economic well being, social standing, and risks of civil and
criminal liability.

CERTIFICATIONS:

For James Madison University to obtain a Federal Wide Assurance (FWA) with the Office of Human Research Protection (OHRP),
U.S. Department of Health & Human Services, all research staff working with human participants must sign this form and receive
training in ethical guidelines and regulations. "Research staff” is defined as persons who have direct and substantive involvement
in proposing, performing, reviewing, or reporting research and includes students fulfilling these roles as well as their faculty
advisors. The Office of Sponsored Programs maintains a roster of all researchers who have completed training within the past
three years.

By signing below, the Responsible Researcher(s), and the Faculty Advisor (if applicable), certifies that he/she is
familiar with the ethical guidelines and regulations regarding the protection of human research participants from
research risks. In addition, he/she agrees to abide by all sponsor and university policies and procedures in
conducting the research. He/she further certifies that he/she has completed training regarding human participant
research ethics within the last three years.

Test module at OSP website http://www.jmu.edu/sponsprog/irb/irbtraining.html

<table>
<thead>
<tr>
<th>Name of Researcher(s)</th>
<th>Signature of Researcher(s) and Faculty Advisor (if applicable)</th>
<th>Date</th>
<th>Training Completed</th>
</tr>
</thead>
</table>
For additional training interests visit the National Institutes of Health Web Tutorial at:
http://cme.nci.nih.gov/

To Submit a Complete protocol, this document should include the following:

- Human Research Review Request form (i.e. the questions above)
- IRB Checklist (included on this form)
- Research Narrative (use the categories indicated below. 10 pages maximum, do not include your literature review)
- Additional relevant research materials (i.e. letter of consent, questionnaire, survey, where used)

Please submit an electronic version of your ENTIRE protocol to jmu.grants@jmu.edu

Please provide a SIGNED hard copy of the Research Review Request Form to:

Office of Sponsored Programs, MSC 5728, James Madison Administrative Complex, Bldg #6, Suite 26
Purpose and Objectives:

The purpose of this study is to identify how to increase job performance for employees at the mid-career level within their particular company. Increasing employee job performance is sure to benefit any organization. The results are increased profits and production while minimizing turnover rates. Decreasing turnover also results in removing the need to train new employees, which saves the organization more money.

The researcher’s belief, supported by the literature, is that feedback is key not only for the organization, but for the employee’s own knowledge as well. Feedback from a superior shows the employee what he or she is doing on the job that meets or surpasses satisfactory levels in addition to what is below the company standard. Feedback can come in various formats. Positive reinforcement is a tool that accentuates the good things that are occurring as opposed to some overly critical methods of feedback.

Much time and effort is put into new employees. New hire orientation programs are designed and developed to acclimate employees to the organization. Employee retention is also a focus, because it does take money to train new employees. On the other end of the employment spectrum are the employees who have advanced through the organizational ranks to managerial or top management status. This sector has proven their worth and dedication to the company through either years of service or unparalleled hard work, and in many cases, both of these facets.

The mid-career, non-supervisory individual contributor employee is the target of this research, because this sector can become overlooked within an organization. The objective of this research is to identify if positive reinforcement has any impact on
increasing the job performance of the mid-career, non-managerial individual contributor employee sector of an organization. Proving positive reinforcement is a factor will allow current and future organizations to implement the strategy in hopes to improve their workforce contributions. The strategy may then be able to be expanded to other career levels, i.e. the new hires and managers to improve their job performance as well. It will also benefit the employees who may be looking to improve their job performance but do not know why they are delivering sub-par performances.

Procedures/Research Design/Methodology/Timeframe:

This research will be quantitative in nature and will begin pending IRB approval. The study will conclude April 18, 2012. The researcher seeks to obtain a minimum sample size of 50 employees in the housekeeping department from a mid-sized Virginia university’s Facilities Management Department. All participants will be at least 18 years of age. The method of collecting the data will be a JMU sponsored online survey database titled Qualtrics. The survey consists of 22 questions, should take about 10-15 minutes for respondents to complete, and the link to access it will be emailed to the employees of the maintenance department at the Virginia university. A voluntary consent form will also be sent along with the survey, explaining in detail the purpose of the study and that there is no more than minimal risk involved. The researcher’s contact information will also be made readily available. The survey will remain open to be taken by the participants for a period of four-weeks. The researcher will work with the sample pools’ manager to deliver a bi-weekly reminder to solicit participants to take the survey. There will be no identifiable information collected to distinguish the participants’ surveys from one another. Demographic information will be included in the survey to determine
if there are any co-relational factors within the research. Participation is voluntary. Participants can withdraw at any time without consequences of any kind. However, once their responses have been submitted and anonymously recorded they will not be able to withdraw from the study.

The researcher’s plan is to obtain all the participant responses electronically, however, the site manager approved the researcher’s contingency plan. It is the belief of the researcher that computer literacy may be a factor for some members of the sample pool completing the survey electronically. If the researcher does not obtain the desired sample size at the end of the four weeks, the researcher has been granted permission to deliver the survey in person to the employees. The employees will complete the survey with a paper and pencil. When the surveys are complete, the employees will place their surveys in an envelope that the researcher will seal, and leave the site. The researcher will then manually enter the participant responses into the Qualtrics database to allow the program to assist with coding the data.

The researcher will fulfill the requirements for his Master’s level Thesis project, as well as add to the body of research in the areas of feedback and increased job performance. The researcher seeks to gain no other direct benefits or compensation for the study.

**Data Analysis:**

The data will be collected and analyzed by the researcher through Qualtrics, SPSS software, and additional assistance will be available from a statistics professor. Only the researcher and his thesis chair will have access to the data. The anonymity of the subjects
will remain intact. No names or other identifiable information will be requested of the participants. The demographic information will not be released to anyone affiliated with the organization. The data will be stored in a locked file cabinet in the researcher’s thesis chairperson’s office located in Memorial Hall. When receiving assistance from the third party statistician, the data will be retrieved before the meeting session and will be returned to the file cabinet immediately following the conclusion of the session. No one will have access to the data besides the researcher and his thesis chairperson.

**Reporting Procedures:**

The audience to be reached is the researcher’s academic supervisors as well as any supervisors within any industry who may be looking to increase the job performance of their employees that occupy the demographic of mid-career, non-supervisory, individual contributor employees. The presentation will be in the form of a graduate-level thesis. Also, the researcher will defend his findings to a panel discussing the purpose, methods, findings, limitations, and grounds for future study. No identifiable information will be reported about the participants in the compiled thesis, nor in the presentation. The subjects will receive feedback from the researcher via printed correspondence, if requested.

**Experience of the researcher (and advisor, if student):**

As a graduate student in the College of Education in the Adult Education/Human Resource Development program, the researcher has completed coursework in Research

**Dr. Jane Thall’s Research Experience:**

Ed.D., The George Washington University, May 2005

M.S. Applied Behavioral Science, The Johns Hopkins University, May 1999

B.A., Spanish, May 1975

**JMU Course Taught by Dr. Jane Thall:**

JMU, COE, AHRD 680 Reading and Research, Fall 2011

JMU, COE, AHRD 700 Thesis, Fall 2011

JMU, COE, AHRD 690 Special Studies in AHRD, Spring 2011, Fall 2011


Dr. Jane Thall has also served on two doctoral dissertation committees as an examiner for Drs. Cheryl Church and Heidi Graham for the degree of Ed.D., The George Washington University, July 2007, and August 2010. Dr. Thall will help guide me through this research.
Appendix C: Web/Email Consent Letter

Web/Email Consent Letter *(Used in anonymous research)*

**Why do this study?** – I am interested in the impact of positive reinforcement on the increased job performance of employees. I need to collect data from mid-career, non-supervisory, individual contributor level employees to allow me to determine if positive reinforcement increases the job performance on this group.

**What will participation involve?** - This research involves completing a survey about the positive reinforcement that you receive while on the job, as well as the status of your own job performance as perceived by you.

**How long will participation take?** – The entire survey will take about 10-15 minutes to complete.

**As an informed participant of this experiment, I understand that:**

My participation is voluntary and I may cease to take part in this experiment at any time, without penalty.

I am aware of what my participation involves.

*There are no more than minimal risks involved in the participation of this study.*

All my questions about the study have been satisfactorily answered.

**I have explained the above and answered all questions asked by the participant:**

Researcher’s Signature: _______________________________ Date: __________

**Purpose of Study**

You are being asked to participate in a research study conducted by Brandon Artis from James Madison University. The purpose of this study is to investigate the impact of positive reinforcement on the job performance of mid-career employees. This study is for the completion of the researcher’s thesis.

**Time Required**

Participation in this study will require about 10-15 minutes of your time.

**Research Procedures**

This study consists of an online survey that will be administered to participants through email using Qualtrics, an online survey tool. You will be presented a series of questions related to the variables of supervisor feedback and job performance.
Confidentiality

The results of this research will be presented in the researcher’s thesis. While individual responses are anonymously obtained and recorded online through the Qualtrics software, data is kept in the strictest confidence. All data will be stored in a secure location only accessible to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be shredded. Final results will be made available to participants upon request.

Risks and Benefits

Your participation in this study will involve no more than minimal risks. It is not anticipated that your physical and mental health will be jeopardized by the participation in this study. Your participation will aid in filling the research gap of applying feedback and the impact it has on increasing employee job performance.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final results of this study, please contact:

Brandon Artis
Adult Education/ Human Resource Development
James Madison University
artistbk@dukes.jmu.edu

Dr. Jane Thall
Learning, Technology & Leadership
Education
thalljb@jmu.edu
(540) 568-5531

Questions about Your Rights as a Research Subject

Dr. David Cockley
Chair, Institutional Review Board
James Madison University
(540) 568-2834
cocklede@jmu.edu

Giving of Consent

I certify that I am at least 18 years of age and have been given the opportunity to ask questions about this study. I have read this consent and I understand what is being requested of me as a participant in this study. By clicking on the link below, and completing and submitting this anonymous survey, I am consenting to participate in this research.

http://jmu.qualtrics.com/SE/?SID=SV_2tWgHQwElyPs3v6

Brandon Artis 11/15/11

Name of Researcher (Printed) Date
Appendix D: Cover Letter/Consent Letter (in-person)

Cover Letter (Used in Anonymous Research) (Paper and pencil)

Identification of Investigators & Purpose of Study
You are being asked to participate in a research study conducted by Brandon Artis from James Madison University. The purpose of this study is to investigate the impact of positive reinforcement on the job performance of mid-career employees. This study is for the completion of the researcher’s thesis.

Research Procedures
This study consists of a survey that will be administered to individual participants on campus at James Madison University. You will be asked to provide answers to a series of questions related to the variables of supervisor feedback and job performance.

Time Required
Participation in this study will require about 10-15 minutes of your time.

Risks
The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life). It is not anticipated that your physical and mental health will be jeopardized by the participation in this study.

Benefits
Your participation in this study will aid in filling the research gap of applying feedback and the impact it has on increasing employee job performance.

Confidentiality
The results of this research will be presented in the researcher’s graduate Thesis, as well as in a presentation to his Thesis chairperson and committee. While individual responses are obtained and recorded anonymously and kept in the strictest confidence, aggregate data will be presented representing averages or generalizations about the responses as a whole. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location accessible only to the researcher. The researcher retains the right to use and publish non-identifiable data. At the completion of the study, the data will be securely stored for a period of five years (as required by The Graduate School), and then shredded.

Participation & Withdrawal
Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.
Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Brandon Artis                                      Dr. Jane Thall
Adult Education/ Human Resource Development        Learning, Technology
James Madison University                           & Leadership
artisbk@dukes.jmu.edu                                thalljb@jmu.edu
(540) 568-5531

Questions about Your Rights as a Research Subject
Dr. David Cockley
Chair, Institutional Review Board
James Madison University
(540) 568-2834
cocklede@jmu.edu

Giving of Consent
I have read this cover letter and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. I certify that I am at least 18 years of age.

______________________________________
Name of Researcher (Printed)

______________________________________    ______________
Name of Researcher (Signed)                                   Date
Appendix E: Survey Questionnaire

Survey Questions

Welcome to this survey:

Impact of Positive Reinforcement on Increased Job Performance

This survey has been created to study the impact of positive reinforcement on increased job performance. You will be asked a series of questions pertaining to the feedback you receive while on the job and your perception of your own job performance. Your responses will be viewed in conjunction with the other responses. Your individual answers will remain anonymous. Please answer all questions honestly and to the best of your ability. You will not be able to return to a previous question once you move on.

This section will record some basic demographic information.

1. I am a __________.
   - Male
   - Female
   - I would prefer not to say

2. What is your age range?
   - 18-25
   - 26-33
   - 34-41
   - 42-49
   - 50-57
   - 58 and older
3. What is your ethnicity?

- Caucasian
- Hispanic
- African American
- Asian
- Pacific Islander
- Other

☐

4. What is your highest level of education completed?

- GED or high school equivalent
- High school diploma
- Some college
- Bachelors degree
- Some graduate school
- Masters degree
- Doctoral degree

☐ The next two (2) questions pertain to your tenure and supervisory status in your organization.

5. How long have you been employed within Facilities Management?

- 0-2 years
- 3-4 years
- 5-15 years
- 16+ years

If 0-2 years is Selected, Then Skip To End of Survey

If 3-4 years is Selected, Then Skip To End of Survey
If 16+ years Is Selected, Then Skip To End of Survey

6. How many people do you directly supervise?

- None
- 1-10 people
- 11-24 people
- 25+ people

If 1-10 people Is Selected, Then Skip To End of Survey
If 11-24 people Is Selected, Then Skip To End of Survey
If 25+ people Is Selected, Then Skip To End of Survey

The following questions refer to the feedback you receive while on the job.

7. My supervisor monitors my performance and discusses it with me.

- Often
- Somewhat
- Never

8. In what form does your current supervisor typically provide feedback to you about your job performance?

- Verbal
- Written
- Both
- No Feedback
- Other
9. What form would you prefer your current supervisor to provide feedback?

- [ ] Verbal
- [ ] Written
- [ ] Both
- [ ] No Feedback
- [ ] Other

10. How often would you prefer to receive feedback from your current supervisor?

- [ ] Less than Once a Month
- [ ] Once a Month
- [ ] 2-3 Times a Month
- [ ] Once a Week
- [ ] 2-3 Times a Week
- [ ] Daily

11. The feedback I typically receive is positive feedback.

- [ ] Strongly Disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly Agree

12. When I receive feedback, it is explained clearly so that I understand exactly what is expected of me.
13. In the last six (6) months, I have received feedback from my supervisor.

- [ ] Strongly Disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly Agree

14. Feedback from my supervisor is important to me completing my job tasks effectively.

- [ ] Strongly Disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly Agree

15. Verbal praise from my supervisor for meeting a company goal is more important to me than receiving an award/certificate for meeting that goal.

- [ ] Strongly Disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly Agree

16. The more feedback I receive from my supervisor, the better I tend to perform.

- [ ] Strongly Disagree
The following questions pertain to your perception of your own job performance. This is strictly your opinion.

17. The factor that would motivate me to improve my job performance the most is __________.
   - [ ] The threat of being fired
   - [ ] A lighter workload
   - [ ] Receiving encouragement from a supervisor
   - [ ] Being directly monitored by a supervisor
   - [ ] Other

18. I would not perform as well at my job without some form of feedback.
   - [ ] Strongly Disagree
   - [ ] Disagree
   - [ ] Agree
   - [ ] Strongly Agree

19. In the last six (6) months, I have seen an improvement in my job performance.
   - [ ] Strongly Disagree
   - [ ] Disagree
   - [ ] Agree
   - [ ] Strongly Agree

20. My personal performance positively contributes to the overall performance of the department.
21. When I do not feel I am performing to department standards, I go to my supervisor to see how I can improve.

22. My job performance will continue to improve with constant feedback from my supervisors.

Thank you for participating in this survey. Your responses will remain anonymous.
Appendix F: Gender of Participants Bar Graph

Note: 1- Men, 2- Women, 3- Other
Appendix G: Ages of Participants Bar Graph

Note: 1- 18 to 25, 2- 26 to 33, 3- 34 to 41, 4- 42 to 49, 5- 50 to 57, 6- 58 and older
Appendix H: Ethnicities of Participants Table

<table>
<thead>
<tr>
<th>What is your ethnicity?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>51</td>
<td>91.1</td>
<td>91.1</td>
<td>91.1</td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
<td>1.8</td>
<td>1.8</td>
<td>92.9</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>7.1</td>
<td>7.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Appendix I: Ethnicities of Participants Bar Graph

Note: 1- Caucasian, 2- Hispanic, 3- African American, 4- Asian, 5- Pacific Islander, 6- Other, 7- No entry

Mean = 1.39
Std. Dev. = 1.317
N = 56
### Appendix J: Education of Participants Table

**What is your highest level of education completed?**

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid GED or high school equivalent</td>
<td>17</td>
<td>30.4</td>
<td>30.4</td>
<td>30.4</td>
</tr>
<tr>
<td>High school diploma</td>
<td>30</td>
<td>53.6</td>
<td>53.6</td>
<td>83.9</td>
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<tr>
<td>Some college</td>
<td>6</td>
<td>10.7</td>
<td>10.7</td>
<td>94.6</td>
</tr>
<tr>
<td>Bachelors degree</td>
<td>1</td>
<td>1.8</td>
<td>1.8</td>
<td>96.4</td>
</tr>
<tr>
<td>Some graduate school</td>
<td>2</td>
<td>3.6</td>
<td>3.6</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Appendix K: Education of Participants Bar Graph

Note: 1- GED or high school equivalent, 2- High school diploma, 3- Some college, 4- Bachelors degree, 5- Some graduate school, 6- Masters degree, 7- Doctoral degree
References


*Organizational Behavior and Human Decision Processes, 79,* 29-55.


*Organizational Dynamics, 1*(3), 41-50.


*Academy of Management Review, 2*, 602-611.


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