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Use of Personality Profile Assessments in the Construction Industry

Brian Richard Childs

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Science

Justin E. Weidman, Chair
Clifton B. Farnsworth
Jay P. Christofferson

School of Technology
Brigham Young University
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ABSTRACT

Use of Personality Profile Assessments in the Construction Industry

Brian Richard Childs
School of Technology, BYU
Master of Science

Various industries are using personality profile assessments as tools to help reduce employee turnover. Employee turnover is a continuing challenge in the construction industry that has negative effects on construction companies. Research found that it was difficult to know if companies in the construction industry are using personality profile assessments as a tool to help reduce employee turnover. After understanding that other industries were using personality profile assessments in their hiring, promoting, team building and leadership development to reduce turnover, it was desired to understand if the construction industry was doing the same. This research performed a survey among the top construction companies to understand if construction companies were using assessments, and if it had any effect on the turnover of those companies. The survey results provided information on the amount of companies using personality profile assessments, as well as additional insights and attitudes among these companies, whether they used assessments or not. The results of this survey and research have provided strong indicators that personality profile assessments are tools that will help construction companies reduce employee turnover.

Keywords: personality profile assessment, employee turnover, construction, human resources

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1 INTRODUCTION

1.1 Background

Human Resource Management is a principal aspect of company management in any industry. In the construction trade, this management is challenging due to the high level of employee turnover (Tulacz 2001, 14). Construction companies find that high employee turnover rates have various negative effects on business, from the company's bottom line, to time spent training and developing workers, as well as the effect on employee morale (Rubin and others 2006; Tulacz 2001; Parker and Skitmore 2005).

In the construction industry, employee turnover is one of the foremost causes of low competitiveness and poor performance (Jones, Ross, and Sertyesilisik 2010). The injunction to understand the importance of employee turnover, its causes, and how to predict and prevent it, therefore, is crucial for a favorable bottom-line. A significant effect of employee turnover in the construction industry includes the costs associated with the hiring, training, and maintaining qualified workers, as well as strengthening employee morale, which tolls lead to lost productivity. In the commercial construction industry, a mistake in hiring, or other employee turnover cases, could cost the company as much as 2.5 times a departed worker's salary (Powers 2007). This financial risk is significant and warrants the investigation into better hiring practices, turnover research, and cost evaluation, thereby reducing the managerial load and increasing net profitability.

1.2 Statement of the Problem

Employee turnover is a problem in the construction industry; it negatively affects the industry and construction companies (Tulacz 2001). Employee turnover was strategically being addressed and positively improved by other industries through the use of personality profile assessments (Wessel 2003; Livadas 2014). A study was needed to investigate if the construction industry was using personality profile assessments and if their use was affecting and addressing the problem of employee turnover.

Companies are realizing that using a simple resume and interview in the recruiting process is not always the most effective method and may contribute to the turnover within the company when. The following quote by Ericksen states the success rate of hiring the right individual when using a resume and job interview.

“Traditional methods of recruiting, which rely heavily on resumes and interview, often do not provide enough information to effectively evaluate a candidate. The probability of selecting the right individual the first time increases as layers of multiple modes of evaluation are added. Statistically, using a resume and job interview as the principle recruiting strategy has a success rate of just 14%” (Ericksen and Twigg 2008).

Many industries have sought to improve their hiring methods because of similarly low statistics. One tactic that other industries have used to attempt to improve the rate of hiring success is the use of personality profile assessments administered during the hiring process and throughout the career of the employees (Wessel 2003; Livadas 2014). Based on a review of literature, it was discovered that many other companies and industries besides the construction industry use personality profile assessments to help reduce employee turnover. Outside of the primary research initiated in this study, there was also difficulty finding statistics or specific examples of personality profile assessments being used in the construction industry. This lack of source research made it problematic to understand if construction companies were aware of

personality profile assessments or did not feel that they would be useful as a tool to help reduce employee turnover. As construction companies seem to be unaware of the effects personality profile assessments can have on selecting and developing the right employee, research was required to identify if there were construction companies using these assessments and, if so, how they were being used.

1.3 Purpose of the Research

The purpose of this research was to identify if and how construction companies were using personality profile assessments in the hiring, training, team formation, promotion and development of employees. This researcher also sought to understand how these assessments were being utilized and if these methods have had an effect on employee turnover at companies where the assessments were being used.

1.4 Research Objectives

1. Identify if and for what construction companies were using personality profile assessments in the hiring, training, team formation, promotion and development of employees.
2. Investigate how and when construction companies used personality profile assessments. Also to discover from companies that used them, how effective the implementation of personality profile assessments was, and if the use had affected the employee turnover rate at those construction companies. For construction companies that did not use personality profile assessments, understand why they did not use them at their company.

3. Identify the different personality profile assessments used in the construction industry human resource management departments.
4. Provide future recommendations for companies in the construction industry who look to implement more effective employee practices and reduce turnover rates.

In order to achieve these objectives, data was collected from large, successful commercial construction companies, throughout the United States, by a phone survey to determine what personality profile assessments they were using, if any, and how these assessments were being used to influence employee decisions and improve company operations. This research shows the most current practices in the commercial construction industry as pertains to the use of personality profile assessments and a company's employees. It also provides further insight into future trends in hiring and the use of personality profiling in the construction industry.

1.5 Assumptions

- The current basic method of hiring in construction using resumes and interviews is not the most effective technique for hiring employees and reducing turnover.
- The risks of employee turnover in the construction industry were substantial enough to warrant research.
- The commercial construction companies in this study were no different than the majority of commercial contractors in the United States. Therefore, research trends should remain consistent over a national population.

1.6 Delimitations

- This research addressed only large, successful commercial construction companies and not single-family residential, heavy civil, or industrial construction.
- This research was limited to surveying large, successful commercial construction companies within the United States.
- Research data was gathered from 78 construction companies randomly selected from the Engineering News Record 2014 Top 400 Contractors list.
- Through the duration of the research, it was assumed that these companies aforementioned understand the definition and use of personality profile assessments. If this definition was not understood, it was defined as explained in the definitions section of this chapter.

1.7 Definitions

The following terms used throughout this research are defined as follows:

Employee Retention: The ability of an organization to retain its employees. It also relates to the efforts by which employers attempt to retain employees in their workforce. Employee retention (as used in this thesis) is used as both the strategy and the outcome.

Employee Turnover: The rate at which an employee is hired and then replaced with a new employee due to voluntary or involuntary acquittal.

Personality Profile Assessment: A hiring and employee management tool used to provide evaluation of an employee's personal attributes, values, and life skills in an effort to maximize

his or her job performance, position, culture fit, and future contributions and development within the company.

Traditional Hiring Methods: Conventional tools such as interviews and resumes used to hire and assess both future and current employees.

Avoidable Turnover: A turnover that happens in avoidable circumstances. Any turnover that occurs because of something that can be controlled is considered avoidable turnover.

Unavoidable Turnover: Turnover caused because of unavoidable circumstances such as an employee's death, illness, or a spouse's relocation or pregnancy.

Involuntary Turnover: Turnover that occurs when an employer makes the decision to discharge an employee and the employee unwillingly leaves his or her position. This turnover is employer initiated.

Voluntary Turnover: Turnover that occurs when an employee willingly leaves his or her position by choice. This turnover is employee initiated.

Culture: Values and practices shared by a group of people. This can also refer to a set of expectations created by the leader of the group. It also includes the personality and perspectives of a group.

2 REVIEW OF LITERATURE

Employee turnover is a continuing challenge for companies in all industries. This review of literature sought to understand the effects of employee turnover in all business industries, though focusing specifically on the construction industry. The review also looked at what other industries besides the construction industry have done to reduce employee turnover and what the construction industry has done to increase employee retention. Personality profile assessments, which are used by some industries to reduce employee turnover, were reviewed for how they were used for employee related decisions. The types of personality profile assessments was also investigated.

2.1 Employee Turnover

Employee turnover is calculated as the number of employee terminations in a given period – either voluntary, involuntary, or both – divided by the average number of active employees during the same period (J Deane Waldman and Arora 2004). Another definition of employee turnover states that “turnover involves leaving any job of any duration and is usually thought of as being followed by continued regular employment” (Iqbal 2010).

Managers or companies may analyze employee turnover as the entire process that is involved with filling a vacancy. When a position is vacated within an organization, a new employee must be hired and trained. This cycle of replacement is known as turnover (Iqbal

2010). A high employee turnover rate means a company is losing a high rate of employees in a given period of time, due to either firing or due to quitting. Employee turnover can be seen as voluntary, which is initiated by the employee, and involuntary when the initiation is done by the organization. Involuntary turnover may usually involve a discharge type of turnover – focused on the individual employee for performance or discipline problems – or a downsizing type of turnover, which occurs because of an organization’s restructuring. Voluntary turnover may include avoidable turnover, which may have been prevented by organizational action. Unavoidable turnover may involve unforeseen actions such as an employee moving or an employee’s death (Iqbal 2010). A company that has a low employee turnover rate is a company that retains a high percentage of employees in a given period of time and does not lose many by termination or quitting. This retention is the desired ideal.

Employee turnover is one of the main issues for companies that affect the overall performance of the organization. While companies and organizations have become more aware of managerial issues over the past couple decades, employee turnover is still an issue throughout the world. In well-developed nations with stronger economies, the employee turnover rate is still high (Tariq, Ramzan, and Riaz 2013). Organizations recognize that satisfied employees can improve performance and that employee turnover may be a sign that employees are not satisfied for one reason or another (Tariq, Ramzan, and Riaz 2013).

Employee turnover affects and involves more than just simply replacing an employee. An employee that leaves voluntarily or one that is asked to leave by the company can cause disruptions in areas such as team dynamics, unit performance, and company operations (Iqbal 2010). Either type of turnover brings costs and problems to solve to the organization. As companies and organizations have a need to replace employees, the investment in past

employees is lost, along with productiveness and potential profits (Simons and Hinkin 2001). The departure of an employee causes the organization to experience a loss in resources and an increase in operation of costs (Lowe 2004). Experiencing excessive employee turnover can also have a negative effect on the overall productivity of a firm. Employee turnover must be successfully managed or it will be a detriment to organizations striving for high profitability and maximum profits (Iqbal 2010).

2.1.1 Negative Effects of Employee Turnover

Employee turnover is a sophisticated problem for a company because it can affect so many departments and aspects of a company's operations. When an employee departs from a company, there are direct and indirect costs that affect the company in various ways. For those costs that are indirect and difficult to calculate, companies may not realize the actual costs and effects that are occurring because of employee turnover within the organization (Frank, Finnegan, and Taylor 2004). Problems and costs that may come to an organization because of employee turnover may include loss in resources, increase in operations costs, separation expenses, decreased productivity, decreased morale of remaining employees, challenges of replacing valuable employees, new-hire training, quality control problems, and drops in communication and time or difficulty in developing teamwork or morale (Lowe 2004; Singh 2002; Iqbal 2010). Many of these issues may bring significant financial impacts to companies.

2.1.2 Financial Effects Resulting from Employee Turnover

One of the most outstanding effects of high employee turnover rates is the financial burden it places on a company. These financial costs can vary, but have a great negative effect on companies. According to the U.S. Department of Labor, it costs a company one-third of a new

hire's annual salary to replace an employee (Michaud 2001; Michaud 2005). Another source, Kelly Chisholm, an FMI talent development consultant and survey author, said, "With the cost of replacement and training as high as 2.5 times a departed worker's salary, the economic incentive to improve retention rates is high" (Powers 2007). Confirming Chisholm's opinion, the pharmaceutical giant, Merck and Company, estimated that its turnover costs were between 150% and 250% of the employee's annual salary. Granted, the cost of losing an employee can differ depending on salary, position or time at the company, but the financial consequences can be considerable, as seen by these companies (Iqbal 2010). When an employee leaves a company, there must then begin a recruitment and selection process for a new employee. The costs associated with recruitment of a new employee include the cost for advertising a position, the time of reviewing and receiving resumes and references, and the time for interviewing potential employees (Tziner and Birati 1996). If a company has a high turnover rate, then there will be higher costs and time for recruitment and selection of new employees (Singh 2002; Iqbal 2010). These effects may begin to have an influence on the attitude or moral of the employees within the company.

2.1.3 Effects of Turnover on Employee Morale

An additional cost of employee turnover is the cost of overtime that may occur as a result of an employee leaving. Other employees may now have added responsibility and workloads while a search for a new employee occurs. The costs of overtime from additional work will be a direct cost to the company. Even while employees experience additional workloads and possibly overtime, they may not be happy about it and start feeling overworked, especially if they are not compensated for the additional work. If employees are feeling this way, their morale may begin to decline, which may in turn affect the quality of work provided. These effects may not be easy

to identify, but do happen as a result of an employee leaving the company (Singh 2002; Iqbal 2010).

2.1.4 Replacing Employees in the Turnover Process

When a company loses an employee, human resource personnel must expend effort through the process of replacing that employee, which is yet another negative effect of employee turnover. Previously mentioned were direct and indirect costs of employee turnover; the process of replacing an employee involves both. There are costs of recruiting, hiring and training, but there are also the costs in effort of continuing to provide the same amount of service in the company while replacing and training a new employee. During the process of replacing and training a new employee, other employees may be required to cover for that position as well and maintain the productivity of that position until the replacement becomes fully proficient. As the replacement takes on more responsibility, he or she will still continue to require more time and resources for support and training from the company (Hillmer, Hillmer, and McRoberts 2004).

2.1.5 Turnover in the Construction Industry

The construction industry has a history of dealing with the challenge of employee turnover and working through those challenges that may be specifically related to the industry itself (Tulacz 2001). From a study conducted on electrical contractors, it was found that there are many influences on an employee choosing to leave a contractor. Not enough recognition, excessive surveillance, work location, project safety, and relationships with owners or management are factors in employee turnover within the construction industry (Sargent, Sullivan, and Hanna 2003).

As previously outlined, employee turnover in the construction industry is a major challenge and can have significant impacts on construction projects and requires significant and innovative attention (Parker and Skitmore 2005; Tasci and Mowry 2009). Michael Creed, the CEO of the engineering firm McKim and Creed Wilmington, N.C., said, “Employee turnover is the defining issue in our industry. We’ve finally realized we’re in a people business. We can’t get great people the same way we’ve been doing it for the last 20 years” (Rubin and others 2006). Companies and firms in the construction industry are seeing the negative effects that employee turnover can have on their organizations (Rubin and others 2006).

2.1.6 Financial Impact in Construction Industry

High employee turnover creates a drag on the bottom line of a construction company. Construction companies and construction management consultants are increasingly using employee turnover and retention rates to calculate the cost of implications they are having on the organization (Nelson 2007). From the results of an EFCG (Environmental Financial Consulting Group) survey, the financial cost in the construction industry for employee turnover is comparable to other industries. After calculating the cost of the financial impact of employee turnover, which includes damage to client relations or lost corporate knowledge, some managers estimated the turnover cost for one employee could exceed \$75,000. Paul Zofnass, the President of the EFCG, a boutique investment-banking firm that services to engineering/consulting, architecture and construction firms, believes the employee turnover cost is closer to \$50,000. He also estimates that the employee turnover cost for more than 100 firms from the EFCG survey could be at least \$1.8 billion per year (Rubin and others 2006).

The cost of a branch manager leaving a construction company is one example of the destructive financial impact an employee can have departing an organization. This departure could cost the company a large amount of money because of the “cascading effect” it could have on others in the firm. Also, part of this loss is the market connections and intelligence that the branch manager has. One company representative stated that he could identify a \$1.5 million impact over 2 ½ years of one manager that didn’t work out (Rubin and others 2006).

An additional issue that comes with employee turnover is the cost to retain employees. PAS Vice President Ron Phillips suggests that the pressure on companies to retain their employees can cause wages to increase (Rubin and others 2006). If a superintendent, for example, wants more money or has an offer with another company, it may be worth paying that employee a few thousand dollars more. The reason for this is because that employee may be able to save the project much more than the increase of pay compared to the cost to recruit, hire and train a new employee (Rubin and others 2006; Gross 2001).

When a construction company does have a need to replace an employee and has realized the cost of losing an employee, it may put greater effort into hiring the right employee and retaining that employee, and to its own benefit. In this situation, some companies turn to recruiters, who in turn claim that high-level searches are becoming more labor intensive and costly. Agency search firm fees can cost an organization up to 35% percent of a new employee’s annual base salary (Snell 2009). At one engineering firm, the CFO spent \$40,000 searching for an employee to fill a position that was not even a top-level position within the company (Rubin and others 2006). Construction companies invest greatly in their employees and when they lose those employees, it is a significant cost financially to the company (Kochanski and Sorensen 2008; Rubin and others 2006).

2.1.7 Employee Turnover Effects on Networks and Projects

When an employee leaves a construction company, he or she takes with him or her the organization's knowledge and possibly its client base. This is an expense to the company and removes from the collective pool the knowledge that the employee has gained while employed there. Employees contain a great amount of information and relationships that come from experience while working with potential clients, owners, subcontractors, city officials and many other individuals or groups. Losing one of those employees also means losing information and relationships that can be very valuable to the company (Rubin and others 2006).

Another issue comes when the replacement superintendent or project manager steps in because that individual's commitment and knowledge to the project may not be as high. This can be caused from the lack of background; the new manager must learn the project's details, goals, plans and mechanics of the project (Parker and Skitmore 2005).

Turnover of the project management affects the project team directly and may disturb the project performance and possibly affect the profitability of the company. Not having consistent managers on a construction project may bring a variety of negative effects to the project, including poor project execution and completion, system upgrades, morale, teamwork, workloads, group stress levels, communication breakdown, loss of direction, increased workloads, disorganization, loss of teamwork, and other possible indirect effects.

Employee turnover within the management of a project has also been found to have consequences on the decisions of cost and schedule trade-offs and staff allocation strategies, which will affect the overall schedule and cost of the project. Employee turnover involving project managers can also create a reduction in the group performance on a project because of the loss of information that goes when a project manager leaves during a project. Turnover could

also have a negative effect on the organization or project group's company knowledge. If employees are continually having turnover, the new employees must be constantly trained; time is lost for additional learning because more time is placed on entry level training, instead focusing on organizational learning and improvement (Parker and Skitmore 2005; Abraham 2007).

2.1.8 Employee Retention Strategies and Plans

Employee turnover has a dramatic effect on companies in and outside the construction industry. As construction companies experience turnover, they see the negative effects on leadership development and talent within their own organizations. As a construction company develops and grows, an investment in a plan for strategic employee recruitment, training, and retention must happen in order to win the employee war for talent (Gross 2001). Through clear strategies and hard work, firms are developing successful employee retention plans (Powers 2007).

Organizations are also realizing that just hiring an employee is not enough. Employees bring their own expectations to the company, and desire a plan or a path from their supervisors once they are hired. The employee wants to know what the company has done to plan where that employee will be in a few years; a lack of specific plans may lead to higher turnover. "Firms attract people into their company but do not provide a clear path, so employees might not want to stay if they don't know where they are going to be in five years down the road" (Powers 2007). It is important that within the first few months of employment, goals are established with a new employee. Companies that create a specific strategy for retention through proper planning will see tremendous benefits from their efforts (Abraham 2007).

Construction companies that have had strategic human resource plans have achieved higher performance, productivity, cost effectiveness, and efficiency and employee retention (Brandenburg, Haas, and Byrom 2006). As construction companies recognize the costs of replacing an employee, more companies are beginning to budget for training activities for their employees than in previous years. In 2007, 82% of companies budgeted for training activities, versus 54% in 2003. Sundt Construction Inc., located in Tempe, Arizona, uses training and development to improve its employee retention. Sundt provides extensive training for its supervisors to ensure that employees are engaged and happy. They felt that this has resulted in better retention and performance of its employees (Powers 2007).

Many companies, including construction companies have a type of mission statement or certain culture that they are striving to achieve. They are looking for employees that work well and embrace the culture of the company. Employees themselves are also looking for work environments that match their character and goals (Meyer and others 2010). Generally a company's top employees or executives create a mission statement or value system. As this culture is created, leaders will desire that all employees will buy into this culture and develop and cultivate it, hopefully a culture that focuses on valuing people, fostering teamwork, and open communication (Cassidy 2008). As a company grows, the top leaders and executives may desire to find employees with similar values or mission statements that the company lives by. One of the great challenges for companies is finding an employee who is the right "fit" in that culture. If a company can find someone who has the same desires as the company in terms of its goals, mission statement and culture, both parties are likely to work well together and desire to stay with one another for a longer period of time (Abraham 2007).

2.2 Personality Profile Assessments

A personality profile assessment can be defined as a test or evaluation that measures a person's decision, values, choices, attitudes, preferences, and/or interests. These personality profile assessments can give employers an idea of how potential employees react in the workplace given the information, emotions, problem solving, and social interaction data provided by the tests (Livadas 2014). A personality profile assessment is designed to let the one being assessed to choose which trait or characteristic they feel matches their own choices or personality and therefore has no wrong answer. The personality profile assessment looks at how a person makes choices, what their preferences or interests are and how they make decisions (Hart and Sheldon 2007). These assessments have also been used in succession planning, leadership development, selection of team members and one-to-one coaching (Livadas 2014).

2.2.1 Uses of Personality Profile Assessments

As personality profile assessments have been used more consistently by companies and developed further, they are being used not only for hiring employees, but also throughout the career development of employees. Personality profile tests are being used for training, recruitment, conflict resolution, team placement, leadership development and more. Personality profile assessments assist companies in finding the right personality they are seeking to hire, team with other employees and develop employees who "fit" the company (Hart and Sheldon 2007). Utilizing the full spectrum of possibilities provided by the results of a personality profile assessment, companies can increase the longevity of their employees as well as the overall satisfaction of each employee (Krell 2005). Because personality profile assessments may be used in so many areas of a company, such as promoting, development, team placement or other training, a few of these uses will be discussed for how they can be applied and utilized.

2.2.2 Using Personality Profile Assessments to Hire

The use of personality profile assessments has developed beyond using them to reduce the number of candidates in the potential employee pool. HR departments are using personality assessments within their own companies to find the common traits or personality strengths. They can then utilize this information and use it as key characteristics in their search for future employees. Next, they may use a personality assessment to determine potential employees of the company. This strategy allows companies to take an aggressive approach to hiring by knowing what personalities they currently have within their company and being able to choose specific personalities they are looking to hire. This reduces the chance that the employee will just work out (Krell 2005).

Personality profile assessments allow companies that are looking to hire, to search more accurately for employees with specific personalities that they know are successful in specific positions or scenarios within their company. One company may be looking to hire a person who possesses a specific personality or characteristic. Another company may be looking for a personality that matches with a certain position. A company may also use a personality assessment to find an employee with a personality that works well with management or specific teams within the company. At Yankee Candle, personality assessments are being used to ensure that the fit between the applicant and the position is compatible (Krell 2005).

Furthermore, The Yankee Candle Company HR Senior Vice President Martha LaCroix, SPHR, Ph.D. at Yankee Candle says “There are a lot of milestones along the employee life cycle, and we use this tool at every single one of them.” At Yankee Candle, personality assessments are used to help with leadership development, individual development, team communication,

conflict resolution, coaching and hiring (Krell 2005). This is just one example of a company that is aggressively using personality profile assessments for hiring and other purposes.

Another example of a company using a personality test is Benchmark Assisted Living in Wellesley, Massachusetts. Their personality tests are used to ensure that potential employees fit the needs of their business as well as those that might complement the personality of executives within the company. Jill Haselman, Senior Vice President of organizational development and culture at Benchmark Assisted Living says, “We want to make sure that we’re not adding leaders in personality areas where we’re already heavy. We want to make sure we have the right qualities to guide us through the unique challenges of our next stage of growth.” Jill is using personality profile assessments to ensure the team is, personality wise, diverse (Krell 2005).

As shown by these examples, there are a variety of approaches to using and implementing personality profile assessments into the hiring plan of a company. These approaches can be repeated or rotated depending on the company’s needs, all while strategically using the personality of potential employees to give them the greatest chance to be successful within the company.

2.2.3 Using Personality Profiles for Employee Placement

Companies have also used personality profile assessments for placing employees in positions where they will fit the culture more effectively. They have been used to place employees within teams where their personalities will work to understand differences and figure out how to work well with each other and find more effective ways to communicate. Companies want to find ways to make teams work well and the personality profile assessments have helped

to more accurately identify personalities and allow managers to group those personalities together so that they perform more effectively (Cline 2004).

2.3 Personality Profile Assessment Reviews

In order to more fully understand personality profile assessments that companies were using, the following table was created to summarize various assessments. The data gathered for these assessments was taken from the website of each assessment and to the authors best knowledge describes what the assessments measure, its features and uses are.

Table 2-1: Analysis of Various Personality Profile Assessments

Assessment Name	What it Measures:	Features:	Assessment Uses:
Berke Assessment	Talent, personality, behaviors and intelligence.	Allows for job description and matching candidates. Shows multiple job descriptions and which individuals matched which jobs. Shows strengths and weaknesses of each individual. Provides follow up interview questions.	Hiring, promoting, and training
Employee Personality Profile (EPP)	Twelve personality traits that provide valuable insights into a person's work styles and how they are likely to interact with co-workers, management and customers.	It can be used for any position, and contains position-specific benchmarks that allow administrators to compare an individual's scores against composite profiles to determine likely job fit.	Hiring, team placement, and promotions.
Hire Success (Employment Testing System)	Personality Traits & basic traits	Compares best traits of current employees in specific positions to those of potential employees. Allows viewer to see other information about each candidate next to their scores like their degree, etc. Allows tailoring your job description in great detail in order find the best fit. Gives complimentary software that can develop a set of questions and add them to the test for a more tailored assessment.	Hiring, promotion and team placement.
Wonderlic	Learning, problem solving, likelihood of counterproductive behavior, conscientiousness, stability and agreeableness.	Has over 50 multiple choice questions that are to be answered in under 12 minutes. Available in 12 different languages.	Hiring and promotion.
Pro.file People	Key characteristics chosen by the hiring company and behavioral patterns.	Scores are measured against a behavioral job competency model.	Hiring, promoting and training,
Myers-Briggs Type Indicator®	How people perceive the world and how they make decisions, perceptions and judgment.	The results end in 1 of 16 personality types. Because a person's personality type with this test can be found, it is especially useful in creating teams of people.	Hiring, promoting and team building.
Profile Evaluations, Inc. Comprehensive Personality Profile® (CPP)®	Practical skill sets, abilities, tendencies and personality,	Can be taken online or with paper and pencil, generally used for public safety officials.	Hiring, promoting, training and team building.
ProfileXT®	Productivity, thinking, reasoning, behavioral traits, and occupational interests.	Can be customized by company, department, manager, position, geography or any combination of these factors.	Hiring, promoting, training and Self-Improvement.
Color Code	Strengths, limitations and personality traits.	Generally used for getting to know employees that are already a part of the company and grouping them together for specific tasks based on personality scores.	Hiring, training and team building.

Table 2-1, Cont'd

DiSC Profile	Dominance, influence, steadiness and compliance.	Groups people into various behavioral categories using a 24-item questionnaire and was developed by the inventor of the lie detector.	Hiring and training.
Herrmann Brain Dominance Instrument	Thinking styles, communication, decision-making, problem solving and management style.	Candidates are tagged as being 1 of 4 different styles of thinkers. This is a 120 question online test.	Hiring and training.
Manchester Personality Questionnaire	Creative and innovative behavior, strengths, weaknesses and areas of competence.	Designed to predict qualities that have a high impact on work success. Also focuses on and measures creativity.	Hiring and Training.
Predictive Index System	Workplace behavior such as formal or informal, reserved or extraverted, a follower or a leader, etc.	Known as the "PI." Multiple choice test.	Hiring, training, promoting and Team building.
Watson Glaser Critical Thinking Appraisal	Critical reasoning, inference, recognition of assumptions, deduction, interpretation and evaluation of arguments.	Generally used to identify worthy management candidates. Been in use since 1925. 40 questions, multiple choice, online.	Training and promoting.
Work Personality Index Select	Characteristics, tendencies, types of positions in which an individual will thrive.	A 30 minute test that assesses 17 personality traits. Known as the "WPI."	Hiring and promoting.
Work Profile Questionnaire	Communication style, emotional resilience, organizational focus, relationships with others and change orientation.	Candidates are asked to rate 100 adjectives and phrases describing their typical work behavior on a scale of 1-5.	Hiring and training.
Gallup StrengthsFinder	An individuals top 5 strengths.	Describes who you are in detail and provides a comprehensive understanding of yourself, your strengths, and what makes you stand out.	Hiring

2.3.1 Additional Research of Assessments

The following is a more detailed analysis of four personality profile assessments. The DiSC, The Predictive Index, Myers-Briggs Type Indicator and Gallup Strengths Finder. These assessments showed to be commonly used assessments when researching personality profile assessments during the literature review. The following is in-depth information about these assessments to understand more about why these assessments may be commonly used.

Meyer Briggs Type Indicator

The Meyer Briggs Type Indicator was created by two women who based the test on the theories of the book Psychological Types (The Myers & Briggs Foundation 2015). The theory of this book states that people have different ways of perceiving the world and people make different decisions based on their perception. The test was created with the idea that a knowledge of people's type lessens friction and reveals differences in values.

The Meyer Briggs Type Indicator boasts the support of the following functions: managing others, development of leadership skills, executive coaching, conflict resolution, change management and simply choosing the right employee for a position or finding a job description that fits your test results. The current English version of the Meyer Briggs Type Indicator includes 93 forced-choice questions and the questions are a mixture of short statements and word pairs. The choices are not exact opposites but are chosen to reflect opposite preferences. The participants may also choose to skip a question if they feel they are not able to choose. There is no “right” or “wrong” answer to the assessment, only different preferences. The results show preferences toward one or the other of the following areas: extraversion vs. introversion, sensing vs. intuition, thinking vs. feeling, and judging vs. perceiving. This in-depth assessment could be used to the advantage of a company in or out of the construction industry.

DiSC

The DiSC is a personality profile assessment tool that was developed for improvement in work productivity, teamwork and communication. It helps individuals discuss their behavioral differences. For those that participate, they will be asked a series of questions that produce a detailed report about the person’s personality and behavior. DiSC delivers results in a simple language so that people can better understand themselves to help adapt their behaviors with others. It is designed for various relationships such as building teams or identifying leadership tendencies.

DiSC gives an increased self-knowledge, which is identified as how you solve problems, or respond to predicaments, or what motivates you. It also helps with minimizing conflicts in teams to improve teamwork. DiSC also assists in developing sales skills by identifying customer styles. Understanding natures and priorities of employees and team members can also help those

who serve in management positions and help leaders become well-rounded and to be more effective managers.

DiSC stands for Dominance, Influence, Steadiness and Conscientiousness. These are the categories that the results of the assessment will be categorized in. Those who score high in “Dominance” focus on accomplishing results and the bottom line with confidence. “Influence” persons place emphasis on influencing others as well as openness and relationships. Those who are placed in the “Steadiness” category prioritize cooperation, sincerity and dependability. “Conscientiousness” person’s importance is on quality, accuracy, expertise and competency. These categories may help employers choose the right personality type for specific positions.

The Predictive Index

The Predictive Index is known as an assessment that is scientifically validated and predicts workplace behavior. It helps provide understanding of the behavioral needs and drives that motivate people to work. The Predictive Index has been used for over 55 years.

The actual survey is given in the form of an adjective checklist, which takes approximately 10 minutes to complete. Managers can use the results to get detailed information into the behavioral drives of people. This assessment has a focus on work-related uses and strives to provide valid and reliable results. The Predictive Index is designed to be used for more than just hiring. It is a tool that can give managers a deeper understanding of employee performance to help improve communication, team effectiveness, employee development and has uses in other areas. The Predictive Index states that its results can help with improved productivity, employee retention, job satisfaction and manager effectiveness, which can create a high performing culture.

Gallup Strengths Finder

The Gallup Strengths Finder has more than 40 years of research behind the assessment, which has helped millions discover and develop their natural talents. It looks at the characteristics of what makes a person unique by using more than 5,000 personalized strengths insights that they have discovered in recent years. This will help to understand how each of a person's top five themes works in their life on a personal level. Each person will receive different, personalized descriptions of how those themes work in their individual lives.

Once one completes the online assessment, they will also receive an action-planning guide that includes a top five theme report, 50 ideas for action, and a strengths discovery activity to help people think about their talents, experience, skills and knowledge.

2.4 Negative Aspects of Using Personality Profile Assessments

The main focus of this research has been to identify how companies have used personality profile assessments in positive ways to help them with their employee decisions. As with most things, the opposing perspective or view should also be considered to identify other issues that may arise with the use of personality profile assessments. Research in the early 1990's found that predicting job performance can be helped by knowing job performance. This research brought further interest in the use of personality profile assessments. From some separate research and additional discussion at a conference in 2004, the question has been raised that these findings and uses of personality profile assessments possibly need to be reconsidered. Their research has brought to attention certain issues in regards to companies and employees using personality profile assessments or similar tests. One issue that cannot be avoided is the faking of responses or answers given on personality profile assessments. They even go on to suggest that

personality profile assessments may or may not be valid for predicting job performance. The researchers also bring up that even if the personality profile assessments have value for employee selection, further research should focus on finding alternatives to self-report personality measures (Morgeson and others 2007).

An unconnected research looked at a specific industry to understand more fully negative effects that may arise from using personality profile assessments. This research looked at the use of personality profile assessments among entry-level law enforcement officers. This research identified the difficulty of properly using the assessments in the ways they were designed to be administered. They suggested that the assessments were not being properly administered to create accurate results on these entry-level law enforcement officers. If an assessment is administered to a group of individuals, that assessment should be sure it functions for the purpose and implementation for that type of group or company. If it is not, there will be a disconnect between the assessment and those who are taking the assessment (Barrett and others 2003).

Summarizing the findings of these two different researches, some negative issues may include the potential of individuals falsifying information when taking the personality profile assessments, as well as improperly using an assessment or using an assessment for the wrong purpose. Companies that are administering the assessments should be aware of the risk of having employees provide false answers on the tests in an effort to provide the “right” responses. Companies should also be aware and careful of which assessments they are using at their company, what those assessment results will provide, and if the purpose for using the assessment matches the intended purpose of the company.

3 METHODOLOGY

3.1 The Method

The purpose of this research was to identify if construction companies were using personality profile assessments, and if so, whether they were using them in the hiring, training, team formation and promotion of employees. The research also aimed to identify what personality profile assessments were being used, and how companies used them to reduce turnover rates in the construction industry.

The research was done through utilizing a cross-sectional survey. A cross-sectional survey is used to gather information on a particular set of people at a single point in time (Institute for Work & Health 2015) . This type of research can use qualitative or quantitative questions to gain the most information about that population during that time. In this research, it enabled the author of this thesis to identify the level construction companies were aware of or if personality profile assessments were implemented as of a certain date. Qualitative data was collected through open-ended questions, allowing the respondents to answer freely. Quantitative data was collected through multiple-choice questions. Utilizing a cross-sectional survey for this research provided valuable data in response to the objectives of this research the questions that have been compiled.

In order to understand what personality profile assessments the construction industry was using and how they were using them, a survey was administered to participants working for large

contractors. This survey was developed to ascertain the awareness of personality profile assessments and their use in relation to employee turnover within construction companies.

3.2 Survey Questions

The survey questions were developed with the purpose of obtaining first hand data about the use of personality profile assessments among construction companies. The author, along with faculty members and input from industry professionals helped create the survey questionnaire. The first survey question asked the respondent to identify if their construction company used personality profile assessments. If the response was affirmative the participant was lead to a series of questions that requested further information about the company's practice of using personality profile assessments. If the answer was negative, then the participant was lead to a series of questions that requested information from the company as to why they did not utilize personality profile assessment.

Several revisions of both tracks of the questionnaire were developed and then the initial survey was pilot tested on a smaller population to determine the validity and the reliability of the questions. The results of the pilot study helped the researchers to refine the questionnaire and remove questions that were not deemed valid or reliable. The pilot study also revealed areas where the questionnaire needed to be strengthened to obtain the desired results. Upon a revision of the original pilot survey, the researchers proceeded with the full study.

3.2.1 Pilot Study

To test the validity of the initial survey questions that were developed, researchers administered the questionnaire to 10 respondents from construction companies and then reviewed the responses to see if any changes needed to be made to the questions. Ten companies

were contacted via phone and given the questionnaire. Three of the responses were in the affirmative of using personality profile assessments and seven of the responses were from companies that did not use personality profile assessments. Responses of both “yes” and “no” to using personality profile assessments was desired to ensure both sets of questions provided the desired data.

After performing the pilot study and recording the responses, the majority of the survey questions appeared to be providing reliable data and responses that could yield valuable data from the construction companies. For those companies that were using personality profile assessments, the answers that were received seemed natural and the companies were knowledgeable in the subject areas relating to the questions. These responses gave substantial results about how and why they use the assessments and how it was affecting their company operations and employee turnover. Questions that were not applicable or that were deemed difficult for companies to answer or understand were revised or taken out of the questionnaire. Additional questions were added to the questionnaire where the researchers felt there was information lacking. For example the question inquiring what other tools companies were using to reduce turnover was added to this track of the survey.

Companies that reported they were not utilizing personality profiles in the pilot study were taken to another track of questions where they were given two additional questions to answer. After performing the pilot study, it was determined that to get more depth in the data, more questions should be added to this portion of the questionnaire. The literature review revealed that employee turnover was problematic in the construction industry. It was decided that a question that could determine other strategies or tools companies used to reduce turnover

would benefit the findings of this work. A question that addressed this was added to the questionnaire before final administration.

3.2.2 Selection of the Sample Population

The population for this study consisted of the 2014 ENR Top 400 Contractors. The companies on this list have shown to consistently be large, successful commercial construction companies. Companies were each given a number and using a random number generator, companies were contacted to participate in the study. Initially the strategy was to send out the survey by email to the companies on the list. The researchers decided that contact by phone would provide an improved response rate from the population. By using phone contacting, the administrator of the questionnaire could make sure the respondent understood the topic and any confusion could be clarified while administering the survey. To provide as much consistent results as possible, the Human Resources representative was requested to be the contact person from each company to take the survey.

When contact was made for each company, the researcher requested to speak to the HR representative; if they were not available, a voicemail was left with that person and requested to call back. Once during the administration of the survey, a few of the respondents asked that the survey questions as shown in Appendix A, be emailed to them and they would then respond. When the contact information was collected, some of the email addresses for the companies were collected for other companies who did not return phone calls. Approximately five to ten responses came by email from those companies that requested by email or the other companies that were sent questions by email. This proved to be a worthwhile endeavor and most of the detailed responses were received via email.

With the population size for the survey as the 2014 ENR Top 400 Contractors, and the 78 responses obtained from the population, it was calculated that with a 95% confidence level, the margin of error was 10% (Creative Research Systems 2012). The margin of error measures the precision of the sample from the population (Center for Institutional Evaluation, Research and Planning). With a 10% margin of error for this survey, there was not a major concern to how it affected the results to the survey questions. With this margin of error percentage, the majority and minority responses will stay largely consistent overall. To reach the 78 responses, approximately 235 construction companies were contacted on the random list created from the 2014 ENR Top 400 Contractors.

3.2.3 Questions for Companies Using Assessments

After identifying which companies were using personality profile assessments, those companies were then asked a series of questions as shown in Appendix A, to seek to more fully understand the research objectives. While researching the use of personality profile assessments in other industries during the literature review, the common areas companies were using assessments for were hiring, team formation, promotions, and development of employees. The first question on this track of the survey was structured to understand for what construction companies were using the assessments and if they were similar reasons for other industries. They were given options of hiring/recruiting, team placement, promotion, leadership development or other.

Another objective of the research was to find when construction companies were implementing the assessment throughout the employees' time at the company. This question was followed up with multiple-choice options of: during the hiring process, annually, during

employee reviews or other. This question was created to understand if any of these uses were related to why companies use the assessments and to understand the effectiveness of their use.

The third objective of this research was to identify the different personality profile assessments that construction companies have used. While reviewing literature for this research, there were commonly used assessments other industries seemed to be favoring and it was desired to know if the construction industry used similar assessments. The survey question asked what assessments the construction companies currently used. The assessments that construction companies used were studied to comprehend any relations as to why they used those assessments. To more fully understand why construction companies used that type of assessment, a follow up survey question asked why the companies used the assessment and how the results benefited their company.

Another important component to this research was to understand how strongly a company felt about the assessments they used. To understand this the companies were asked if they felt the results from the personality profile assessments were accurate and useful and then given varying multiple-choice selections ranging from strongly disagreeing, to strongly agreeing to not knowing. A follow-up question to this was created to understand if the companies had used any other personality profile assessments in the past but no longer used them and if so, why they no longer used them. This was asked to isolate any assessments that companies felt were not effective.

Among the objectives of the research was to know if the employee turnover had been reduced among construction companies that were using personality profile assessments. A Likert scale question was administered to determine if companies felt the assessments being used resulted in improved turnover rates within their companies. Results from this question allowed

the data to be compared to findings found in the literature review that suggested in other industries the use of personality profile assessments helps to reduce employee turnover. In addition to Likert scale and multiple-choice questions, open-ended questions were added to the survey to allow for companies to give free responses and provide more in-depth data on the subject

3.2.4 Questions for Companies Not Using Assessments

For companies that responded that they did not use personality profile assessments, a series of questions were created. These survey questions were created to understand why they did not use the assessments or if they have used them in the past but no longer use them. It was also created to see what way they may possibly use them if they were to use the assessments at their company.

3.3 Administering the Survey

The administration of the survey took place in approximately a 45-day span of time. As companies were contacted and asked if the human resource representative was available for the purpose of asking survey questions, most companies responded positively and forwarded the call to the representative. Many of the calls went straight to voicemail. In these instances a message was left explaining the purpose of the call and a request to be called back so the questions could be inquired for the research. Approximately ten companies where voicemails were left, called back to take the survey and all the companies that did call back were using personality profile assessments at their company and had a positive experience with them. Their interest and experience with personality profile assessments were a reason they called back to take the survey. There were approximately 112 voicemails left at companies which were not returned.

For companies that were left voicemails, approximately 1/3 of these were called back a second time to see if the human resource representative could be reached. From these call backs there were less than 5 companies that were available or desired to take the survey. All of these responses were from companies that did not use personality profile assessments. There could be a possibility of skewed results because of the companies that were left voicemails and either did not call back or did not respond to a second call. If these companies had taken the survey the percentages of the survey results may be different.

As the survey was administered and responses were being received, collection of the responses was recorded during or immediately after the phone call. For the majority of the calls, notes were taken during the call and then once the call was complete more details were added to the notes for the complete responses.

As calls were made and the survey was administered to the companies, responses were recorded in a spreadsheet for each question answered. Following this procedure allowed all the responses to be tracked and recorded in one area. Entering the responses in this way also allowed for a more efficient process to review the results for study and examining the responses.

3.3.1 Reviewing and Studying the Results

Once the 78 responses were obtained the results were then reviewed and entry and grammar differences were modified so that the results could be sorted and grouped together correctly. Each response was studied and sorted so that percentages, trends and information provided could be presented and examined. For those responses that could, charts or graphs were created so they could visually be understood more clearly as well as show patterns that were

identified. Through studying and sorting of the results, the connection to the research objectives were able to be more clearly identified.

4 FINDINGS

A survey was conducted to identify if and how construction companies were using personality profile assessments. Additional information was obtained to understand how these assessments were used and if it was having an effect on employee turnover. Approximately 235 construction companies from the 2014 ENR Top 400 Contractors list were randomly contacted and 78 responses were received. The findings of the survey are presented here in Chapter 4.

The construction companies were contacted and asked a set series of questions based on the initial question of whether the company uses personality profile assessments or not. The full questionnaire can be found in Appendix A.

4.1 If and What Construction Companies Use Assessments For

As shown in figure 4-1, among the 78 companies that participated in the study, 33% or 26 of them were currently using personality profile assessments in their company. The remaining 67% or 52 of the companies surveyed were not using personality profile assessments. The companies were asked varying follow up questions based on if they were using the assessments or not. For companies that were currently using personality profile assessments the questions were directed to better understand how the companies were using the assessments, which assessments they used and if they felt they made an impact on the company's employee turnover rates.

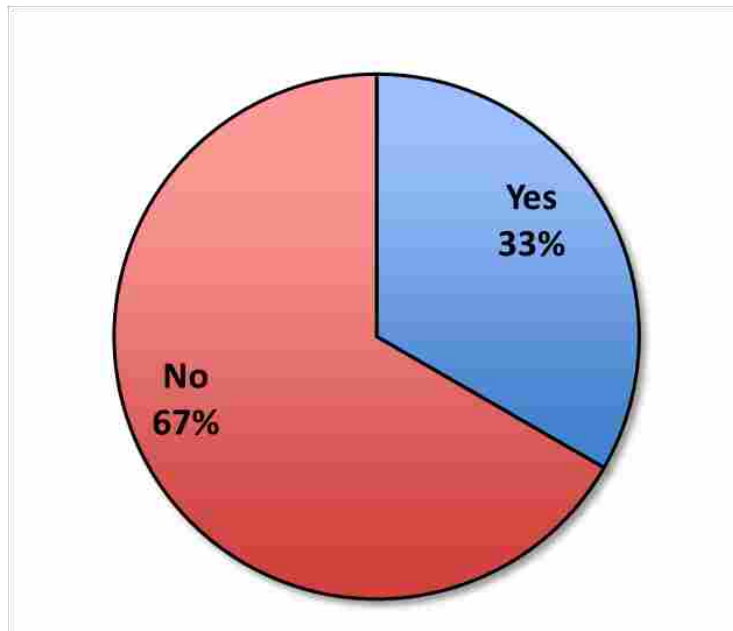


Figure 4-1: Construction Companies Using Personality Profile Assessments

One objective of this research was to understand what construction companies were using personality profile assessments for and if they were using them for other reasons besides hiring. The companies that responded in the affirmative, were asked in what way they use the assessments. Figure 4-2 shows that of the companies using the assessments, 50% were using them for hiring employees. 20% of the companies were using them for leadership development within the company, while the remaining 18% and 12% were used for promotions and team placement, respectively. These responses showed that hiring was the primary purpose that the assessments were used but also confirmed assessments were used for other purposes as well.

The survey responses also revealed that some construction companies were using the assessments for multiple purposes. Of the 26 companies that responded to the survey in the affirmative of using personality profile assessments, 10 of them used assessments for multiple purposes within their company. As can be seen from Table 4-1, there were a variety of multiple uses among the construction companies.



Figure 4-2: Ways Personality Profile Assessments Are Used

While this study showed hiring was the most common use for personality profile assessments, there did not seem to be a steady pattern showing that companies have been using the assessments for multiple purposes. This may indicate that the uses of personality profile assessments were correlated to the needs of the companies that use them and the limitations of the individual assessments. The different cultures, positions and team needs that these companies were using the assessments for seem to be unique for each company. There were also a good number of companies that did not provide the assessments they were using for various reasons such as not wanting to reveal the assessment they used. Since these assessments were not provided, the percentages of these results may not reflect accurate assessment usage among these construction companies.

Table 4-1: Uses of Personality Profile Assessments by Company

	Hiring	Leadership Development	Promotions	Team Placement	Assessment Using
Company 1	X				Not Provided
Company 2	X	X			Myers-Briggs Type Indicator & The Predictive Index
Company 3	X				Not Provided
Company 4		X	X	X	DiSC Profile and Gallup Strengths Finder
Company 5	X			X	The Birkman Method
Company 6	X	X			Profile XT
Company 7	X				Not Provided
Company 8	X				The Predictive Index
Company 9		X		X	DiSC Profile and Myers-Briggs Type Indicator
Company 10	X				People Answers / Infor
Company 11	X				Not Provided
Company 12	X	X			Harrison Assessments
Company 13			X		Not Provided
Company 14				X	Gallup Strengths Finder
Company 15	X				Profiles International
Company 16	X		X		Wonderlic and DiSC
Company 17	X				Activity Vector Analysis (AVA)
Company 18				X	Herrmann Brain Dominance Instrument (HBDI)
Company 19	X	X	X		Watson-Glaser Critical Thinking Appraisal
Company 20	X				Not Provided
Company 21	X				DISC
Company 22	X				ZERORISK HR
Company 23	X	X			Not Provided
Company 24	X	X	X	X	DiSC
Company 25				X	Not Provided
Company 26	X				Not Provided

4.2 Understanding How Construction Companies Use Assessments and Supporting Arguments

The companies were also asked at what point during an employee’s career they administer the personality profile assessments. The majority (60%) of the companies used the assessments during the hiring process as shown in Figure 4-3. This accurately corresponds to the responses from the previous question of what the majority of construction companies were using the personality profile assessments for. The second most common response for when the

assessments were administered was during employee reviews, at 20% of the responses. Comments from the companies left the impression that this was the best time for them to administer them to current employees. 11% of companies were using the assessments on an as needed basis. One example of this was one specific company who would use them when the time was necessary to create a project team, and use it for those team members. The other 9% used the assessments for promotion of employees. The responses to this and other questions gave additional insight into when and how construction companies more specifically used the assessments.

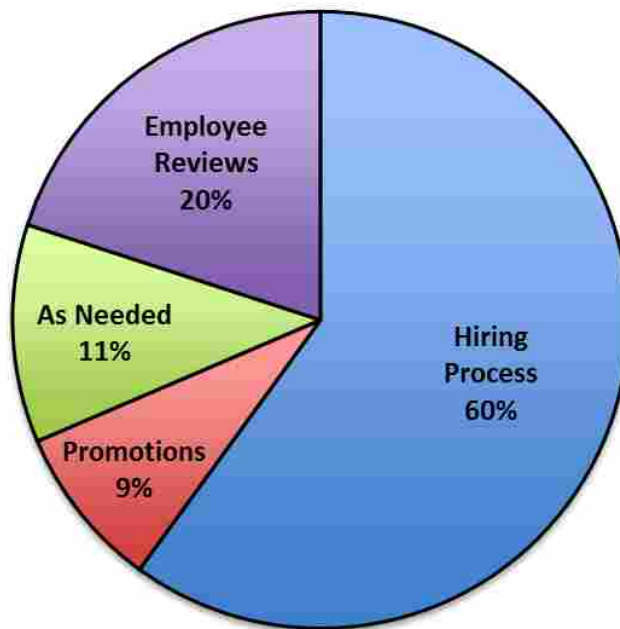


Figure 4-3: When Personality Profile Assessments Are Administered

It was learned that some construction companies administer assessments multiple times during an employee’s career. As can be seen in Table 4-2, again the most common time assessments were administered was during the hiring process. In the table it seems there was no direct pattern to those companies that use the assessments for other uses besides hiring. Being the

second most common method of use during employee reviews seems practical in that is a common time companies meet with and discuss issues and goals with their employees.

Table 4-2: When Assessments are Administered by Company

	Hiring Process	Promotions	As Needed	Employee Reviews
Company 1	X			
Company 2	X		X	
Company 3	X			
Company 4	X	X		X
Company 5			X	
Company 6	X			
Company 7	X			
Company 8	X			
Company 9	X			X
Company 10	X			
Company 11	X			
Company 12	X			X
Company 13				X
Company 14			X	
Company 15	X			
Company 16	X			
Company 17	X			
Company 18			X	
Company 19	X	X		
Company 20				X
Company 21	X			
Company 22	X			
Company 23	X	X		
Company 24	X			X
Company 25	X			X
Company 26	X			

4.2.1 Companies Use of Assessments

The results of this study show that companies were not uniformly administering personality profile assessments. One company stated that they simply used the results to see if a candidate could be a good fit for the company and for specific positions within the company. Other companies used the results of the assessments to find a person to match personality traits

they needed for a certain position within their company. Similarly, another company used the results to better understand a potential employees critical thinking skills in order to have an improved understanding of that person. A different company specified that the assessments helped them see a person's motives before they hired that individual. In a separate response given from a company, they felt that the assessment results helped them predict areas or environments within the company that an employee would succeed in. They also used the results to recognize potential weaknesses of the employee and to help them make a plan with that employee to improve on those weaknesses.

Along with using personality profile assessments for and during the hiring process, companies were using them during other stages of the employee's career. Companies responded that they used personality profile assessments during employee reviews, as needed for employment needs such as team placement, or when an employee may have an opportunity for a promotion.

One significant response from a company regarding the use of assessments for team placement was the use of the results to create project teams for their construction projects. The results of the assessments about the employees' personalities helped them decide on the team members to assist in the success of all the personalities on the team. They felt strongly about this process and their positive experience doing this. They felt the importance of the impact of the results from the personality profile assessments and therefore, they analyzed the principles from the assessments to help them meet their clients' needs. The team would assess the client and identify personality traits of their client. Working through this process would allow the team to address issues with an improved approach because they were more aware of why the client was behaving a certain way.

A different example of using the results for building teams was from a company who used the results to analyze how team members think. The company wanted a diverse group of thinkers in their teams as well as knowledge of the type of thinkers in the group. They used this information to help them know how to prepare and work with team members.

As with hiring an employee some companies simply used the results to help find an employee to promote to a position that they would fit best in. When one of the companies needed to fill a certain position they would find a person with a personality that matches what they felt was a needed personality for that position. One company said doing this has created happier employees who fit in their job descriptions. Some companies used the same reasoning and process for hiring an employee when they were promoting an employee. They wanted to ensure the best personality or person would fit best into a position based on personality characteristics. Using personality profile assessments was an additional tool to help them in this process.

As discussed in the literature review, some companies want to establish a specific mission or culture as well as develop their employees with this culture in mind. Results from the survey showed that companies were using the results of the assessments to help create a better environment for the employees. They believe that happy employees benefit the entire company. The assessments were thought of as a personal and professional development tool to help individuals communicate better, increase team efficiency and productivity and ultimately increase client satisfaction. As mentioned previously, one company used the results to help them understand what areas an employee can improve on. Doing this helped them improve the employee and their environment. Another company stated that they use the results to simply help them know the strengths of their employees. Knowing their strengths can help the company develop the employee even further.

4.2.2 Assessment Effectiveness

One objective of this research was to understand the effectiveness of the use of personality profile assessments among construction companies in regards to decreasing employee turnover rates. From the responses to one of the survey questions it was gathered that a large majority strongly agreed that the results of personality profile assessments were accurate and useful. These results can be seen in Figure 4-4. Only one of the respondents replied that they did not know if it was accurate and useful. The remaining other companies either agreed or somewhat agreed. When answering this question and other open ended questions in the survey, the majority of the companies felt strongly about the effectiveness of the assessments. They also provided in depth details of this effectiveness as previously discussed in this chapter which came as a result from the previous survey questions which inquired about various elements of their usage of personality profile assessments.

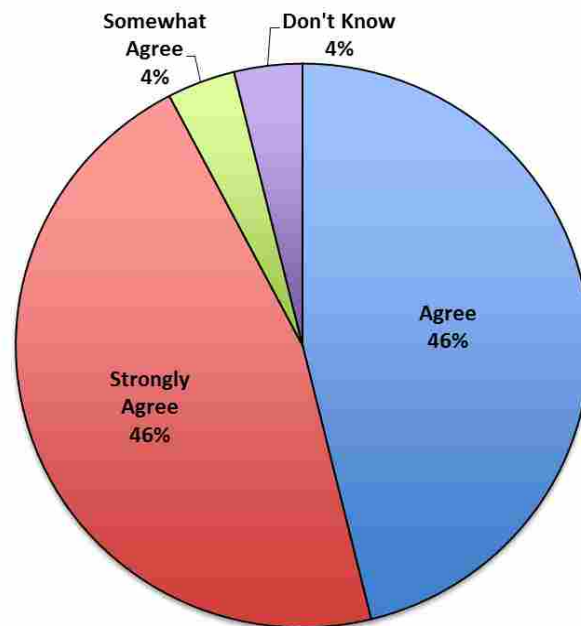


Figure 4-4: Are Assessments Accurate and Useful?

4.2.3 Negative Aspects of Using Assessments

Among the survey administered was a question asking if they had experienced any negative aspects of using personality profile assessments. Of the 26 companies that responded to the survey that they were using personality profile assessments, 23 replied that they have not experienced any negative aspects of using the assessments at their companies. While researching the uses of personality profile assessments for the literature review, most research articles found and reviewed had also had positive experiences and uses for assessments. There were less frequent findings of negative aspects of using personality profile assessments than there were positive experiences reported.

Three companies commented on negative experiences they have dealt with. One company stated that if you have someone falsify their responses while taking a personality profile assessment, and then hire that employee, the company then has to deal with that employee that they may not have wanted to hire if the responses had been sincere. This issue was brought up as a potential problem in the literature review and this response shows it can be a problem companies may have to face. Another company stated the negative issue they have experienced was some employees felt that taking a personality profile test was an invasion of their privacy and refused to take them. The company said if they did this they might then be eliminated for consideration. This could possibly become a greater issue with tension between the individual and the company. The effectiveness of using assessments may be reduced because the company considered fewer employees. The third company that had negative experiences said some people didn't want to take the time to take the personality profile assessment when being interviewed for a position. This negative issue could also reduce effectiveness of using assessments because again they may not be considering all possible candidates for a position.

There may need to be more information given to potential candidates so they are aware of why the company uses the personality profile assessments and what it can do for the candidate.

4.2.4 Ranking of Companies Using Assessments

For the companies that used personality profile assessments, their ranking on the ENR Top 400 Contractors list was compared to see if there was any correlation. If there was any correlation to higher rankings because of the use of personality profile assessments, it might be suggested that their use would improve the company's ranking and overall effectiveness. When the rankings were observed, those companies that were using assessments were fairly evenly spread among the top 400 contractors as seen in Figure 4-5. No noticeable pattern was recognized between companies using personality profile assessments and their ranking on the top 400 list.

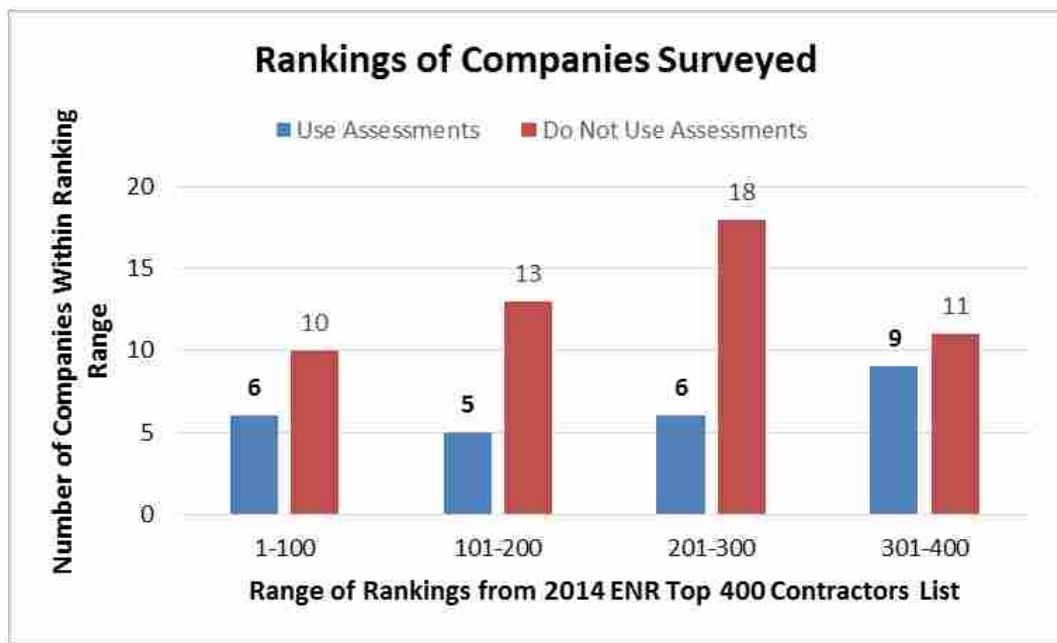


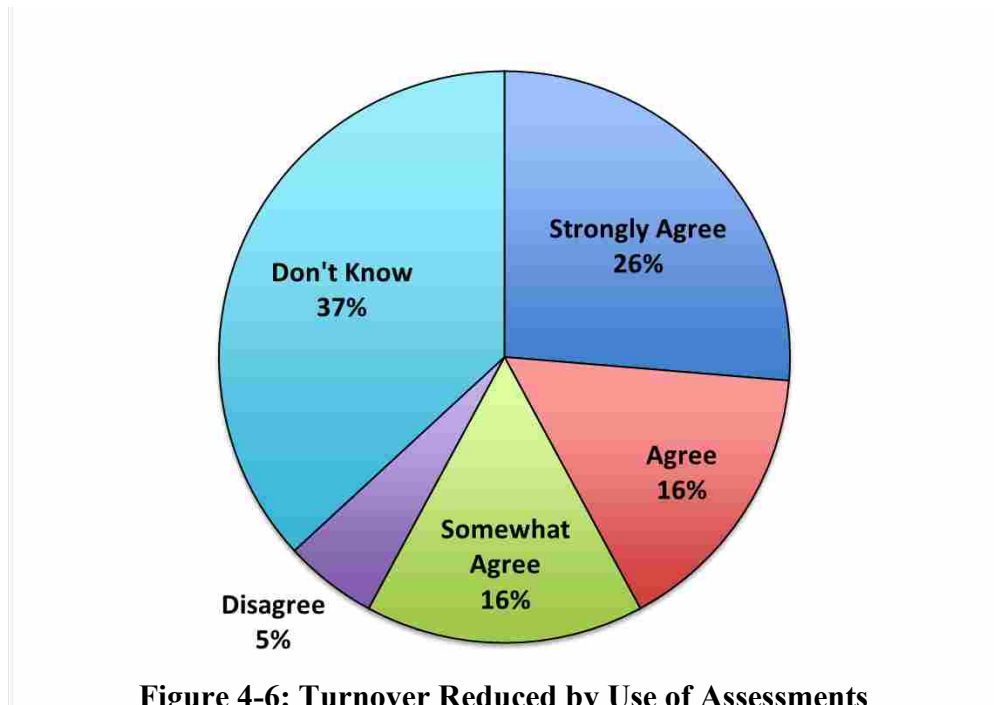
Figure 4-5: Rankings of Companies Using Assessments

4.2.5 Assessments Reducing Turnover

An additional objective of this research was to see how the use of personality profile assessments affects the rate of retention of employees at construction companies. Companies were asked if they felt that using personality profile assessments had reduced the turnover in their company. Figure 4-6 shows 58% of the respondents either somewhat agreed, agreed or strongly agreed. While there was no direct question asking if these companies tracked their employee turnover rate, a few of the companies explained that they tracked their turnover or retention rate and felt there was a direct correlation to using the assessments. A company that used assessments said their turnover rate was 3% and felt that the assessments helped keep that rate low. One company stated they had been using the same personality profile assessment for the last 15 years and that their retention rate had been above 90% during that time. The attitude among those that felt it had reduced the turnover rate was that it was worth their time and investment to keep their employees and that these assessments were helping. One company stated that the assessment helped them find the strengths and weaknesses, which they then collaborated to review and select employees. They felt this process had reduced their turnover. Another company stated that they did not have data to back up their results that it had reduced turnover, but they felt strongly that using the assessments has increased self-awareness, increased emotional intelligence, better communication skills, improved giving and receiving feedback skills, and better conflict resolution skills as well as helped develop more efficient teams and produced client satisfaction.

One company stated that these assessments helped the supervisor to learn more about how their employees work best and what their preferences were. It also helped employees realize what areas they need to improve on. They felt that this helped reduce their employee turnover.

Another company specified that they use the results to help them reduce employee turnover. This company found that if a person's results were in a certain category that they would typically have a higher turnover rate at their company. They mentioned that this was not their only deciding factor, but after tracking these results over a period of time, it has helped them reduce their turnover.



As one of the objectives of the research was to find out if the use of personality profile assessments has affected the employee turnover rate, a follow-up question was asked to discover if companies were doing anything else to reduce turnover. For companies that were using personality profile assessments, the additional strategies besides the assessments included employee evaluations, exit interviews, pay scale, rewarding employees, or employee engagement activities. A couple responses from companies said communication and investment into employee development was important. There was no mention of any other main strategies, which

could imply that the use of personality profile assessments was the main tool for reducing employee turnover at these companies.

For companies that were not using personality profile assessments, the same question was asked inquiring if they had any other strategies or tools for reducing employee turnover. Since they were not using personality profile assessments, this question was asked to see if there were other alternatives they were implementing that could be provided as a recommendation for this research. Of the 52 companies that were not using personality profile assessments, 37 of them responded to this open-ended question that they did not have any additional methods for reducing employee turnover. Numerous of these companies also revealed that they did not track or know what their employee turnover rate was. These responses may suggest that a majority of construction companies may not have an accurate account of their employee turnover rate and therefore don't know if they have a turnover problem. As discussed in the literature review, the construction industry is an industry that struggles with employee turnover; so many of these companies could potentially benefit from the use of personality profile assessments.

The remaining companies provided specific strategies that they implemented and believe were doing well in reducing employee turnover. A few of the companies responded that they either pay above market for wages or provide excellent benefits packages. Multiple companies stated they provide training and development for the employees. A few other companies used performance reviews or yearly evaluations as their strategy for reducing employee turnover. Conclusively a couple companies stated the company culture they created was their strategy to retain employees. One of these companies said identifying culture fit in the interview process was important and if an employee fit in their company culture then he or she was more likely to stay. They felt they could best identify culture fit in face-to-face conversations in the interview

process. This company's response was similar to what was found in the literature review to be important. This company just relied on face-to-face interaction to make their decision instead of the help of personality profile assessments to assist them in this decision.

4.2.6 Why Assessments Are Not Used

Among the objectives of this research was to understand why construction companies were not using personality profile assessments at their company. Companies in the survey that responded that they did not use assessments were asked what the reasoning was for not using them. The most common response (26) to this question was that the companies have not felt the need to use personality profile assessments. The results from this question showed that companies were aware of the assessments but either did not feel like they needed them or really didn't care if they used them or not. One company stated that they were a construction company and most of their people were field workers and seasonal workers. Another company said most of their employee turnover occurs in the field and if they used personality profile assessments it would be for office positions. These responses gave the impression that they felt like they knew what the assessments could do but in reality they didn't think they would be effective for all employees or positions.

Twenty (33%) of companies not using profiles responded that they did not know much about personality profile assessments. After being asked the question why they did not use assessments one company said they have never considered using them and said it was a probably a good idea after being asked the question.

Eleven (18%) of the companies not using profiles responded that they didn't believe personality profile assessments were useful. While responding to this question a few of the

companies gave additional comments on why they felt this way. One company stated, “We are a construction company, everyone has the same personality.” Much could be read into this statement; such as did this company really know or care about its employees if it felt they all had the same personality? Another company said they hire a lot of field hands and didn’t need to reduce their turnover rates. A different company said they know about personality profile assessments but they were such a small company they didn’t feel using them would be beneficial. Even though this company felt they were a small company, they were still on the 2014 ENR Top 400 Contractors list and had yearly revenue of over \$130 million, suggesting they are not necessarily a small construction company. The reasons construction companies stated they were using personality profile assessments did not have any relation to the size of their company, but instead to how they could use them to help with many of their employee challenges. While all these companies responded that they didn’t believe personality profile assessments would be useful, their reasoning suggests that they may not know in detail about personality profile assessments and the benefits they may provide.

Only three of the respondents that did not use personality profile assessments answered that they did not use them because of cost. The rankings of these companies from the ENR Top 400 Contractors list was compared to see if there might be any correlation to the cost of using assessment. One of the companies was in the top 100 and the other two were in the top 300. So it seems there was no direct correlation to the rankings of the list. These companies may simply not spend much money on hiring and/or developing employees and have looked into using them and felt the cost was too great for what they think the results would be. Because only three companies responded this way, it seems that cost was not a major factor in the decisions for these companies regarding the use of personality profile assessments.

Only one of the companies for this survey question responded that they have used personality profile assessments in the past but now no longer use them. The reasoning given from this company was because the assessment did not provide the results they were looking for. Not much more detail was given but since they were not currently using an assessment, it was assumed once they stopped using that one assessment they did not begin using another one.

There were no companies that reported that they couldn't find an assessment they liked and used it as a reason for not using them at all. This suggests that these companies who were not using personality profile assessments may not have really looked deeply into personality profile assessments and what they can help companies with.

4.3 Personality Profile Assessments Being Used in the Construction Industry

Companies were also requested to name which personality profile assessment their company used, which is represented in Figure 4-7. The top assessments found to be used by companies in this study were DiSC, The Predictive Index, Myers-Briggs Type Indicator and Gallup Strengths Finder. These assessments that more commonly appeared were in line with findings from the literature review and concurrent with what was being used in other industries. The survey results also revealed there were a great number of other assessments that were not as common but still used by several companies. During the survey it was found that some companies used multiple assessments for various reasons. The variation in assessments used by these companies also comes from the different ways the assessments were used. For example one company that used the DiSC profile used it to help employees improve themselves and accelerate their productivity when promoting an employee to a right position. That same company also used it for creating project teams to ensure success of the personalities in the team.

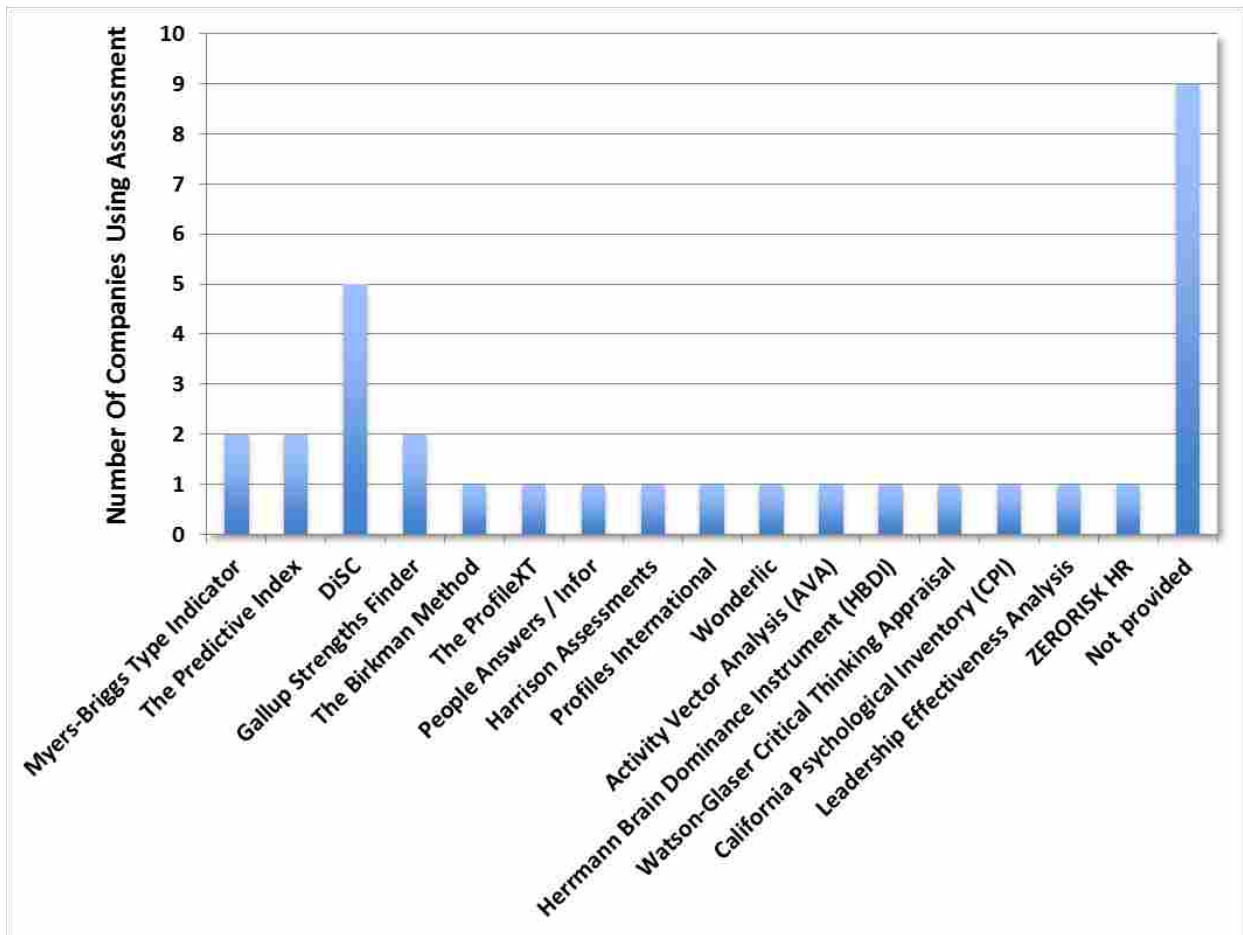


Figure 4-7: Personality Profile Assessments Being Used by Construction Companies

The companies were also questioned to find out if they had used any personality profile assessments in the past that they were not currently using. 84% of the companies that were using assessments had not used other assessments. Only three of the companies had used other assessments because the original assessment they used did not provide the results they were looking for. The survey results from this question exhibited that companies have experienced positive results from the assessments they were currently using and had not changed from those assessments.

4.3.1 Unexpected Uses of Assessments

After reviewing and studying the responses from the survey, there were a few replies from companies that were somewhat unexpected. These responses were related to positive uses and experiences with using personality profile assessments. One of the most surprising uses came from a company that strongly believed in the principles of using personality profile assessments. The company used assessments for their own employees and specifically for the members of project teams that were formed. This company realized the importance of knowing their client inasmuch that they further studied the principles from the assessment they used and worked to apply it to their client. The team would meet and discuss the personality of the client to identify their characteristics. Once identified, they would address issues that could arise and how they could prevent or overcome those issues. This was a very proactive approach that was not an expected use of personality profiles.

As understood from the literature review, employees are concerned with their personal and professional development. Employees seem to expect more help in these areas from their employers. One of the construction companies that responded believed in helping their employees with personal and professional development. They used the personality profile assessments to help them assist the employees in this development. They believed that if they could improve the employees in these areas, it would help the employees communicate better, increase their team efficiency and improve their client satisfaction.

Another surprise came from a company who directly used personality profile assessments to reduce the turnover at their company. They had been using an assessment so regularly in their hiring process that they created categories for the results of their assessments. They had tracked that if an individual's result were in a certain category they would most likely have a higher

chance at turnover. It was a rare response from a construction company to be proactive about not only knowing their turnover rate, but recognizing what type of individuals created higher turnover and therefore who not to hire.

4.3.2 Analysis of Open-Ended Questions

Among the survey questions to the construction companies were some open-ended questions to gain additional insight from them that they may not have otherwise provided from the other survey questions. These questions asked why they use assessments, or what experiences they have had using them or other tools the company may be using. The responses from these questions have been discussed previously and shown the companies have provided valuable data from these questions. While discussing these open-ended questions with the companies, the attitude among the companies, depending on their use of assessments was noticed. For those companies that were using assessments, the information they provided was free flowing and they desired to share their experiences and success using them. It was felt from these companies that they went above and beyond to understand and help their employees. For those companies that were left voicemails and asked to call back to take the survey, the only ones that did call back were companies that used assessments. They had a passion for them and believed in their usefulness.

For those companies that did not use them, it was difficult to get through the few questions of the survey. The general attitude seemed that they did not care much or really did not know much about the subject. They seemed to be going with the status quo of thinking providing the standard benefits and wages would satisfy their employees enough and they had no idea about their companies' turnover rate. The difference between the two attitudes was fairly obvious

and there was believed to be a correlation to the use of personality profile assessments among the companies.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

In the construction industry, employee turnover is a major challenge with significant impacts on companies and their construction projects (Parker and Skitmore 2005). This research has shown that there are construction companies in the industry, that recognize that turnover is a challenge and have looked to personality profile assessments as a tool to help reduce employee turnover. The research has also revealed additional details about how companies felt about personality profile assessments, both positively and negatively.

5.1.1 Construction Companies Using Assessments

Of the respondents to the survey, 33% of the construction companies were using personality profile assessments. While this is not a majority of the companies, having 1/3 of the respondents using them shows that they are a factor to consider as a useful tool when addressing employee turnover in the construction industry. The literature review revealed that other industries were utilizing personality profile assessments for hiring and other company operations. This research discovered that the construction industry was also using them for these reasons. Although the majority of construction companies were using the assessments primarily during the hiring process they were also utilizing them for leadership development, promoting

employees and team development. These findings show that the construction industry does not seem to be that much different than other industries.

This research sought to discover if construction companies were using personality profile assessments as a tool to reduce employee turnover and what effects it might be having on turnover rates. When asked if using personality profile assessments had reduced their company turnover, 58% of the respondents agreed in one degree or another. A few of these companies provided specific examples of the turnover rate they had calculated while using assessments and their strong belief that they had made a great positive impact in that rate. If employee turnover is such a challenge in the construction industry, then these responses provide strong evidence that the use of personality profile assessments could help construction companies reduce the turnover rate.

While this research gave many constructive examples of the use of personality profile assessments, it also discovered the majority of construction companies were not using personality profile assessments in any way, including in helping to reduce employee turnover. Many construction companies also revealed that they were not implementing any other significant tool to reduce turnover other than standard wages and benefits plans. The general attitude and approach by these companies towards their employees and company culture and values seemed less important and therefore did not specifically address employee turnover within their company.

5.2 Recommendations for the Industry

Through the literature review and survey performed for this research, recommendations for the construction industry have been recognized. In general there were some suggestions for

real life applications that were rooted in the objectives that should be addressed. The problem of employee turnover is a real challenge in the construction industry and this research has found that there are construction companies using personality profile assessments to address the problem.

Personality profile assessments are recommended as a means to help reduce employee turnover by helping companies more fully understand employees and matching the employee's skills and characteristics to the culture and positions within the company. This research has provided examples of construction companies having success in reducing employee turnover because of their use of personality profile assessments.

Construction companies having strong beliefs in the use of personality profile assessments have felt that their reduced employee turnover was a direct result of using the profile assessments. The companies using assessments have each found different ways to use them to reduce employee turnover. For example, one company shared that they have recognized a specific result from a potential employee will most likely be an employee that will create turnover at that company. This company showed that companies could use personality profile assessments, strategically to reduce turnover. It is suggested that companies in the construction industry use personality profile testing to analyze employees to discover which ones are more or less likely to create turnover.

It is also recommended that companies who decide to use personality profile assessments for hiring purposes could also use them for other purposes in their business. Examples of other areas that construction companies are strengthening by the use of personality profile assessments include other employee development areas such as: team development, promotions and leadership development. Another company also used assessments to improve client relations by

using personality profile assessments with the owners of the projects they were working on. Other companies provided specifics on how they were using the assessments to create strong, highly functional project teams. As employees and their various personalities have an effect in many areas of a company, it is recommended that companies research other ways they can successfully implement personality profile assessments within their company

For construction companies looking to use personality profile assessments or those that are currently using them, it is recommended that they research the various personality profile assessments that are available. As shown in the results from the survey, there are multiple assessments available for use. Each assessment will measure individuals through different methods for various purposes. Companies should recognize why they are looking to use personality profile assessments and then find an assessment that can help them accomplish that purpose. Most companies studied that were currently using the assessments have only tried using one assessment. Although most reported to be satisfied with its results, they might find that using a different assessment would more accurately meet their needs.

Also discovered was that many construction companies were not using personality profile assessments and they were not aware of their employee turnover rate. It is recommended that companies in the construction industry carefully track and monitor their employee turnover rate and further investigate what might be the trigger or cause for such rates. It is further suggested that construction companies that are not using assessments should perform a trial use of them. This use may provide opportunities for these companies to evaluate their employee challenges and issues and reveal there are things they can address and improve with their employees. There were several strong responses from companies who were currently using the assessments to provide cause for companies to look at implementing personality profile assessments. This

implementation has shown that it is a tool that can reduce employee turnover. It is suggested that all companies use personality profile assessments for reducing employee turnover rate and any other area they might feel necessary.

5.3 Recommendations for Additional Study

At the completion of this research some additional questions arose that were related to topics that could add more depth and detail to this research. This research discovered a percentage of construction companies that were using personality profile assessments. While the literature review found examples and information regarding other industries that were using personality profile assessments for employee turnover reasons, it was difficult to find an overall percentage of other industries using personality profile assessments. If this percentage were known or percentages from other industries, it could be determined if the construction industry has comparable percentages using personality profile assessments.

Another recommendation for additional research would be to study the most effective ways companies are using personality profiles for different purposes. This would involve researching the different methods companies are actually administering and using results to manage when using them for hiring, promotions, development, or team placement. Studying this more in depth and comparing specific ways they are used to the turnover rates of the companies may provide examples of specific ways companies can use personality profile assessments in the most effective ways.

It is recommended that future research be conducted to analyze which personality profile assessment is the most useful for specific purposes. This would allow companies in any industry to utilize a specific test to best address the problems they are trying to solve. It may determine

that perhaps one individual personality profile assessment would be more useful across all aspects of turnover, hiring, promoting and team building.

Future research on what companies are doing to reduce turnover would be of benefit to the construction industry. A few responses were that were briefly mentioned in this study included: benefit packages, paid time off, pathway plans for promotions, etc. It is recommended that research be conducted on those strategies to determine their usefulness and how they compare to the use of personality profile assessments in lowering turnover rates.

It was discovered during the survey process that several of the construction companies had Human Resource managers whose main purpose was to recruit, hire and ensure the happiness of the current employees as well as to address any situations that may arise. Another study might reveal how an HR representative could best use time and resources to save the company money in the long run by reducing turnover rates.

5.4 Implications

The data collected and information acquired from this research has provided awareness of the use of personality profile assessments within the construction industry as a means to help reduce employee turnover. Once the survey results were collected and analyzed the implications of this research were understood and deemed valuable as follows.

While employee turnover continues to be a concern and issue in the construction industry, there are construction companies taking a proactive approach and a significant number of them are using personality profile assessments to address employee turnover. The construction industry is comparable to other industries in that they are approaching the use of personality profile assessments in similar ways such as hiring, promotions, team and leadership

development. Construction companies are using the assessments for specific and strategic reasons to help improve employee turnover and they strongly feel it is having a positive impact.

While there are companies using personality profile assessments, there is still a majority of them that do not use them and this research has revealed that many of these companies may not understand personality profile assessments or the impact that they can have on their employee turnover within the company. Numerous amounts of these companies also feel the standard wages and benefits provided to their employees provide enough incentive to reduce employee turnover. While they may feel this is working at their companies, this research has shown that personality profile assessments are having a significant, positive impact among the turnover of their employees and other companies should consider the impacts of using personality profile assessments in conjunction with other strategies that may already be in use.

The strongest implication felt by the author of this research is that construction companies should use personality profile assessments after hiring an employee for the greatest impact among their employees and their companies. After interacting with these companies through the administration of the survey, the companies using assessments left a great impression that their custom use of the assessments throughout an employee's career had a powerful impact. It helped reduce employee turnover as well as positively improved other aspects at their companies that was felt would not have been achieved otherwise.

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APPENDIX A. SURVEY QUESTIONS

1. Does your company use personality profile assessments?

Yes

No

If Yes

2. What does your company use personality profile assessments for? Check all that apply.

Hiring/Recruiting

Team Placement

Promotion

Leadership Development

Other _____

3. When are personality assessments administered?

During the hiring process

Annually

Employee Reviews

Other

4. What personality profile assessment does your company currently use?

- 5. Why does your company use that assessment and how do the results of it benefit your company?**
- 6. The results of our personality profile assessments are accurate and useful**
Strongly Disagree
Disagree
Somewhat Disagree
Neither Disagree nor Agree
Somewhat Agree
Agree
Strongly Agree
Don't Know
- 7. Has your company used other personality profile assessments in the past but no longer uses them? If so, why?**
- 8. Turnover in our company has been reduced due to our company using personality profile assessments**
Strongly Disagree
Disagree
Somewhat Disagree
Neither Disagree nor Agree
Somewhat Agree
Agree
Strongly Agree
Don't Know
- 9. What positive results or experiences does your company have about using personality profile assessments?**
- 10. What negative aspects (such as legal issues) of using personality profile assessments has your company experienced and what has been done about it?**
- 11. Personality profile assessments have been shown to reduce turnover, what other strategies or tools does your company use to reduce employee turnover?**

If No

**1b. What are the reasons your company does not use personality profile assessments?
(Check all that apply)**

Cost

Haven't found one we like

Don't believe they are useful

Haven't felt the need to use them

Don't know much about them

Have used them in the past but do not currently use them

**2b. Which of the following areas would you most consider implementing the use of
personality profile assessments in your company?**

Hiring

Recruiting

Team organization

Promotion

Leadership assessment

None

Other _____

**3b. Personality profile assessments have been shown to reduce turnover, what other
strategies or tools does your company use to reduce employee turnover?**