The WELL Building Standard: Assessment of Effectiveness

Zachary Richardson

California Polytechnic University San Luis Obispo, California

This study aims to assess the effectiveness of the WELL Building standard. The WELL Building standard is a certification very similar in nature to that of LEED, where there are criteria that must be met in order for a building to be certified. The International WELL Building Institute claims that by adhering to their standards, building owners will be able to improve many health aspects in the lives of the occupants, as well as creating more effective workplaces for business. Through a careful analysis of the physical and mental health aspects WELL claims to improve, as well as surveying building occupants to see if these areas have actually improved, it was concluded that the International WELL Building Institute is indeed effective at accomplishing the goals and claims that they have set forth.

Key Words: WELL, Healthy Living, Certifications, Building Standards

Introduction

As the business world gets more and more competitive by the day, the need for having the most productive, healthy, and enthusiastic employees is rapidly increasing. How is a business to keep their customers if their service team is constantly stressed to the nines; if their engineering group is having low output rates; if their sales team lacks the energy and passion that they once had in the workplace? Throughout time it has been a common practice for employers to offer both monetary benefits as well as vacation benefits in an effort to increase to increase these qualities in their workforce. It is only now that we are starting to learn that there may be more effective ways of achieving this same goal.

The WELL Building Standard aims to solve some of these common issues that are encountered in the workplace by creating buildings that are the most suited for productivity and energy as possible. The WELL Building Standard was launched by the International WELL Building Institute in October of 2014 in association with the GBCI in an effort to establish themselves "The premier standard for buildings, interiors and communities seeking to implement features that support and advance human health and wellness on a large scale" (The WELL Building Standard, 2018).

Purpose

The Purpose of this research is to assess the effectiveness of the WELL Building Standard by studying the changes and effects it has had on the occupants of buildings that have achieved a WELL Certification. By studying the responses from these employees and occupants, it should be clear whether or not this is a worthwhile certification for owners and developers to strive for.

About the WELL Standard

General Overview

The WELL Building standard, operated and certified by the International WELL Building Institute, is one of the newest and most innovative building certifications in the construction industry. Rather than focusing on the sustainability of the building as a whole, the WELL building standard aims to improve the lifestyles of the occupants from a health standpoint, as well as providing a benefit to the owner through both increased productivity and financial gain. The International WELL Building Institute created their standards on 7 pillars of focus. They are as follows: Air, Water, Nourishment, Light, Fitness, Comfort, and Mind. Each pillar is broken down into roughly 20 subcategories which delineate the specific goals for each pillar. These subcategories all have an assigned point value

that is specific to each item. For a building to become WELL certified, the project must obtain a set number of points overall. There are three levels of certifications are governed by the number of points beyond the minimum required for certification. The lowest level certification is WELL Silver, followed by Gold, and then Platinum, which is the highest certification that the International WELL Building Institute awards. Only buildings that have reached these certification levels are the ones used in this study.

Benefits for Occupants

The WELL boasts several major benefits for employees and persons occupying WELL spaces. The international WELL Building Institute claims that the improvements made to WELL certified buildings have a profound effect on the lives of those living and working in the space. One of the things they seem to be most concerned about is the quality of the air; nearly a third of all the WELL features are found under the "Air" category (The WELL Building Standard, 2018). As we all know, the quality of the outside air is rapidly decreasing in today's industrial world and this poor quality air has very serious adverse effects on the humans. Air can carry toxic chemicals, pathogens, and countless other substances that are harmful to the human lungs and body. And since humans on average spend 90% of their day inside, it is crucial that the poor air of the outside world is clean and pure when it enters the indoor environment (The WELL Building Standard, 2018). This is why WELL requires the usage of state of the art HVAC equipment for providing clean air. Thus, keeping occupants healthy by limiting their exposure to airborne toxins and pathogens, limiting the amount of work days that have to miss due to illness (The WELL Building Standard, 2018).

WELL also focuses heavily on the nutrition and healthy exercise of the occupants. Some argue that this is the most important part of WELL due to the impact it has on a person's health. In combination with exercising very little, an unhealthy diet is a major contributor to the obesity problem in the united states. Obesity is the leading cause of cardiovascular disease, cancer, and many other terrible diseases (Heart Disease, 2017). On a more positive note, a healthy, well rounded diet has been proven to increase energy, enthusiasm, focus, productivity, quality sleep at night, and countless other aspects of your life (Schuna, Carly, 2017). This is why WELL collaborated with countless dieticians, doctors, and physical trainers to develop their standards for nourishment and exercise options within a WELL project (The WELL Building Standard, 2018).

Lastly, WELL boasts that their standard has a significant impact on the mental health of WELL occupants. Mental health problems and high levels of stress are estimated to reduce an individual's lifespan by nearly 10 years, which is a saddening statistic (The WELL Building Standard, 2018). This is why the WELL standard implements strategies to mitigate these issues. Some of these strategies include having what they call "relaxation rooms" for occupants to relax and get away from work; even if it just for a few minutes. They recommend buildings be located near clinical therapists or even have therapists within the building (The WELL Building Standard, 2018). Reducing mental illness and stress amongst occupants has a profound impact on their productivity and enthusiasm in the workplace.

Benefits for Owners, Developers, and Companies

All of the benefits that WELL provides to the occupants of certified buildings have huge benefits and returns to developers, owners, and the companies that work in these spaces. For the businesses as a whole that work in WELL spaces, having more enthusiastic, passionate, happier, less stressed, more productive employees can have a profound impact on the success of the company. It changes the atmosphere of the office, as well as pleasing clients and customers at a much higher rate. But it doesn't stop there. According to a 2016 study, 96% of private businesses in California provide healthcare for their employees (Percent of Private Sector..., 2017). This means that the business pays when their employees come down with an illness, and as we all know, medical bills are not cheap. Thus, businesses benefit massively from keeping their employees healthy, which is one of the overarching goals of the WELL Building Institute.

On the building owner and developer side, there are also massive financial benefits. The construction industry is headed towards a world where everything needs to be healthy and sustainable. Thus getting ahead of the curve will most likely prove as a very worthwhile investment if and when a developer chooses to sell a WELL certified Building. In terms of short term benefits, WELL buildings have the ability to bring in significantly more rent (Kirk, Patricia, 2017). John Wooz, an experienced developer who owns several WELL certified buildings in New York, was quoted as saying, "Healthy buildings command a 20% higher rent premium over the market average," speaking

in reference to the WELL Buildings he owns. This shows how high of a demand there is for these spaces from up and coming businesses and fortune 500 companies alike.

Drawbacks

Being WELL certified undoubtedly has plenty of benefits for developers, owners, and employees alike. However, there are some drawbacks involved. One of the most obvious is the cost of construction that comes with implementing systems and products that would not otherwise be used. First off, there is a cost associated with bringing a International WELL Building Institute inspector out to the jobsite to approve and certify a project. The actual cost varies from 15,000 dollars for existing construction and interiors work, to just over 30,000 dollars for ground up construction (The WELL Building Standard, 2018). Unfortunately, this is the smallest of the costs associated with WELL.

The major price increase for a project comes from the physical differences in the construction. Oddly enough, the cost for implementing WELL approved systems is actually greater in existing buildings than it is for new, ground up construction (Kirk, Patricia, 2017). In existing buildings, sometimes demolition and rework is required to fit the new WELL certified systems. For example, there may not be enough above ceiling space to install filtered registers for an HVAC system. Thus the ceiling would have to be lowered to allow these registers to be installed which would heavily increase the cost of being WELL certified. For ground up construction, these abnormal differences can be baked into the design, and thus there is no rework involved with installing them. According to an IWBI spokesperson, and confirmed by a study from the National Real Estate Investor, the cost increase of a for ground up construction is between 1 and 3 dollars per square foot. (Kirk, Patricia, 2017). This seems small, but even a one dollar per foot increase has the ability increase the cost of a large scale project by millions of dollars. For existing construction upgrades to meet WELL standards, it is about double that according to the same study by the NREI (Kirk, Patricia, 2017).

Methodology

The International WELL Building Institute claims that the buildings they certify have profound effects on the lifestyles and health of these occupants in a variety of ways, including keeping occupants healthy, improving diets, reducing stress levels, increasing enthusiasm, improving sleep patterns, and increasing the amount of exercise occupants get (The WELL Building Standard, 2018). Since most of these desired effects are very easily measurable and easy to recall, a survey was used to collect data on increased or decreased levels of these categories amongst the occupants of these buildings.

Survey Design

The aim of this survey was to create a simple yet effective platform the collect clear and useful feedback from occupants of WELL certified buildings. After fully studying the aims and goals set forth by the International WELL Building Institute it was determined that the most important factors to study were the effects of high quality indoor air, nourishment, exercise, and the mental health aspects of WELL certified buildings. The survey was 8 questions that were multiple choice in order to make the survey short in order to encourage responses, but also collect easily comparable data.

Survey Participants and Selection Process

Seeing as the survey participants had to be occupants or employees working in a building that is WELL certified, figuring out who was going to participate in the survey was crucial to this study. As it turns out, the International WELL Building Institute has a comprehensive list of nearly all the project that are WELL certified, as well as the names of the business that occupy those buildings. It was decided that the survey research should be limited to California simply due to the easy of getting in contact with these businesses for participation in the survey. There are 89 projects in California that have been certified that were publically available on the website (The WELL Building Standard, 2018). From these 89 projects, 4 were selected to be used in the survey. It was also decided that for increased likelihood of responses, it would be best to reach out to buildings that were occupied by construction related businesses. Seeing as this survey would be coming from a Construction Management major, companies in the same industry would probably be much more willing to participate.

The first building selected was BCCI Construction's headquarters in San Francisco, California. The building is WELL silver certified and was constructed in 2016 (The WELL Building Standard, 2018). They accounted for eleven responses to the survey. The next building was Sri Lanka Construction international headquarters in Los Angles, California. Their Building is WELL gold certified (The WELL Building Standard, 2018). Sri Lanka Construction accounted for eight responses to the survey. Next was the Allsteel Showroom building in Los Angeles California. Allsteel is a WELL gold certified building and accounted for 6 responses to the survey (The WELL Building Standard, 2018). Last was the RDC Studio One Eleven Headquarters in Long Beach, California. The Building is WELL gold certified and also accounted for 6 responses to the survey (The WELL Building Standard, 2018). In total, 31 responses to the survey were recorded from the 4 companies it was sent out to. Considering that the survey could only be answered by people who work full time in the building, and the busyness of the construction and architecture industry, this is a relatively high response rate and provided quality data.

Survey Contents

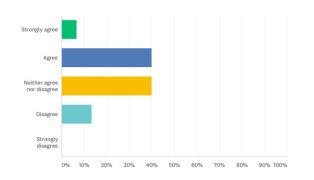
- 1. Since working in this space, I have had healthier eating habits.
 - a. Strongly Agree
 - b. Agree
 - c. Neither Agree nor Disagree
 - d. Disagree
 - e. Strongly Disagree
- Since working in this space, I have had more energy and enthusiasm in the workplace. 2.
 - a. Strongly Agree
 - b. Agree
 - c. Neither Agree nor Disagree
 - d. Disagree
 - e. Strongly Disagree
- 3. Since working in this space, I find that I exercise more often.
 - a. Strongly Agree
 - b. Agree
 - c. Neither Agree nor Disagreed. Disagree

 - e. Strongly Disagree
- 4. Since working in this space, I have been getting more sleep, and better quality sleep at night.
 - a. Strongly Agree
 - b. Agree
 - c. Neither Agree nor Disagree
 - d. Disagree
 - e. Strongly Disagree
- 5. Since working in this space, I have been leading a healthier lifestyle.
 - a. Strongly Agree
 - b. Agree
 - c. Neither Agree nor Disagree
 - d. Disagree
 - e. Strongly Disagree
- 6. Since working in this space, my stress levels in the workplace have...
 - a. Increased Significantly
 - b. Increased
 - c. Neither Increased nor Decreased
 - d. Decreased
 - e. Decreased Significantly
- 7. Since working in this space, my productivity as an employee has...
 - a. Increased Significantly
 - b. Increased
 - c. Neither Increased nor Decreased
 - d. Decreased
 - e. Decreased Significantly

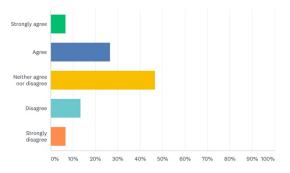
- 8. Since working in this space, the number of work days I have missed due to illness has...
 - a. Increased Significantly
 - b. Increased
 - c. Neither Increased nor Decreased
 - d. Decreased
 - e. Decreased Significantly

Analysis of Results

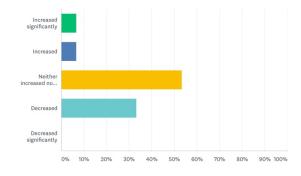
Since working in this space, I have had healthier eating habits



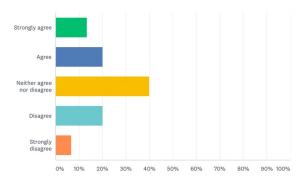
Since working in this space, I have been getting more sleep, and better quality sleep at night



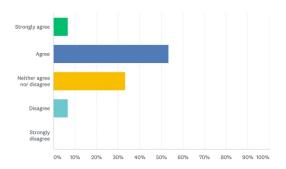
Since working in this space, my stress levels in the work place have



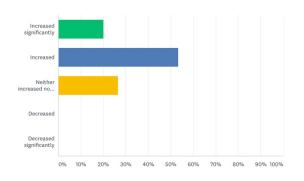
Since working in this space, I find that I exercise more often



Since working in this space, I feel as though I have been living a healthier lifestyle

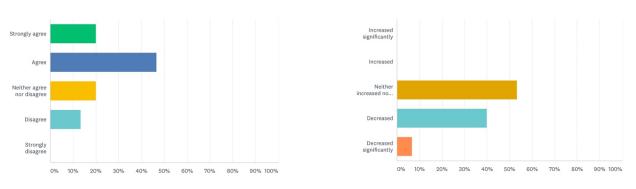


Since working in this space, my productivity as an employee has



Since working in this space, I have had more energy and enthusiasm in the work place

Since working in this space, the number of work days I have missed due to illness has



As we can see from the graphics above, the survey resulted in some very promising data. Nearly every category is showing improvement; some more than others. The areas that showed massive improvement were workplace energy and enthusiasm, and workplace productivity. Areas that showed significant improvement were eating habits, sick days, and overall lifestyle healthiness. Sleep levels improved slightly, exercise habits showed no change, and workplace stress levels showed slighting worsening results.

Conclusions

The survey of WELL building occupants made it abundantly clear that the International WELL Building Institute is having largely positive impacts on the lives of those living and working in their buildings. Occupants made it very clear that they are not only performing at much higher levels in the workplace, but are also living much healthier lives as a whole as seen in this summary graphic to the right. In this graphic, A green up arrow represents a positive

change as reported by occupants. The more arrows, the stronger the change. Yellow means neutral, and red means a negative change as reported by occupants. With less days missed due to illness, higher productivity in the workplace, and less insurance money having to be paid due to better health of employees, there are plenty of reasons for businesses to want to occupy a WELL certified Building. With certification costs of only a few thousand dollars, and increased ground-up construction costs of only one or two percent, the drawbacks of implementing WELL are few and far between. With all this being said, the

<u>CATEGORY</u>	<u>OUTCOME</u>
Eating Habits	11
Workplace Energy & Enthusiasm	111
Exercise Habits	
Sleep Levels	t
Lifestyle Healthiness	11
Workkplace Stress Levels	1
Workplace Productivity	111
Sick Days	11

only conclusion to be made is that the International WELL Building Institute is indeed effective at accomplishing their goal of improving the lives of occupants, as well as financially and logistically benefitting the companies who occupy the buildings and the owners or building developers.

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