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You're Not What I Expected: Expectancy Violations and Performance Ratings

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You're Not What I Expected:
Expectancy Violations and Performance Ratings

by

Britany N. Telford

A thesis submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
with a concentration in Research Methodology
Department of Psychology
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Keywords: Performance Appraisal, Job Performance, Expectancy Violation, Bias, OCB

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DEDICATION

To my family for their unwavering support and encouragement. This thesis, as well as everything else I have accomplished, would never have been possible without you.

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ABSTRACT

I present the results of two studies designed to explore how Expectation Violation Theory may explain biases in performance ratings. Study 1 examines how pre-hire information biases on-the-job ratings of task performance. Study 2 replicates the findings of Study 1 for on-the-job ratings of OCB performance. Results of these studies suggest that expectations violations do occur when on-the-job performance is either higher or lower than suggested by pre-hire information. However, first impressions of the employee appear to bias performance ratings of both task and OCB performance rather than expectation violations. Findings suggest applicants that make positive first impressions are rated higher on both OCB and task performance than equivalently performing co-workers who make less favorable first impressions.

CHAPTER ONE:

INTRODUCTION

“Expectations are premeditated resentments” (Anonymous, n.d.). This anonymous quote expresses the impact of expectancy violations. We presume our expectations will be met and dislike when reality falls short of these expectations. This phenomenon of human nature is not abandoned when we enter the workplace and is particularly applicable to job performance. Ambady and Rosenthal’s (1992) work demonstrated that interviewers form an opinion of interviewees within seconds of meeting them.

Additionally, managers begin to form opinions and expectations about new hires before they even arrive, based on sources such as the new hire’s recommendation letters, resume or interview (Brown & Campion, 1994). However, the fact that a new employee’s performance after hire may surpass, meet, or fall short of the manager’s pre-hire expectations is seldom discussed. Using expectancy violation theory (EVT; Burgoon & Jones, 1976) I investigate how the discrepancy between expected and actual performance predicts both the supervisor’s ratings of the employee’s performance and supervisor’s reward recommendations for the employee. This is of practical interest because supervisors are gatekeepers for organizational decisions such as promotions, raises, and terminations. Thus, a supervisor’s biased rating of the employee’s performance may have large consequences for both the employee and the organization.

Expectancy Violations

Humans prefer to believe they can predict future situations and behavior because uncertainty is cognitively uncomfortable (Berger & Calabrese, 1975). This tendency is exemplified by phenomena such as the just-world hypothesis (Lerner & Simmons, 1966) and schemata. Schemata are mental frameworks used to organize information and make predictions about the world, and are often built through past experiences or information (Stein, 1992). Schemata contain both declarative (factual knowledge about *what* something is) and procedural information (processes, and *how* to carry out a procedure; Anderson, 1976).

Research on schemata has a long history in psychology through topics such as stereotyping (e.g. stereotype threat and academic performance; Steele, 1997), interpersonal interactions (e.g. expectancy violations theory; Burgoon & Jones, 1976), memory (e.g. self-reference encoding; Rogers, Kuiper, & Kirker, 1977), and creativity (e.g. schema violations and divergent thinking; Gocłowska, Baas, Crisp, & De Dreu, 2014). Most research theories founded in the concept of schemata assert that schema violations are unpleasant for the individual experiencing them. For example, cognitive dissonance theory posits that individuals feel psychologically uncomfortable (dissonance) when cognitions, “any knowledge, opinion, or belief about oneself, or about one’s behavior,” are inconsistent with one another (Festinger, 1957, p. 3). This aligns with the assertion that individuals dislike uncertainty. Schemata allow individuals to reduce uncertainty by predicting what will happen in a situation, such as how an individual will behave. But when the situation does not align with expectations, it indicates the world is uncertain and not predictable, resulting in psychological discomfort.

Within the interpersonal domain, schemata allow individuals to form expectations about how they and others should behave in interactions and relationships. For example, expectancy violation theory (EVT; Burgoon & Jones, 1976; Burgoon, 1993), a theory founded on the concept of schemata, utilizes them to demonstrate how people both form expectations and react to violations of expectations. EVT has three central tenants: expectations, violations, and valence. According to EVT, individuals form *expectations*, predictable behaviors that can be attributed to a situation or individual (Burgoon, 1993). These expectations may be based in social norms or born out of previous interactions (Burgoon, 1993). Individuals use their expectations to reduce the ambiguity of future situations or interpersonal encounters. For example, my co-worker generally responds to emails within 24 hours. Based on my perception of his past performance, when I send an email to my co-worker, I expect him to respond within 24 hours.

The second tenant of EVT, *violations*, occurs when an individual behaves in a way that is contrary to expectations. For example, my co-worker generally responds to emails within 24 hours, but took one week to respond to my most recent email. His late response is a behavior that does not align with my expectation, thus is a violation. This violation then leads to a judgment of the violator (Floyd & Voloudakis, 1999). This judgment can be positive, (i.e., pleasant surprise after a spouse's atypical show of devotion) or negative (i.e., displeasure when your spouse arrives home later than usual and misses dinner; Afifi & Mett, 1998). Thus, violations have a valence, specifically a positive or negative violation valence, which is assigned after a breach in expectation occurs.

EVT was originally proposed to explain how individuals perceive violations of their personal space. However schema violation research has since been applied to other domains such as interpersonal relationships (e.g. Bevan, 2003; Bevan, Ang & Fearn, 2014; Afifi & Faulkner, 2000), stereotype violations (e.g. Bettencourt, Dill, Greathouse, Charlton, & Mulholland, 1996; Biernat, Vescio, & Billings, 1999; Joardar, 2011), and verbal behavior expectancies (e.g. Johnson & Lewis, 2010). The impact of expectation violations on subjective ratings has also been examined.

For example, Jackson, Sullivan, and Hodge (1993) had participants read fictitious undergraduate college applications that either violated or did not violate race stereotype schemata. The race stereotype schema for academic performance within the United States, the country in which the study took place, is that blacks are low academic performers and whites are high academic performers (Jackson et al., 1993). Applications with equivalent academic information (e.g. GPA, extracurricular activities) were manipulated such that the applicant was either a black or a white student. When the application depicted high performance, participants rated black applicants more favorably overall than white targets even though the applications were identical in all factors but race. When the application depicted low performance, participants rated white applicants less favorably overall than black participants. Jackson, Sullivan, and Hodge argue that this is support for EVT because negative violations of expectations were rated less favorably while positive violations of expectations were rated more favorably.

A study by Heilman and Chen (2005) replicated these findings for gender stereotypes. The stereotype for females is that they should be communal and engage in group oriented, nurturing behaviors. Conversely, men should be agentic and engage in

more aggressive behaviors that help them get ahead of others. The authors compared three conditions for each gender (1) engaging in helping behavior when asked by a coworker, (2) declining to engage in helping behavior when asked by a coworker, and (3) no information about helping behavior. When men engaged in helping behavior, participants rated their performance higher than the no information condition, but rated woman equivalent to the no information condition for the same behavior. When men declined helping, participants rated their performance equivalent to the no information condition, but rated women's performance lower than that condition for the same behavior.

Though the authors do not propose theoretical underpinnings for this phenomenon, I argue that EVT explains the bias. When women engaged in helping behavior, they were performing as expected, thus there was no expectation violation and they were consequently neither rewarded nor punished. Men who did not engage in helping behavior were also performing as expected based on their gender stereotype, thus they were neither rewarded nor punished for this behavior. However, when men did engage in helping behavior, they were seen as positively violating expectations, and were rewarded.

Looking beyond race and gender, research suggests that expectations about personality may differentially influence subjective ratings. Bendersky and Shah (2013) examined coworker contribution ratings over time using workplace vignettes. MTurk participants were asked to rate how much a fictional coworker contributed before (time 1) and after (time 2) learning how much the coworker was willing to contribute to the group effort. Scenarios were manipulated such that the fictional coworker displayed high or low

extraversion. They found that at time 2, extraverts' contributions were judged as lower than their introverted counterparts, although their contributions were objectively the same. Extraverts negatively violated expectations, thus were punished more harshly than equally contributing introverts.

Within workplace research, expectation violations have primarily been examined from the viewpoint of subordinates. Grover, Hasel, Manville, and Serrano-Archimi (2014) examined trust violations supervisors committed from the viewpoint of their subordinates. They found that supervisors who negatively violated employees' role expectations elicited strong reactions from employees such as leaving the manager's department or performing poorly. Though this highlights the practical implications of expectancy violations within the workplace, it focuses only on how incumbents adapt their own behavior to supervisors who do not meet expectations. Absent from the literature, are supervisors' reactions to subordinate expectancy violations. This is of practical importance because supervisors are responsible for organizational judgments about employees such as raises, promotions, and terminations. Though recently there has been a movement at companies like Microsoft, Adobe, and Gap to do away with annual performance reviews, at the majority of companies they are still the primary tool for making important organizational decisions.

Performance Appraisal

Performance management seeks to continuously improve employee performance through processes, such as evaluation, feedback, training, and reward systems, that align with organizational goals (Aguinis, 2009b; DeNisi, & Smith, 2013). It can be used to meet many organizational purposes such as making administrative decisions (e.g.

bonuses, raises, promotions, terminations), providing the legal documentation for such decisions, producing developmental feedback for employees, and identifying where training is needed (Aguinis, 2009a). In a study surveying 278 organizations, Rogers, Bernthal, and Smith (2003) found that 91% of companies used a performance management system. They also found that those with performance management systems typically outperform those without in financial outcomes, customer satisfaction, and employee retention.

Performance appraisal is one process within the larger entity of performance management and has historically received a great amount of attention from researchers and practitioners alike (Aguinis, 2009a). A review of articles from 2003-2007 listed performance appraisal and feedback as the 3rd most popular article topic of the *Journal of Applied Psychology* and 2nd most of *Personnel Psychology* (Cascio & Aguinis 2008). Performance appraisal is an assessment technique to measure an employee's or team's performance, and systematically identify strengths and weaknesses (Aguinis & Pierce, 2008). The performance constructs measured may vary, but two prominent examples are task performance and organizational citizenship behavior which are discussed in detail in studies one and two respectively. Judgment of performance may come from a mixture of sources such as the employee him/herself, supervisors, peers, subordinates, or customers. Most typically, supervisor reviews of performance are used. This practice aligns with research demonstrating supervisor performance reviews are more reliable than peer or self-appraisals (Viswesvaran, Ones, & Schmidt, 1996; Conway & Huffcutt, 1997). However, accuracy is only one consideration when designing the assessment process and each source has its place depending on the goals of the appraisal. For example, including

the employee in the process increases the perceptions of fairness and accuracy (Shore, Adams, & Tashchian, 1998) and increases the chance the employee's performance will improve in the future (Aguinis, 2009b).

Because performance appraisal is a foundation for other processes within performance management (e.g. the legal documentation for decision makings, basis of employee feedback) judgment biases caused by supervisor reactions to employee expectation violations may have direct consequences on the employee and the organization. For example, appraisals that are too lenient may result in the promotion of the wrong employees or cover up training needs. Employees who perceive performance appraisals as unfair may choose to leave the company (Prendergast & Topel, 1993). Bias may come from a variety of sources such as organizational politics (Bjerke et al., 1987), rater personality (Bernadine et al., 2000), similarities between the rate and rater attitudes (Abrami & Mizener, 1985), halo leniency, severity, (Viswesvaran et al., 2005), and stereotypes (Heilman & Chen, 2005). I seek to bridge between two fields of research, performance appraisal biases and expectation violations. The following two studies will examine (1) if on-the-job performance can violate supervisor's expectations formed pre-hire, (2) if this violation creates performance appraisal bias, and (3) if this violation creates bias in recommendations for rewards (e.g. raise, termination).

CHAPTER TWO

STUDY 1

Introduction

Prior research demonstrates that managers form first impressions, or expectations, of employees before they are even on the job (Brown & Campion, 1994). However, not every new-hire performs at the level their manager expected. The new-hire may surpass (positive violation), meet (no violation), or under-achieve (negative violation) performance expectations. Additionally, these expectation violations may differentially affect the supervisor's subjective performance ratings of employees.

Workplace supervisors may be more impressed by an employee they initially perceived as mediocre surpassing expectations, than a high potential objectively performing equally well. Additionally, a supervisor may be more disappointed by a high potential that does not live up to expectations than a mediocre employee who objectively performs equally poorly. As suggested by EVT, a manager should be pleased by violations that benefit them (positive violation valence) such as surpassing expectations, and dislike violations that do not benefit them (negative violation valence), such as not meeting expectations. Thus, I propose the following hypotheses:

H1. High potentials at time 1 who exhibit low performance at time 2 will have higher violations of expectations than low potentials at time 1 who exhibit equivalently low performance at time 2

H2. High potentials at time 1 who exhibit high performance at time 2 will have lower violations of expectations than low potentials at time 1 who exhibit equivalently high performance at time 2.

H3. High potentials at time 1 who exhibit low performance at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently low performance at time 2

H4. High potentials at time 1 who exhibit high performance at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently high performance at time 2.

Although expectancy violation research has been applied to subjective ratings (e.g. Jackson, 1993; Kernahan, Bartholow, & Bettencourt, 2000), more distal consequences have not been examined. Performance appraisals are a foundation for many other organizational decisions, thus biases in performance appraisals may have consequences in other performance management domains. For example, do performance expectation violations affect not only subjective performance ratings, but also recommendations to reward or punish the employee?

H5. High potentials at time 1 who exhibit low performance at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently low performance at time 2

H6. High potentials at time 1 who exhibit high performance at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently high performance at time 2.

Job Performance

Job performance refers to the measurable behaviors performed at work that lead to accomplishing organizational goals (Viswesvaran & Ones, 2000; Motowidlo, 2003). As discussed earlier, supervisor appraisals of job performance are used by organizations for a multitude of decisions such as promotions, raises, and other pay-for-performance benefits (Farr & Levy, 2007). Though there appears to be a general factor of job performance (Viswesvaran, Schmidt, & Ones, 1996; 2005), models of performance typically cluster around three sub-dimensions: task performance, organizational citizenship behaviors (OCB), and counterproductive work behaviors (Viswesvaran & Ones, 2000).

Although task performance and OCB both lead to desirable organizational outcomes, *counterproductive behavior* (CWB) is defined as intentional behaviors that go against the best interest of the organization (Sackett & DeVore, 2002). For the purposes of this study, I focus on only task performance (Study 1) and OCB (Study 2) due to the fact that CWBs are typically lower incident.

It is clear that task performance and OCB are related yet distinct constructs within the job performance domain (Conway, 1999). Evidence for this is provided in part by their differential relationships with common job attitude dimensions such as satisfaction, commitment, and justice (Hoffman et al., 2007; Wayne, Shore, Bommer, & Tetrick, 2002). *Task performance* is defined as the degree to which employees perform behaviors that are a part of their formal job description (Borman & Motowidlo, 1993; Murphy, 1989). The accuracy of task performance measurement has received a lot of attention, and therefore several potential sources of error have already been identified. A few

examples of these sources are halo, the tendency of raters to judge all aspects of an individual using a general impression formed on only one or a few of the individual's characteristics (Viswesvaran et al., 2005); rating too leniently or too harshly across employees (Vishwesvvaran et al., 2005); and the tendency of raters to rate employees more similar to them higher than others (Abrami & Mezener, 1985).

Building upon the previously discussed studies that demonstrated biases in ratings due to violations of expectations (e.g. Bendersky & Shah, 2013; Heilman & Chen, 2005; Jackson, Sullivan & Hodge, 1993), performance expectation violations may be another potential source of bias in task performance ratings. Specifically, employees' whose on-the-job performance is lower (negative violation) than expectations established pre-hire, through information such as letters of recommendation, interviews, and resume, should be rated lower than employees who do not violate expectations. Additionally, employees who perform higher than expected (positive violation) should be rated higher than employees who do not violate expectations. Thus I propose the following specific hypotheses:

H1a. High potentials at time 1 who exhibit low task performance at time 2 will have higher violations of expectations than low potentials at time 1 who exhibit equivalently low task performance at time 2

H2a. High potentials at time 1 who exhibit high task performance at time 2 will have lower violations of expectations than low potentials at time 1 who exhibit equivalently high performance at time 2

H3a. *High potentials at time 1 who exhibit low task performance at time 2 will have lower task performance ratings than low potentials at time 1 who exhibit equivalently low performance at time 2*

H4a. *High potentials at time 1 who exhibit high task performance at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently high task performance at time 2*

H5a. *High potentials at time 1 who exhibit low task performance at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently low task performance at time 2*

H6a. *High potentials at time 1 who exhibit high task performance at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently high task performance at time 2*

Method

Participants

Participants were recruited using a publicly available listserv. The listserv contained email address for approximately 10,000 engineers certified to practice in their state. This list is a mix of several types of engineers including civil, and electrical. Potential participants were emailed a description and link to the survey. Although this was a large participant pool, response rates were small. This small response rate was expected because there was no compensation, the email did not come from someone personally known to the participants, and there was no way to know that the listed email mailboxes were monitored regularly.

A total of 179 engineers, agreed to participate in Study 1. Two participants were deleted from the study for incorrectly answering one or more attention questions leaving 177 participants for analyses. On average, participants were 49 years old and worked 45 hours per week. All participants had at least 1 year of experience as a manager of other employees, and had 9 years of managerial experience on average. The majority, 78%, had experience rating employee performance. Sample sizes and demographics for each condition are available in Table 1.

Table 1. Study 1 Demographics by Condition

Condition	N	Age	Hrs/ Wk	Male	Race/Ethnicity ^a						
					White	Black	Hispanic	Asian	Middle Eastern	Pacific Islander	American Indian
1	44	50	44	75%	76%	0%	14%	5%	5%	0%	0%
2	44	49	48	86%	89%	0%	9%	0%	0%	0%	2%
3	46	49	44	89%	78%	6%	10%	2%	4%	0%	0%
4	42	50	45	81%	78%	7%	12%	0%	2%	0%	0%

^a Participants were allowed to choose more than one race/ethnicity

Materials

Vignette Development. Four vignettes were developed for this study; specifically, two pre-hire vignettes administered at time 1 and two post-hire vignettes administered at time 2. Pre-hire vignettes contained a letter of recommendation for the potential new employee. Post-hire vignettes summarized the employee’s job performance over the last six months. See Appendix B for the vignettes used in this study and in study two.

Rotundo and Sackett’s (2002) profile development method was used to create the vignettes. This process involved four major steps. Step 1) Two subject matter experts

(SMEs) in construction project management that had experience in performance appraisal were asked to a) review the O*NET construction project managers task description for accuracy, b) provide good and poor behavioral examples of performance on each of the tasks, and c) provide examples of how these good and poor behaviors would be communicated on a letter of recommendation.

Step 2) SMEs were asked to sort each behavior into task performance or OCB based on the definitions provided previously. Examples of the O*NET task descriptions include *plan, schedule, or coordinate construction project activities to meet deadlines* and *prepare and submit budget estimates, progress reports, or cost tracking reports*.

Step 3) The behavioral examples were compiled into the vignettes. The two pre-hire vignettes consisted of letters of recommendation manipulated to display either high task performance or low task performance. The two post-hire vignettes displayed either high task performance or low task performance using on-the-job behaviors provided by the SMEs.

Step 4) Twenty-two Industrial and Organizational doctoral students served as subject matter experts (SME) and rated each vignette on Williams and Anderson's (1991) 7-item, in-role behavior measure (described in detail below). Vignettes were presented in random order. This step ensured the vignettes were constructed such that they contained the desired manipulations of high and low task performance. Descriptive statistics for each vignette are available in Table 2. No modifications to the vignettes were deemed necessary.

Table 2. Study 1 Vignette Descriptive Statistics

Vignette	N	Mean	SD	Min	Max
Prehire: High	22	45	4.59	31	49
Prehire: Low	22	17	6.71	7	29
On-the-job: High	22	46	2.93	40	49
On-the-job: Low	22	16	5.44	8	25

Pre and Post Task Performance Appraisal. To assess task performance, participants completed Williams and Anderson’s (1991) 7-item, in-role behavior measure after reading the pre-hire vignette at time 1 ($\alpha = .94$) and again after reading the on-the-job vignette at time 2 ($\alpha = .95$). This measure uses a Likert-type, 7-point agreement scale with items such as “adequately completes assigned duties” each measured on scale ranging from 1 *strongly disagree* to 7 *strongly agree*. A full list of questions is available in Appendix C. This measure was originally intended to measure past employee performance, therefore at time 1 the instructions were modified slightly so that participants could rate expected performance. Instructions were changed to “*Please indicate the extent to which you agree that Jerry will participate in each behavior.*” At time 2, because I wished to assess past performance rather than expected performance, the instructions remained true to the original measure; “*based on the scenarios you read, please indicate the extent to which you agree Jerry participated in each behavior.*”

Expectation Violation. Afifi & Mett’s (1998) violation scales (Appendix D) were used to measure the presence and valence of the expectation violations. These two 4-item, 5–point, Likert-type scales measure violation expectatios (e.g. *Jerry’s performance was not at all expected/completely expected*; $\alpha = .79$), and violation valence (Eg. *Jerry’s performance was a very positive/very negative behavior*; $\alpha = .92$).

Reward Recommendations. Allen and Rush's (1998) measure of reward recommendations was used to assess the degree to which the rater would recommend the employee for optional benefits such as a raise. This scale contains five items measured on a 5-point scale (1) would definitely not recommend to (5) would recommend with confidence. Additionally, two reverse coded items were added assessing recommendations to demote and to terminate. Overall reliability was good $\alpha=.95$. The full 7-item scale is available in Appendix E.

Demographics. Demographic questions included age, sex, ethnicity, average hours worked per week, job industry, and managerial experience. These questions were assessed at the end of the study. The full questionnaire is available in Appendix F.

Procedure

Qualtrics, a survey hosting site, was used to administer all information to the participants. Participants first read through the Informed Consent. Once Informed Consent was collected, the participant was randomly assigned to one of the four treatment groups using Qualtrics' survey flow randomizer option. The four treatment groups are available in Appendix G.

All participants were presented with the same background story available in Appendix H. This story informs them that they are the owner of a commercial construction company. They have just won a new project, building a 13.2 million dollar hotel, and they need a new project manager to run the job. Because this is a big job, they will need a competent project manager who keeps on top of progress and doesn't let details fall through the cracks. Without a competent project manager, their company could lose a large amount of money.

Second, participants read a letter of recommendation to establish performance expectations for the new project manager. Third, each participant rated performance expectations for the new hires using the Williams and Anderson (1991) in-role behavior measure. Fourth, participants read a vignette describing the employee's on-the-job performance for the last six months. Fifth, after reading the performance descriptions, participants once again completed Williams and Anderson's (1991) in-role behavior measure. Sixth, participants completed Afifi & Mett's (1998) violation scales. Seventh, participants completed Allen and Rush's (1998) measure of reward recommendations. Last, participants responded to several demographic questions.

Results

Hypotheses 1 and 2 essentially state that participants will report violations of expectations when on-the-job performance is not equivalent to indicators of performance presented pre-hire. Hypothesis H1 and H2 were tested with a factorial ANOVA followed by pairwise comparisons. Results supported the hypothesized relationships. Specifically, the interaction between scenario 1 and 2 was significant, $F(1,72)=6.73$, $p<.0001$, $\eta^2=.642$. When on the job performance was low, participants expressed greater expectation violation for employees with high pre-hire behavior ($M=19.96$) than low pre-hire behavior ($M=10.52$; $p<.0001$). Additionally, when on the job performance was high, participants expressed greater expectation violation for employees with low pre-hire behavior ($M=19.96$) than high pre-hire behavior ($M=11.364$; $p<.0001$). Note that scenario 2 had a small main effect on violation expectation, $F(1,172)=5.65$, $p=0.19$, $\eta^2=.032$, but scenario 1 did not $F(1,172)=.796$, $p=.74$, $\eta^2=.005$. Graphs depicting these results are available in Figure 1.

Hypotheses 3 and 4 proposed that on the job performance ratings would be biased by expectation violations such that, compared to employees with no violation, employees who performed worse than expected would have lower ratings and employees who performed better than expected would have inflated ratings. These hypotheses were also tested using a factorial ANOVA. Both the initial pre-hire scenario ($F(1,173)=4.53$, $p=.035$, $\eta^2=.026$), and the on-the job scenario ($F(1,173)=1278.94$, $p<.0001$, $\eta^2=.881$) had a main effect on on-the-job task performance ratings. Additionally, the interaction between the two was significant ($F(1,173)=8.126$, $p=.005$, $\eta^2=.045$). Pairwise comparisons revealed that Hypotheses 3 and 4 were unsupported. When on-the-job performance was high, pre-hire behavior had no effect on performance ratings, (low $M=43.77$, high $M=42.75$; $p=.605$). However, when on-the-job behaviors were low, individuals with high pre-hire performance were rated significantly better ($M=18.75$) than those with low pre-hire performance ($M=15.12$; $p=.001$; see Figure 2).

Hypotheses 5 and 6 proposed that, compared to employees with no expectation violation, employees who performed worse than expected would have lower reward recommendations and employees who performed better than expected would have higher reward recommendations. Hypotheses 5 and 6 were also tested using factorial ANOVA which was significant ($F(1,172) = 104.18$, $p<.0001$, $\eta^2=.65$). The pre-hire scenario did not have a main effect on reward recommendations ($F(1,172)=2.68$, $p=.10$, $\eta^2=.02$), but the on-the-job scenario did ($F(1, 172)= 308.84$ $p<.0001$, $\eta^2=.64$) such that high on-the-job performance was awarded more reward recommendations ($M=22.06$) than low on-the-job performance ($M=15.918$). The interaction between the scenarios was non-significant

($F(1,172)= 2.03, p=.16, \eta^2=.01$), thus hypotheses 5 and 6 were unsupported (see Figure 3).

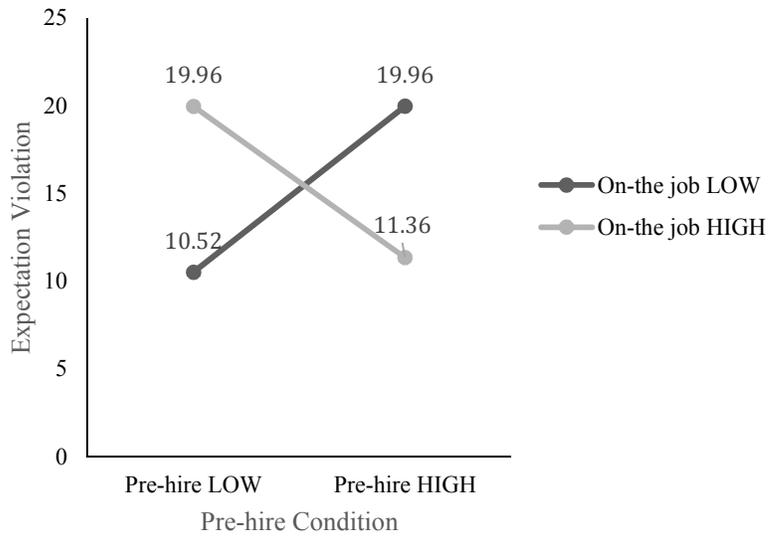


Figure 1. The interaction between pre-hire and on-the-job task performance on violation of expectations.

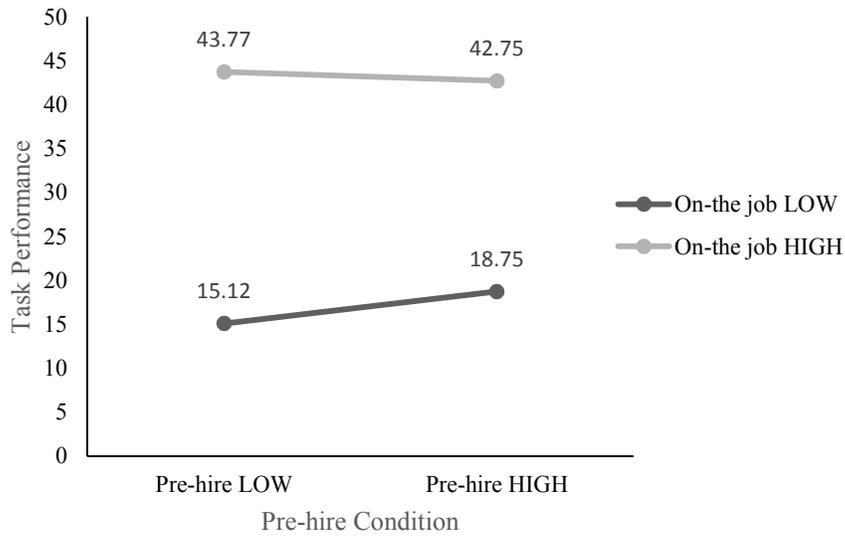


Figure 2. The interaction between pre-hire and on-the-job task performance on task performance ratings.

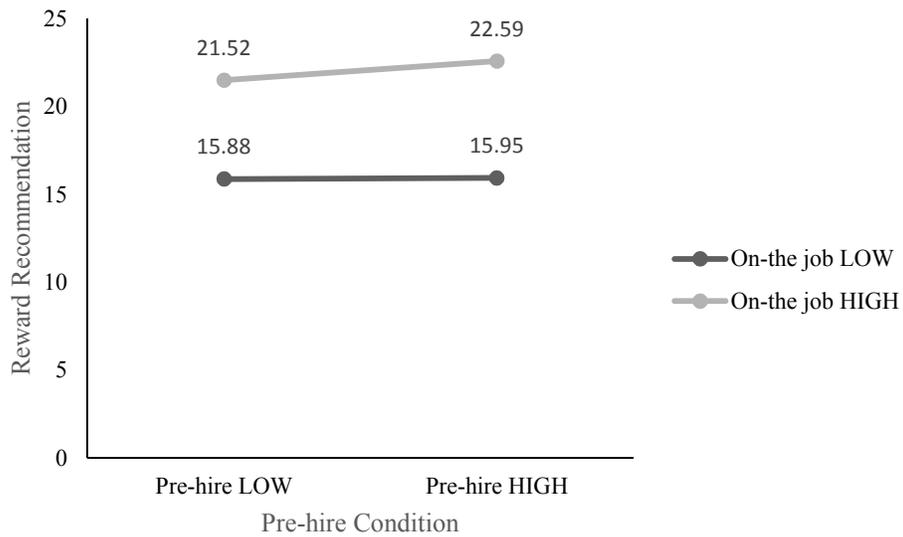


Figure 3. The interaction between pre-hire and on-the-job task performance on reward recommendations.

Discussion

This study investigated expectancy violation theory as an explanation for biases in task performance ratings. Using scenarios with varying pre-hire and on-the-job task performance, performance expectations and violations were established. Over all conditions, high on-the-job performance scenarios resulted in higher performance ratings and more reward recommendations than low on-the-job performance ratings. This is good news because it suggests that high performers receive better performance ratings and rewards than low performers on average, regardless of expectations formed by supervisors pre-hire. Another positive finding, though contrary to the hypotheses, was the lack of bias in task performance ratings due to pre-hire information for high on-the-job performers. Participants did experience expectation violation when on-the-job performance was better or worse than that depicted in the pre-hire information, however it did not appear to affect high on-the-job performers nor explain the bias in low on-the-job performers.

Interestingly, low-on-the-job performers were rated differently depending on whether they had high or low pre-hire performance indicators. One possible explanation for this phenomenon is confirmation bias. Confirmation bias is the tendency to seek out, interpret, and recall information that confirms a belief rather than disconfirms it (Oswald & Grosjean, 2004). According to confirmation bias, participants should interpret the same on-the-job performance scenario differently depending on their existing opinion of the employee. This suggests that if a supervisor has an expectation the new employee will be a high performer, he or she may give less importance to new information that contradicts this expectation. Results suggest that the positive first impression was indeed beneficial

and caused more lenient ratings later on when the employee performed poorly. Study 2 attempts to see if this finding is repeated for OCBs or if expectation violations bias results as originally proposed.

CHAPTER THREE

STUDY 2

In contrast to task performance, OCBs are voluntary work behaviors such as backing up a team member, being cordial with co-workers, and positively representing the company outside the office. Though they may not be a part of the formal job description, these behaviors do contribute to supervisory ratings of job performance (Orr, Sackett, and Mercer, 1989). This concept has been studied under several different names and related dimensions [e.g. contextual performance (Borman & Montiwidlo, 1993), organizational citizenship behavior (Organ, 1988), prosocial organizational behavior (Brief & Motowidlo, 1986), organizational spontaneity (George & Brief, 1992), extrarole behavior (Katz & Kahn, 1978; Van Dyne, Cummings, & Parks, 1995)], however organizational citizenship behavior (OCB) is arguably the most popular terminology in current research (Lepine, Erez, & Johnson, 2002).

Organizational citizenship behavior (OCB) is defined as discretionary behavior that leads to accomplishing organizational goals (Viswesvaran & Ones, 2000; Organ, 1997). Note that Organ (1988) originally defined OCB as non-enforceable behavior that is neither part of the organization's job description nor formal reward system. However, the current definition acknowledges that supervisors do indeed reward OCB (Organ, 1997; Viswesvaran & Ownes, 2000).

Smith, Organ, and Near (1983) originally proposed a two-dimensional OCB model, that has since been expanded into a five factor model by Organ (1988). These five

factors are courtesy (being mindful of coworkers), conscientiousness (above-and-beyond in dedication to the job), civic virtue (actively participating in optional organizational meetings and keeping abreast of announcements) and sportsmanship (maintaining positivity in the workplace). Podsakoff's (1990) measure (available in appendix A) of these five OCB sub-dimensions is still widely used, but some researchers argue that a reconceptualization of this model is necessary.

Williams and Anderson (1991) argued for a two-factor model composed of OCB-I, OCBs that primarily benefit the individual, but also meet organizational goals (e.g. taking interest in coworkers, backing up behavior), and OCB-O, OCB that primarily benefit the organization (e.g. notifying the organization of expected absences, maintaining positivity at work). However, Hoffman, Blair, Meriac, and Woehr's (2007) meta-analysis did not support the notion that OCB-O and OCB-I were distinct dimensions. Instead, the authors argue that OCB should be conceptualized as a one-dimensional construct. This echoes the findings of Lepine, Erez, and Johnson's (2002) meta-analysis that demonstrated neither Williams and Anderson's (1991) two factor nor Organ's (1998) five factor model accounted for incremental variance over the one factor model. Thus, aggregating the five sub-dimensions of Podsakoff's (1990) measure to reflect a unidimensional measure of OCB is empirically supported.

Task performance and OCB are related, but contribute differentially to overall job performance ratings (Motowidlo & Scotter, 1994). Thus, to better understand the influence of pre-hire information on job performance ratings, it is important to examine the previously proposed hypotheses for both performance dimensions to ascertain

whether the variable relationships function the same or differently. Study 2 examined the relationships previously hypothesized, this time for OCB.

H1. High potentials at time 1 who exhibit low OCB at time 2 will have higher violations of expectations than low potentials at time 1 who exhibit equivalently low OCB at time 2

H2. High potentials at time 1 who exhibit high OCB at time 2 will have lower violations of expectations than low potentials at time 1 who exhibit equivalently high OCB at time 2

H3. High potentials at time 1 who exhibit low OCB at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently low OCB at time 2

H4. High potentials at time 1 who exhibit high OCB at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently high OCB at time 2

H5. High potentials at time 1 who exhibit low OCB at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently low OCB at time 2

H6. High potentials at time 1 who exhibit high OCB at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently high OCB at time 2

Method

Participants

Participants were again recruited using a publicly available listserv of engineers certified to practice in their state. The list contained approximately 10,000 engineers and was a mix of several types of engineers including civil, and electrical. It is important to note that none of the potential participants in Study 2 were approached to participate in Study 1. Potential participants were emailed a description of the survey and a link to it.

A total of 174 engineers, agreed to participate in Study 2. Seven participants were deleted from the study for incorrectly answering one or more attention questions leaving 167 participants for analyses. On average, participants were 48 years old and worked 48 hours per week. All participants had at least 1 year of experience as a manager of other employees, and had 9 years of managerial experience on average. Also, the majority, 81%, had experience with rating employee performance. Sample sizes and demographics for each condition are available in Table 3.

Table 3. Study 2 Demographics by Condition

Condition	N	Age	Hrs/ Wk	Male	Race/Ethnicity ^a						
					White	Black	Hispanic	Asian	Middle Eastern	Pacific Islander	American Indian
1	38	49	48	76%	89%	0%	8%	3%	0%	0%	0%
2	44	48	48	84%	69%	4%	9%	4%	7%	5%	2%
3	43	47	48	88%	82%	0%	14%	2%	2%	0%	0%
4	42	46	48	80%	80%	0%	14%	7%	0%	0%	0%

^a Participants were allowed to choose more than one race/ethnicity

Materials

Vignette Development. Four vignettes were developed for this study using Rotundo and Sacket's (2002) profile development method. During vignette development for Study 1, construction project managers were asked to provide good and poor behavioral examples of the construction project manager O*NET behaviors, and to sort each into tasks and OCBs. The OCB behavioral examples were combined to build the vignettes for Study 2.

Two vignettes provided pre-hire information in the form of a letter of recommendation for the potential new employee. One depicted high levels of OCB at his previous job, and one depicted low levels. Two post-hire vignettes summarized the employee's OCB over the last six months on-the-job. Again, one depicted high on-the-job OCB and the second depicted low on-the-job OCB. See Appendix B for these vignettes.

Finally, twenty-two Industrial and Organizational doctoral students rated each vignette on Podsakoff et al.'s (1990) 24-item OCB measure (described in detail below). Vignettes were presented to raters in random order. This step ensured the vignettes were constructed such that they contained the desired manipulations of high and low task performance. Descriptive statistics for each vignette are available in Table 4.

Table 4. Study 2 Vignette Descriptive Statistics

Vignette	N	Mean	SD	Min	Max
Prehire: High	21	141	16.16	106	165
Prehire: Low	20	56	13.60	37	87
On-the-job: High	22	148	13.54	122	167
On-the-job: Low	22	53	15.54	30	83

Pre and Post OCB Performance Appraisal. Podsakoff et al.'s (1990) 24-item measure was used to measure OCB both at time 1 ($\alpha = .98$) and at time 2 ($\alpha = .99$). This measure assesses Organ's (1988) five facets of OCB: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. Each facet is assessed with 5 items except civic virtue, which has 4 items. The aggregate one-dimensional measure was used for all analyses. Participants indicated their agreement with each item using a 7-point Likert-type response ranging from 1 *strongly disagree* to 7 *strongly agree*. An example altruism item is "This employee is always ready to lend a helping hand to those around him/her." The full measure is available in Appendix A.

Expectation Violation. Afifi & Mett's (1998) violation scales (Appendix D) were used to measure the presence and valence of the expectation violations. These two 4-item, 5-point, Likert-type scales measure violation expectations (e.g. *Jerry's performance was not at all expected/completely expected; $\alpha = .83$*), and violation valence (Eg. *Jerry's performance was a very positive/very negative behavior; $\alpha = .92$*).

Reward Recommendations. Allen and Rush's (1998) measure of reward recommendations was used to assess the degree to which the rater would recommend the employee for optional benefits such as a raise. This scale contains five items measured on a 5-point scale (1) would definitely not recommend to (5) would recommend with confidence. Additionally, two reverse coded items were added assessing recommendations to demote and to terminate. Overall reliability was good $\alpha = .97$. The full 7-item scale is available in Appendix E.

Demographics. As in study 1, demographic questions included age, sex, ethnicity, average hours worked per week, job industry, and managerial experience.

These questions were assessed at the end of the study. The full questionnaire is available in Appendix F.

Results

Again, Hypotheses 1 and 2 essentially state that participants will report violations of expectations when on-the-job OCB (scenario2) is not equivalent to OCB presented pre-hire (scenario 1). This was tested using a factorial ANOVA followed by pairwise comparisons. The interaction was significant $F(1,160)=551.75, p<.001, \eta^2=.775$. When on-the-job performance was low, employees with high pre-hire performance were rated significantly higher ($M=21.57$), than those with low pre-hire performance ($M=10.39$). When on-the-job performance was high participants with low pre-hire OCB ($M=23.64$) were rated higher than individuals with high pre-hire OCB ($M=10.78$). Thus, both Hypotheses 1 and 2 were supported. Note that there was a significant main effect for scenario 2 $F(1,160)=551.75, p<.001, \eta^2=.035$ and a non-significant main effect for scenario 1 ($F(1,160)=2.699$, but these results are not of relevance due to the significant interaction. See Figure 4 for a visual representation of these relationships.

Hypotheses 3 and 4 proposed that on the job performance ratings would be biased by expectation violations such that, compared to employees with no violation, employees who engage in lower OCB than expected would have lower ratings and employees that engage in OCB more than expected would have inflated ratings. A significant main effect was seen for the pre-hire scenario $F(1,162)=7.13, p=.008, \eta^2=.042$ and for the on-the-job scenario, $F(1,162)=886.29, p<.0001, \eta^2=.845$. The interaction between the two was also significant $F(1,162)=1561, p<.0001, \eta^2=.088$, such that when on-the-job OCB was low, high pre-hire OCB rated significantly higher ($M=71.75$) than low pre-hire OCB

($M=55.31$; $p<.0001$; see Figure 5). When on-the-job OCB was high, low pre-hire $M=139.05$ and high prehire ($M=135.86$) OCB were not significantly different $p=.375$. Thus, both hypotheses were unsupported.

Hypotheses 5 and 6 proposed that reward recommendations would be biased by expectation violations such that, compared to employees with no violation, employees who engage in lower OCB than expected would receive lower reward recommendations and employees who engage in OCB more than expected would receive higher reward recommendations. There was a significant main effect for the pre-hire scenario $F(1,160)=.07$, $p=.001$, $\eta^2=.070$ and on the on-the-job scenario $F(1,160)= 699.53$, $p<.000$, $\eta^2=.814$ (see Figure 6). More importantly, there was a significant interaction $F(1,160)= 8.331$, $p=.004$, $\eta^2=.049$, such that when on-the-job OCB was low, employees with high pre-hire OCB ($M=17.00$) were rewarded significantly more than those with low pre-hire OCB $p<.0001$ (13.32) $p<.0001$. When on the job OCB was high, employees with high pre-hire OCB ($M=30.65$) and low pre-hire OCB ($M=30.31$) did not differ $p=.69$. Thus, Hypotheses 5 and 6 were unsupported.

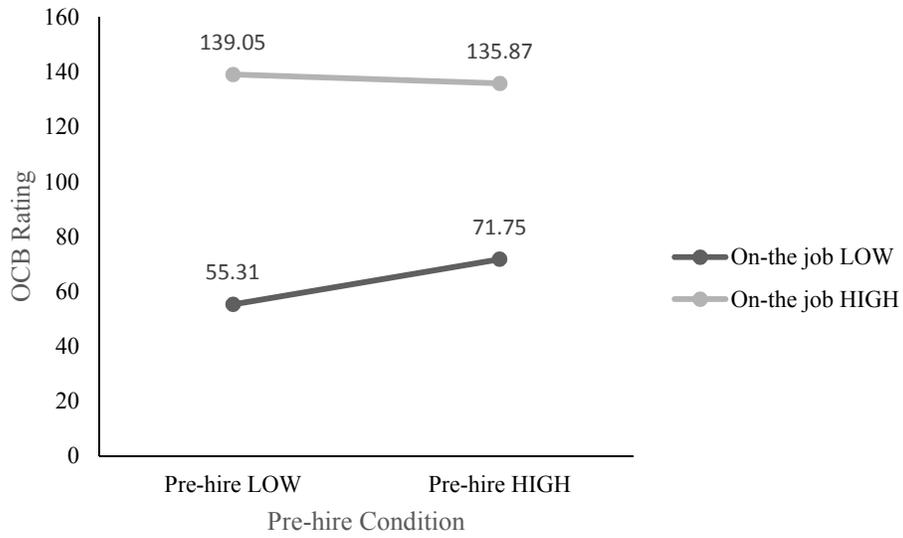


Figure 4. The interaction between pre-hire and on-the-job OCB on expectation violations.

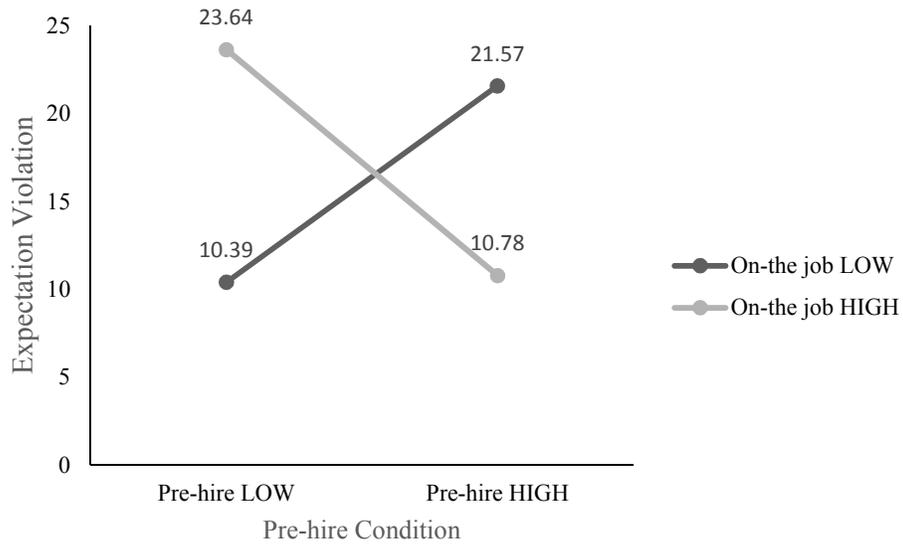


Figure 5. The interaction between pre-hire and on-the-job OCB on OCB ratings.

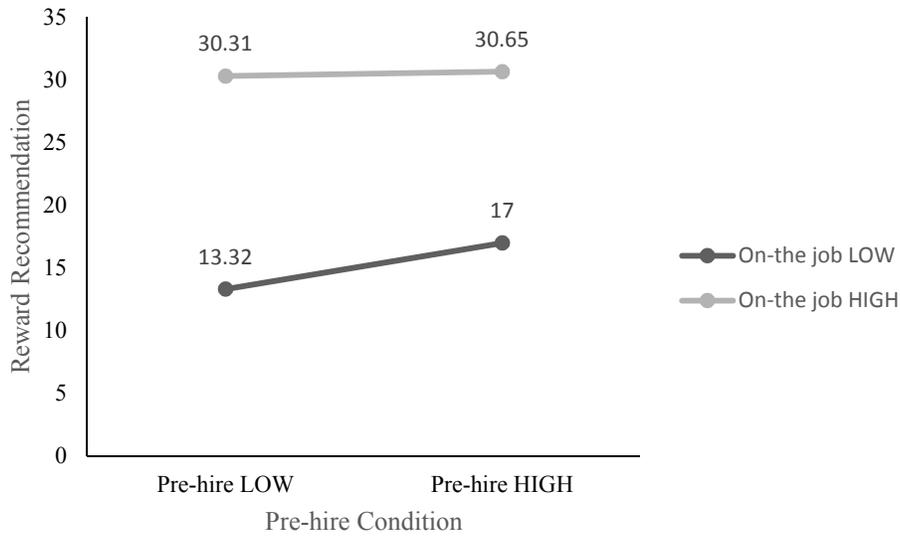


Figure 6. The interaction between pre-hire and on-the-job OCB on reward recommendations.

Discussion

This study was designed as a replication of Study 1 using a different job performance construct, OCB. Expectations for performance were established using pre-hire letters of recommendation depicting either high or low OCB behavior at a past job. Violations of expectation were created using on-the-job performance vignettes depicting either high or low OCB. Only Hypotheses 1 and 2, that expectation violations would occur, were supported. When on-the-job OCB was either higher or lower than indicated by pre-hire letters of recommendation, participants reported more expectation violations than when on-the-job OCB was equivalent to pre-hire letters. Again, this suggests that pre-hire information, such as letters of recommendation, can lead to expectations about the employee’s performance. However, violations do not appear to bias on-the-job ratings of OCB. Rather, pre-hire information appears to bias on-the-job OCB ratings differently

than proposed. When on-the-job OCB was high, there was no apparent bias based on pre-hire information. When on-the-job OCB was low, employees with high pre-hire OCB letters of recommendation received significantly higher OCB ratings than those with no violation. These employees also received more reward recommendations. This suggests that pre-hire information does indeed bias on-the job OCB ratings, though it appears that this matters only for people performing poorly on-the-job. As seen in Study 1, poor on-the-job performance was judged less harshly if the employee made a positive first impression using pre-hire information. Potential explanations for these findings are discussed in the General Discussion.

CHAPTER FOUR

GENERAL DISCUSSION

Expectation violations for both studies were in the proposed directions. This supports the notion that supervisors form expectations of how an employee will perform on-the-job based on pre-hire information such as letters of recommendation. It also supports the notion that supervisors are cognizant of violations of these expectations when on-the-job performance is either higher or lower than indicated by pre-hire information. Expectations appear to have influenced these ratings such that individuals with high pre-hire behaviors were rated higher than those with low pre-hire behaviors even when they exhibited equivalently low on-the-job performance. This pattern is also seen within reward recommendations in Study 2 which is problematic because it indicates employees engaging in equivalent OCB on-the-job may be differentially rewarded due to biases developed pre-hire.

One potential explanation for these results is confirmation bias, the tendency to seek out, interpret, and recall information that confirms a belief rather than disconfirms it (Oswald & Grosjean, 2004). Supervisors who form a performance expectation for an employee may ignore or give less importance to on-the-job performance that does not confirm their expectation. An example of confirmation bias can be seen in a study by Jonas, Schulz-Hardt, Frey and Thelen (2001). Participants were presented with sixteen expert opinions and disproportionately read evidence that supported rather than opposed their point of view. Participants chose to ignore credible information that did not align

with their pre-existing attitudes. In a similar manner, participants in the current set of studies may have paid less attention to on-the-job performance behaviors that did not confirm their expectations.

This expectancy confirmation is also seen in Dougherty, Turban, and Callender's (1994) study of interviewing practices. Managers were given information about potential applicants, such as their test scores and application. Better pre-hire information was correlated with interviewers' use of positive interview style, and more selling of the company during the interview. Managers' opinions of applicants' affected their behavior in a way that helped or hurt the applicant in the interview. Thus, it is important for employees to create a positive first impression and to consider that the first impression is formed as soon as any information about the employee is conveyed. This first impression create supervisor expectations that bias later interactions and performance ratings, especially if on-the-job performance is low. An employee who made a good first impression may be offered more chances than a coworker performing equally poorly.

Limitations and Future Research

Though confirmation bias offers up a potential explanation for the findings of these studies, it is still unclear why the bias occurred only for low on-the-job performers. The replication of this finding in Study 2 makes it less likely it is a statistical anomaly. Only two levels of performance (high and low) were used, making it difficult to understand the boundaries of this phenomenon. Future research should address this limitation using more variation in performance.

Another limitation of both studies is the use of vignettes rather than real world behavior. In most organizations, impressions of the employee's on-the-job performance

are made through multiple interactions and sources of information over time, rather than just reading a letter of recommendation. Perceptions of an employee's performance are likely modified with each of these interactions. Additionally, a vignette cannot realistically simulate the richness of real-world supervisor-employee interactions, which further limits the generalizability of these findings. Repeating these studies in the field longitudinally will be necessary to ensure generalizability and investigate the boundaries of the confirmation bias.

Future research should also examine the type of pre-hire information and how this might differentially bias later performance ratings. These studies used letters of recommendation, which is only one form of pre-hire information. Other forms provide different facets of the applicant's personality which may lead to stronger or weaker first impressions. For example, interviews allow applicants to explain their past performance, whereas letters of recommendation are written by someone other than the applicant. Supervisors may weigh one source more heavily than the other more when forming their first impression.

Finally, it is unclear why EVT theory did not explain the biases in the current set of studies, but did explain the biases in similar studies (e.g. Bendersky & Shah, 2013; Heilman & Chen, 2005; Jackson, Sullivan & Hodge, 1993). Future research should specifically examine if EVT is only relevant when there are strongly held cultural stereotypes such as for race and gender. Future research should also examine the variables of EVT and first impressions together to uncover how they interact.

Conclusions

These two studies were designed to examine performance expectations as a source of performance appraisal bias using EVT theory as the underlying mechanism for this phenomenon. Though expectation violations did occur, EVT theory did not explain the biases in these studies. Rather, expectations may have caused participants to engage in confirmation bias. However, this bias only existed for low performers, which suggest that on-the-job performance may moderate this phenomenon. This pair of studies demonstrates both the influence of expectations and the criticality of pre-interview information. Supervisors often receive information about potential employees, such as their application, resume, letters of recommendation, and test scores, before ever meeting them in person. It is important for applicants to realize the impact this pre-hire information may have, not just on their hiring chances, but also on their long term relationship with their supervisor.

REFERENCES

- Abrami, P. C., & Mizener, D. A. (1985). Student/instructor attitude similarity, student ratings, and course performance. *Journal of Educational Psychology, 77*(6), 693.
- Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology, 83*(2), 247-260. doi:10.1037/0021-9010.83.2.247
- Ambady, N., & Rosenthal, R. (1992). Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis. *Psychological Bulletin, 111*, 256–274.
- Anderson, J. (1976). *Language, memory and thought*. Hillsdale, NJ: Erlbaum Associates.
- Afifi, W. A., & Faulkner, S. L. (2000). On being 'just friends': The frequency and impact of sexual activity in cross-sex friendships. *Journal of Social and Personal Relationships, 17*(2), 205-222. doi:10.1177/0265407500172003
- Afifi, W.A., & Metts, S. (1998). Characteristics and consequences of expectation violations in close relationships *Journal of Social and Personal Relationships, 15*, 365–392
- Aguinis, H. (2009a). An expanded view of performance management. *Performance management: Putting research into practice*, 1-43.
- Aguinis, H. (2009b). *Performance management (2nd ed .)*. Upper Saddle River, NJ : Pearson Prentice Hall .

- Aguinis, H., & Pierce, C. A. (2008). Enhancing the relevance of organizational behavior by embracing performance management research. *Journal of Organizational Behavior*, 29(1), 139-145.
- Bendersky, C., & Shah, N. P. (2013). The downfall of extraverts and rise of neurotics: The dynamic process of status allocation in task groups. *Academy of Management Journal*, 56(2), 387-406.
- Berger, C. R., Calabrese, R. J. (1975). Some exploration in initial interaction and beyond: Toward a developmental theory of communication. *Human Communication Research*, 1, 99–112.
- Berthal, P. R., Rogers, R. W., & Smith, A. B. (2003). Managing performance: Building accountability for organizational success. Pittsburgh, PA: *Development Dimensions International*.
- Bettencourt, B.A., Dill, K.E., Greathouse, S.A., Charlton, K., & Mulholland, A. (1996). Evaluations of ingroup and outgroup members: The role of category-based expectancy violation. *Journal of experimental social psychology* 33(3), 244-275.
- Bevan, J. L. (2003). Expectancy violation theory and sexual resistance in close, cross-sex relationships. *Communication Monographs*, 70(1), 68-82. doi:10.1080/715114662
- Bevan, J.L., Ang, P.C., Fearn, J.B. (2014) Being unfriended on Facebook: An application of expectancy violation theory. *Computers in Human Behavior* 33 171–178.
- Biernat, M., Vescio, T. K., & Billings, L. S. (1999). Black sheep and expectancy violation: Integrating two models of social judgment. *European Journal of Social Psychology*, 29(4), 523-542.

- Bjerke, D. G., Cleveland, J. N., Morrison, R. F., & Wilson, W. C. (1987). *Officer fitness report evaluation study* (No. NPRDC-TR-88-4). Navy Personnel Research and Development Center San Diego, CA.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.
- Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *Academy of Management Review*, *11*, 710–725
- Brown, B.K., & Campion, M.A. (1994) Biodata phenomenology: Recruiters' perceptions and use of biographical information in resume screening. *Journal of Applied Psychology*, *79*, 897-908.
- Burgoon, J.K. (1993). Interpersonal expectations, expectancy violations, and emotional communication. *Journal of Language and Social Psychology*, *12*(1) 30-48.
- Burgoon, J.K. & Jones, S.B. (1976). Toward a theory of personal space expectations and their violations. *Human Communication Research*, *2* p. 131–146
- Conway, J.M. (1999). Distinguishing contextual performance from task performance for managerial jobs. *Journal of Applied Psychology*, *84* (1), 3-13.
- Conway, J. M., & Huffcutt, A. I. (1997). Psychometric properties of multisource performance ratings: A meta-analysis of subordinate, supervisor, peer, and self-ratings. *Human Performance*, *10*(4), 331-360.
- DeNisi, A., & Smith, C. E. (2014). Performance appraisal, performance management, and firm-level performance: A review, a proposed model, and new directions for future research. *The Academy of Management Annals*, *8*(1), 127-179.

- Festinger, L. (1957). *A Theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Floyd, K., & Voloudakis, M. (1999). Attributions for expectancy violating changes in affectionate behavior in platonic friendships. *The Journal of Psychology: Interdisciplinary and Applied*, *133*(1), 32-48. doi:10.1080/00223989909599720
- George, J. M., & Brief, A. P. (1992). Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin*, *112*(2), 310-329. doi:10.1037/0033-2909.112.2.310
- Gocłowska, M. A., Baas, M., Crisp, R. J., & De Dreu, C. W. (2014). Whether social schema violations help or hurt creativity depends on need for structure. *Personality and Social Psychology Bulletin*, *40*(8), 959-971. doi:10.1177/0146167214533132
- Grover, S. L., Hasel, M. C., Manville, C., & Serrano-Archimi, C. (2014). Follower reactions to leader trust violations: A grounded theory of violation types, likelihood of recovery, and recovery process. *European Management Journal*, doi:10.1016/j.emj.2014.01.002
- Heilman, M. E. & Chen, J. J. (2005). Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. *Journal of Applied Psychology*, *90*(3), 431-441.
- Hoffman, B. J., Blair, C. A., Meriac, J. P., & Woehr, D. J. (2007). Expanding the criterion domain? A quantitative review of the OCB literature. *Journal of Applied Psychology*, *92*(2), 555-566. doi:10.1037/0021-9010.92.2.55

- Jackson, L. A., Sullivan, L. A., & Hodge, C. N. (1993). Stereotype effects of attributions, predictions, and evaluations: No two social judgments are quite alike. *Journal of Personality and Social Psychology*, *65*(1), 69-84. doi:10.1037/0022-3514.65.1.69
- Joardar, A. (2011). Examining changes in group acceptance of a newcomer from a different culture: An expectancy violation perspective. *International Journal of Cross Cultural Management*, *11*(3), 341-362. doi:10.1177/1470595811425630
- Johnson, D. I., & Lewis, N. (2010). Perceptions of swearing in the work setting: An expectancy violations theory perspective. *Communication Reports*, *23*(2), 106-118. doi:10.1080/08934215.2010.511401
- Jonas, E., Schulz-Hardt, S., Frey, D., & Thelen, N. (2001). Confirmation bias in sequential information search after preliminary decisions: An expansion of dissonance theoretical research on selective exposure to information. *Journal of Personality And Social Psychology*, *80*(4), 557-571. doi:10.1037/0022-3514.80.4.557
- Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations*. New York: Wiley.
- Kernahan, C., Bartholow, B. D., & Bettencourt, B. A. (2000). Effects of category-based expectancy violation on affect-related evaluations: Toward a comprehensive model. *Basic and Applied Social Psychology*, *22*(2), 85-100. doi:10.1207/15324830051036171
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, *87*(1), 52-65. doi:10.1037/0021-9010.87.1.52

- Lerner, M. J., & Simmons, C. H. (1966). Observer's reaction to the "innocent victim": Compassion or rejection? *Journal of Personality and Social Psychology*, 4, 203–210.
- Motowidlo, S. J. 2003. Job Performance. *Handbook of Psychology*. One:3:39–53.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied psychology*, 79(4), 475.
- Organ, D.W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington MA: Lexington Books.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10(2), 85-97. doi:10.1207/s15327043hup1002_2
- Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H., Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1(2), 107-142.
- Prendergast, C., & Topel, R. (1993). Discretion and bias in performance evaluation. *European Economic Review*, 37(2-3), 355-365.
- Rogers, T. B., Kuiper, N. A., & Kirker, W. S. (1977). Self-reference and the encoding of personal information. *Journal of Personality and Social Psychology*, 35(9), 677-688. doi:10.1037/0022-3514.35.9.677
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, 87(1), 66-80. doi:10.1037/0021-9010.87.1.66

- Sackett, P. R., & DeVore, C. J. (2002). Counterproductive behaviors at work. In Handbook of industrial, work and organizational psychology: Personnel psychology (Vol. 1, pp. 145–164). Thousand Oaks, CA: Sage Publications Ltd.
- Shore, T. H., Adams, J. S., & Tashchian, A. (1998). Effects of self-appraisal information, appraisal purpose, and feedback target on performance appraisal ratings. *Journal of Business and Psychology*, 12, 283 – 298.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663.
doi:10.1037/0021-9010.68.4.653
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52(6), 613-629. doi:10.1037/0003-066X.52.6.613
- Stein, D. J. (1992). Schemas in the cognitive and clinical sciences. *Journal of Psychotherapy Integration*, 2, 45-63
- Van Dyne, L., Cummings, L. L., & McLean Parks, J. M. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (A bridge over muddied waters). In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 17, pp. 215–285). Greenwich, CT: JAI Press.
- Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, 8(4), 216-226.
doi:10.1111/1468-2389.00151

- Viswesvaran, C., Ones, D. S., & Schmidt, F.L. (1996). Comparative analysis of the reliability of job performance ratings. *Journal of Applied Psychology, 81*, 557-574.
- Viswesvaran, C., Schmidt, F., & Ones, D.S. (1996, April). *Modeling job performance: Is there a general factor?* Poster presented at the eleventh annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Viswesvaran, C., Schmidt, F. L., & Ones, D. S. (2005). Is There a General Factor in Ratings of Job Performance? A Meta-Analytic Framework for Disentangling Substantive and Error Influences. *Journal of Applied Psychology, 90*(1), 108-131. doi:10.1037/0021-9010.90.1.108
- Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology, 87*(3), 590-598. doi:10.1037/0021-9010.87.3.590
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management, 17*(3), 601-617. doi:10.1177/014920639101700305

APPENDICES

Appendix A: OCB Scale

Adapted from Podsakoff, MacKenzie, Moorman, and Fetter (1990)

Time 1 (pre-hire) Instructions: Please rate the extent to which you expect Jerry to perform the following behaviors.

Time 2 (post-hire) Instructions: Please rate the extent to which you think Jerry performed the following behaviors.

- 1. Strongly Disagree*
- 2. Disagree*
- 3. Somewhat Disagree*
- 4. Neither Agree nor Disagree*
- 5. Somewhat Agree*
- 6. Agree*
- 7. Strongly Agree*

Altruism

1. Helps others who have been absent.
2. Helps others who have heavy workloads.
3. Helps orient new people even though it is not required.
4. Willingly helps others who have work related problems.
5. Is always ready to lend a helping hand to those around him/her.

Conscientiousness

1. Attendance at work is above the norm.
2. Does not take extra breaks.
3. Obeys company rules and regulations even when no one is watching.
4. Is one of my most conscientious employees.
5. Believes in giving an honest day's work for an honest day's pay.

Sportsmanship

1. Consumes a lot of time complaining about trivial matters. (R)
2. Always focuses on what is wrong rather than the positive side. (R)
3. Tends to make "mountains out of molehills." (R)
4. Always finds fault with what the organization is doing. (R)
5. Is the classic "squeaky wheel" that always needs greasing. (R)

Courtesy

1. Takes steps to try to prevent problems with other workers.
2. Is mindful of how his/her behavior affects other people's jobs.
3. Does not abuse the rights of others.

4. Tries to avoid creating problems for coworkers.
5. Considers the impact of his/her actions on coworkers.

Civic Virtue

1. Attends meetings that are not mandatory, but are considered important.
2. Attends functions that are not required, but help the company image.
3. Keeps abreast of changes in the organization.
4. Reads and keeps up with organization announcements, memos, and so on.

Appendix B: Example Performance Vignettes

I. Pre-Hire

a. Scenario 1: High Task Performance

I have worked closely with Jerry for the past 5 years. He is very organized and keeps concise records of all decisions made on the project. He holds weekly meetings with the job-site staff in which he monitors project progress and sets project goals for the upcoming week.

Additionally, throughout the week he checks in with the project team to ensure they are on track for goal completion. When there are changes to the building plans, he works closely with the subcontractors and building owner to renegotiate contracts and ensure the entire team is onboard with all changes.

He personally reviews subcontractor work before payment is made to ensure the work is completed as billed and up to company quality standards. His attention to financial details has ensured that all of the projects he's managed have been completed on-time and under budget.

b. Scenario 2: Low Task Performance

I have worked closely with Jerry for the past 5 years. He is unorganized and does not document project decisions. He has a laissez-faire management style, such that he lets his project team perform without much oversight.

Subcontractors and building owners that work with him frequently complain that they are not aware of the buildings' progress or changes to the building plans. He does not check up on the quality of subcontractor work done in the building before payment is made, nor does he re-budget when there are changes to the building plan. His lack of attention to financial details has resulted in many of the projects he's managed being completed late, and over budget.

c. Scenario 3: High OCB

I have worked closely with Jerry for the past 5 years. He consistently goes above and beyond his job description. This is apparent in the culture he creates within every project team he works with. He encourages a positive, can-do attitude from his employees. He takes the project team out to lunch once a month, to build cohesiveness and boost morale. He consistently shows an interest in the lives of his team members, and is always available to back-up a subordinate that is overworked. He is a mentor to many young employees in our organization.

He makes himself available after work hours to answer any questions the building owners or subcontracts may have. Additionally, he regularly participates in community trade events to build relationships with vendors and promote the company.

d. Scenario 4: Low OCB

I have worked closely with Jerry for the past 5 years. He typically does the minimum amount of work required. He complains often about the quality of the work his team members' produce, and speaks negatively about his co-workers in front of subcontractors and building owners. Young employees prefer not to work on his team because he does not provide any mentorship.

He asks that his team members focus on their tasks when at work and not spend time talking about their personal lives. He leaves the job site by 5pm every day and makes it clear he does not want to be bothered after hours. He does not join his co-workers when they participate in community trade events to build relationships with vendors and promote the company.

II. Post-Hire

a. Scenario 5: High Task Performance

Jerry has been working with us for the past 6-months. The project he is managing is on-time and within-budget. This is likely due to his attention to detail and close monitoring of team progress. He is organized with project details, and communicates information promptly and concisely with all team members. There have been significant changes to the building from the architect and Jerry has successfully adapted these changes. For example, he has renegotiated subcontractor contracts and timelines and ensured the building owner is kept abreast of cost and scope changes.

b. Scenario 6: Low Task Performance

Jerry has been working with us for the past 6-months. The project he is managing is not on-time, nor within-budget. There have been significant changes to the building from the architect and Jerry has had difficulty adapting these changes. He struggles to organize project details and needs to communicate with his team more frequently. He has spoken with subcontractors about the changes, but did not submit time or cost changes to the owner to ensure we and the subcontractors would be compensated for the additional work.

c. Scenario 7: High OCB

Jerry has been working with us for the past 6-months. He has quickly established himself as a mentor to young up-and-coming employees. He rarely misses a day of work, and consistently makes himself available to weekend emergencies. He volunteered to help with this year's recruitment, and travelled to several colleges to promote the company. Though this job requires long hours and can be stressful, Jerry always comes to work with a positive attitude. When subordinates have difficulty handling a heavy workload, he offers assistance and helps them develop a plan to successfully complete tasks.

d. Scenario 8: Low OCB

Jerry has been working with us for the past 6-months. This job requires long hours and can be stressful; therefore he usually takes a half day on Fridays and makes himself unavailable during the weekends. During busy weeks, he requests that team members show up to work an hour earlier than normal, though he does not come early himself. He trusts his team members to stay late and complete their workloads, and therefore does not offer to assist his subordinates when they have a heavy workload. If tasks are not completed in a timely manner, he complains about it extensively at team meetings to ensure the culprit is aware of the issue.

Appendix C: Task Performance Appraisal

Adapted from Williams and Anderson (1991)

Pre-hire (time 1) Instructions:

Please indicate the extent to which you agree Jerry will participate in each behavior

Post-hire (time 2) Instructions:

Based on the scenarios you read, please indicate the extent to which you agree Jerry participated in each behavior

- 1. Strongly Disagree*
- 2. Disagree*
- 3. Somewhat Disagree*
- 4. Neither Agree nor Disagree*
- 5. Somewhat Agree*
- 6. Agree*
- 7. Strongly Agree*

1. Adequately completes assigned duties
2. Fulfills responsibilities specified in job description
3. Performs tasks that are expected of him/her
4. Meets formal performance requirement of the job
5. Engages in activities that will directly affect his/her performance evaluation
6. Neglects aspects of the job he/she is obligated to perform (R)
7. Fails to perform essential duties (R)

Appendix D: Violation Scales

Adapted from Afifi and Metts (1998)

- 1. Strongly Disagree*
- 2. Disagree*
- 3. Somewhat Disagree*
- 4. Neither Agree nor Disagree*
- 5. Somewhat Agree*
- 6. Agree*
- 7. Strongly Agree*

Violation expectedness

1. Jerry's performance was completely expected (R)
2. Jerry's performance was not at all expected
3. Jerry's performance surprised me a great deal
4. Jerry's performance surprised me only very slightly(R)

Violation Valence

1. Jerry's behavior was a very positive performance
2. Jerry's behavior was a behavior I liked a lot
3. Jerry's behavior was a behavior that I did not like at all (R)
4. I'd like to see much more of Jerry's behavior

Appendix E: Reward Recommendations

Adapted from Allen and Rush (1998)

Using the rating scale below, please rate the extent to which you would recommend Jerry for each of the following.

- 1. Would definitely not recommend*
- 2. Would not recommend*
- 3. Neutral*
- 4. Would recommend*
- 5. Would definitely recommend*

1. Raise (salary increase)
2. Promotion
3. High profile project
4. Public recognition (e.g. a company award)
5. Opportunities for professional development
6. Termination (R)
7. Demotion (R)

Appendix F: Demographics

1. On average how many hours do you work at your job per week (If currently unemployed mark 0)
 - a. _____ hours per week on average
2. How many years of experience do you have as a supervisor or manager of other employees?
 - a. Dropdown box (0, less than 1 year, 1, 2, 3...30, more than 30)
3. Do you have experience rating the performance of employees?
 - a. Yes
 - b. No
4. Do you currently or have you ever worked in the construction industry?
 - a. Yes
 - b. No
5. What **sex** do you identify with?
 - a. Male
 - b. Female
6. In what year were you born?
 - a. _____
7. What race/ethnicity do you identify with? (Check all that apply)
 - a. White
 - b. Black
 - c. Hispanic
 - d. Asian
 - e. Middle Eastern or North African
 - f. Pacific Islander
 - g. American Indian or Alaskan Native

Appendix G: Treatment Groups

Scenarios numbers correspond to the example scenarios in Appendix B. Treatment group numbers correspond to the hypothesis testing comparison groups in Appendix I.

Treatment Group	Performance Variable	Time 1 Scenario	Time 2 Scenario
1	Task Performance	1	5
2	Task Performance	1	6
3	Task Performance	2	5
4	Task Performance	2	6
5	OCB	3	7
6	OCB	3	8
7	OCB	4	7
8	OCB	4	8

Appendix H: Introduction Story

You are the owner of a commercial construction company. You have just won a new project, building a 13.2 million dollar hotel, and need to hire a new project manager to run the job. Because this is a big job, you will need a competent project manager that keeps on top of progress and doesn't let details fall through the cracks. Without a competent project manager, your company could lose a large amount of money.

Appendix I: Hypotheses

DV	Hypothesis	Performance Type	Comparison Groups
Expectation Violation	H1a <i>High potentials at time 1 who exhibit low task performance at time 2 will have higher violations of expectations than low potentials at time 1 who exhibit equivalently low task performance at time 2</i>	Task	Group 2 vs Group 4
Expectation Violation	H1b <i>High potentials at time 1 who exhibit low OCB at time 2 will have higher violations of expectations than low potentials at time 1 who exhibit equivalently low OCB at time 2</i>	OCB	Group 6 vs Group 8
Expectation Violation	H2a <i>High potentials at time 1 who exhibit high task performance at time 2 will have lower violations of expectations than low potentials at time 1 who exhibit equivalently high performance at time 2.</i>	Task	Group 1 vs Group 3
Expectation Violation	H2b <i>High potentials at time 1 who exhibit high OCB at time 2 will have lower violations of expectations than low potentials at time 1 who exhibit equivalently high OCB at time 2</i>	OCB	Group 5 vs Group 7
Performance	H3a <i>High potentials at time 1 who exhibit low task performance at time 2 will have lower task performance ratings than low potentials at time 1 who exhibit equivalently low performance at time 2</i>	Task	Group 2 vs Group 4
Performance	H3b <i>High potentials at time 1 who exhibit low OCB at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently low OCB at time 2</i>	OCB	Group 6 vs Group 8
Performance	H4a <i>High potentials at time 1 who exhibit high task performance at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently high task performance at time 2</i>	Task	Group 1 vs Group 3
Performance	H4b <i>High potentials at time 1 who exhibit high OCB at time 2 will have lower performance ratings than low potentials at time 1 who exhibit equivalently high OCB at time 2</i>	OCB	Group 5 vs Group 7
Reward	H5a <i>High potentials at time 1 who exhibit low task performance at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently low task performance at time 2</i>	Task	Group 2 vs Group 4
Reward	H5b <i>High potentials at time 1 who exhibit low OCB at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently low OCB at time 2</i>	OCB	Group 6 vs Group 8
Reward	H6a <i>High potentials at time 1 who exhibit high task performance at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently high task performance at time 2.</i>	Task	Group 1 vs Group 3
Reward	H6b <i>High potentials at time 1 who exhibit high OCB at time 2 will have lower reward recommendations than low potentials at time 1 who exhibit equivalently high OCB at time 2.</i>	OCB	Group 5 vs Group 7

Appendix J: IRB Approval Letter



RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX (813) 974-7091

December 16, 2015

Britany Telford
Psychology
4202 E. Fowler Avenue
PCD4118G
Tampa, FL 33620

RE: **Exempt Certification**
IRB#: Pro00024700
Title: The Role of EVT in Job Performance Ratings

Dear Ms. Telford:

On 12/16/2015, the Institutional Review Board (IRB) determined that your research meets criteria for exemption from the federal regulations as outlined by 45CFR46.101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Approved Items:

[Protocolv1_11-30-2015.docx](#)

[InformedConsentV1_12-14-2015.docx](#)

As the principal investigator for this study, it is your responsibility to ensure that this research is conducted as outlined in your application and consistent with the ethical principles outlined in the Belmont Report and with USF HRPP policies and procedures.

Please note, as per USF HRPP Policy, once the Exempt determination is made, the application is closed in ARC. Any proposed or anticipated changes to the study design that was previously declared exempt from IRB review must be submitted to the IRB as a new study prior to initiation

of the change. However, administrative changes, including changes in research personnel, do not warrant an amendment or new application.

Given the determination of exemption, this application is being closed in ARC. This does not limit your ability to conduct your research project.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kristen Salomon', followed by a horizontal line.

Kristen Salomon, Ph.D., Vice Chairperson
USF Institutional Review Board