THE EFFECTS OF MERITOCRATIC CONDITIONS ON TIME ALLOCATION IN
THE PERFORMANCE APPRAISAL PROCESS

A Thesis

Presented to the faculty of the Department of Psychology
California State University, Sacramento

Submitted in partial satisfaction of
the requirements for the degree of

MASTER OF ARTS

in
Psychology
(Industrial/Organizational)

by
Bradley James Thomson

SPRING
2015
THE EFFECTS OF MERITOCRATIC CONDITIONS ON TIME ALLOCATION IN THE PERFORMANCE APPRAISAL PROCESS

A Thesis

by

Bradley James Thomson

Approved by:

_____________________________, Committee Chair
Oriel Strickland, Ph.D

_____________________________, Second Reader
Gregory Hurtz, Ph. D

_____________________________, Third Reader
Rachel August, Ph. D

_____________________________
Date:

ii
Student: Bradley James Thomson

I certify that this student has met the requirements for format contained in the University format manual, and that this thesis is suitable for shelving in the Library and credit is to be awarded for the thesis.

__________________________, Graduate Coordinator
Jianjian Qin Ph. D. Date

Department of Psychology
Abstract

of

THE EFFECTS OF MERITOCRATIC CONDITIONS ON TIME ALLOCATION IN THE PERFORMANCE APPRAISAL PROCESS

by

Bradley James Thomson

In this study, it was empirically tested the theoretical argument that when an organizational culture promotes meritocracy, managers may paradoxically show greater biases unrelated to performance. In addition, this study included analysis for a three-way interaction of compensation system, employee gender, and participant gender on reward allocations. If supported, this hypothesis would mean greater levels of the paradox of meritocracy effect for male participants compared to female participants. This study also took an empirical approach to examine whether written description of a compensation system would influence the amount of time spent on a performance evaluation task in an in-basket-style managerial simulation. 166 undergraduate psychology participants were randomly assigned to read a mission statement from an organization that promoted either merit or non-merit reward systems and then were instructed to complete various tasks, which included performance appraisals. The results from the data generally supported the hypotheses, except for the three-way interaction.

_______________________, Committee Chair
Oriel Strickland, Ph. D.

_______________________
Date

iv
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td></td>
<td>vii</td>
</tr>
<tr>
<td>List of Figures</td>
<td></td>
<td>viii</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>The Cognitive Approach to Performance Appraisal</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Selected Research on Performance Appraisal</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Selected Research on Meritocracy</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Meritocracy and its Implications for the Attentional Phase of Appraisal</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>The Paradox of Meritocracy</td>
<td>7</td>
</tr>
<tr>
<td>2. METHODS</td>
<td>Pilot Study</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Thesis Study</td>
<td>15</td>
</tr>
<tr>
<td>3. RESULTS</td>
<td>Descriptive Statistics</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Inferential Statistics</td>
<td>21</td>
</tr>
<tr>
<td>4. DISCUSSION</td>
<td>Re-Cap of Study Findings &amp; Integration with the Literature</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Strengths and Weaknesses of the Study</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Applied Implications</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Directions for Future Research</td>
<td>35</td>
</tr>
<tr>
<td>Appendix</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>A</td>
<td>Consent Form</td>
<td>38</td>
</tr>
<tr>
<td>B</td>
<td>Demographic Questionnaire</td>
<td>39</td>
</tr>
<tr>
<td>C</td>
<td>Debriefing</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>Meritocratic Mission Statement</td>
<td>41</td>
</tr>
<tr>
<td>E</td>
<td>Non-Meritocratic Mission Statement</td>
<td>42</td>
</tr>
<tr>
<td>F</td>
<td>E-Mail Exercise</td>
<td>43</td>
</tr>
<tr>
<td>G</td>
<td>Scheduling Exercise</td>
<td>44</td>
</tr>
<tr>
<td>H</td>
<td>Performance Appraisal - Employee 1</td>
<td>45</td>
</tr>
<tr>
<td>I</td>
<td>Performance Appraisal - Employee 2</td>
<td>46</td>
</tr>
<tr>
<td>J</td>
<td>Performance Appraisal - Employee 3</td>
<td>47</td>
</tr>
<tr>
<td>K</td>
<td>Thesis Script</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>50</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Tables</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inter-Rater Reliability</td>
<td>14</td>
</tr>
<tr>
<td>2. Participant Demographics</td>
<td>15</td>
</tr>
<tr>
<td>3. Time Allocation to In-Basket Exercises</td>
<td>19</td>
</tr>
<tr>
<td>4. Employee Bonus Allocations made on Performance Appraisals</td>
<td>20</td>
</tr>
<tr>
<td>5. Main Effect of Compensation System on Time Allocation</td>
<td>22</td>
</tr>
<tr>
<td>6. Interaction of Compensation System and Employee Gender on Rewards Allocated</td>
<td>25</td>
</tr>
<tr>
<td>7. Mixed Model ANOVA Assessing the Effects of Gender and Compensation System on Rewards Allocated</td>
<td>27</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figures</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Paradox of meritocracy graph</td>
<td>26</td>
</tr>
</tbody>
</table>

viii
The efforts of employees can determine the effectiveness of an organization, and appraisal is one way in which those efforts can be aligned with the objectives of an organization. Performance appraisals are among the most important human resource practices (DeNisi & Sonesh, 2011; Boswell & Boudreau, 2002; Judge & Ferris, 1993; Yehuda Baruch, 1996) and one of the most heavily researched topics in work psychology (Fletcher, 2002). The term “performance appraisal,” refers to the evaluation of an employee’s performance, often annually, in which an evaluator assesses the extent to which desired behaviors have been observed or achieved (note the primary focus of this study is on the performance of individual employees and not the performance of teams – that topic needs to be discussed in its own right) (DeNisi & Sonesh, 2011).

Organizations conduct appraisals for a number of reasons, such as providing documentation for decision making, providing performance feedback, and developing a basis for pay decisions, but perhaps the ultimate purpose for conducting appraisals is to improve organizational performance (DeNisi & Sonesh, 2011). It should also be recognized that performance appraisals involve an evaluation process in that qualitative and/or quantitative scores may be assigned, based on the judged level of the employee’s job performance on the dimension or criteria used; the scores of which are shared with the employee being evaluated (DeNisi & Pritchard, 2006). These judgments involve a
variety of cognitive and social processes and due to limits in human information processing, result in a variety of errors in ratings (DeNisi & Sonesh, 2011).

**The Cognitive Approach to Performance Appraisal**

A cognitive approach was introduced several decades ago (DeNisi, 1984) to explain the performance appraisal process. This process consists of three stages of information processing: attention, encoding, and retrieval. According to this view, the process begins with appraisers obtaining information about the persons being appraised. The information acquisition process varies both within and between raters in the degree to which acquisition is systematic, conscious, and guided by valid predispositions about an employee’s performance. Organization and storage of the information in memory follows its acquisition. In addition, the amount of attention paid to the nature of the dimensions of which information is stored, along with the nature of the dimensions themselves, vary as a function of many factors (DeNisi & Pritchard, 2006). These factors can include proximal or distal variables. Examples of a proximal variable can include the rating purpose, interaction between the supervisor and employee, or the nature of the rated task. Distal variables can include characteristics, such as the organizational structure, culture, or values (DeNisi & Smith, 2014). The last step of the process, retrieval, involves the retriever’s ability to remember information stored in memory. Evaluation combines that information in order to form an evaluative judgment about the employee’s performance (Ilgen, Barnes-Farrell & McKellin, 1993).

The proposed study focuses primarily on the ‘attention’ stage of the process. One of the most important features of this stage includes how much time has been allocated
by management to gather information about employee performance. It is proposed that this attentional phase can be affected by the organizational culture; specifically, the described purpose of the performance evaluation. Compensation systems play a critical role in shaping the organizational culture and how employees perceive what an organization values (Kuhn, 2009). Therefore, it seems necessary to find out if different compensation systems have an effect on the attentional phase of this cognitive process.

**Selected Research on Performance Appraisals**

Researchers have linked employees’ satisfaction with performance appraisal to the perceived accuracy or perceived utility of the appraisal (Dusterhoff, 2013). If the process is perceived as unfair and the employees are dissatisfied, then they are unlikely to accept and use the results of the appraisal for development. Employees who are more satisfied with the process are more likely to agree with their evaluation and see it as useful in improving their performance and development (Dusterhoff, 2013). Findings from Byrne, Pitts, Wilson, and Steiner (2012), indicate that when employees receive fair treatment from their supervisor, their perceived fairness fosters feelings of support, creating a safe environment. Safety is particularly important in performance appraisal, where employees identity and self-esteem are vulnerable (Byrne et al., 2012). Consequently, it is important for supervisors to acquire the necessary information in a fair and accurate manner to ensure that employees perceive the appraisal process as unbiased (Byrne et al., 2012).

A large volume of research on the topic of performance appraisal has highlighted problems with the success of performance management systems (for a review, see
DeNisi, 2011). This is a challenging and dynamic problem because there are so many factors involved. For instance, some research has approached the issue by suggesting that performance appraisals create discomfort because they place appraisers in contradicting roles of coach and judge (Gbadamosi, 2013). The tendency for managers and supervisors to be lenient in their performance appraisal remains one of the most significant problems related to performance appraisal systems (Bernardin, Thomason, Ronald, & Kane 2015). Others focus on the degree of subjectivity involved in the managers’ appraisals and claim that such assessments could be regarded as one image or construction of a worker’s job performance amongst many other possibilities (Moren, 2013). Overall, there are many indications that it is a managerial task, which is entrenched in feelings, compromises and many political considerations (Moren, 2013).

**Selected Research on Meritocracy**

One widely accepted notion for improving individual performance is linking pay to performance in order to increase productivity, which will be referred to as “meritocracy” throughout this study. Organizations have adopted the idea of meritocracy, whereby employees rewarded on the basis of their individual merits and contributions, rather than seniority, equality, or need, in the hope of enhancing individual and organizational performance (Casitlla & Benard, 2010). Meritocracy is one of the dominant belief systems in the United States because it is a core component of the “American Dream” and also plays an important role in the national story of immigration (Hochschild, 1995). It has been shown that people who believe that society is meritocratic, perceive that there are few systematic barriers to success aside from their
own efforts and abilities (Major, Kaiser, O’Brien, & McCoy, 2007). As a belief about the
way society ought to be organized, meritocracy supports a message of fairness and equal
opportunity (Son Hing, Bobocel, Zanna, Garcia, Gee, & Orazietti, 2011). Specifically,
effectancy theory suggests that employees are more likely to be committed to tasks for
which they hold higher performance-reward expectancy (Han, Bartol, & Kim, 2015). As
a result, employees with higher performance-reward expectancy will spend more
cognitive and attentional resources in enhancing their job performance (Han et al., 2015).

Despite the widespread use of meritocracy, many employees do not perceive that
their performance is adequately rewarded (Gerhart, Rynes, & Fulmer, 2009). In addition,
some authors are not convinced of the effectiveness of meritocracy. For instance, critics
argue that merit-based compensation programs provoke competition rather than
collaboration (Solmon & Podgursky, 2000). In addition to this, factors such as
inheritance, social or political advantages, and unfair discrimination can interfere with
true merit-based outcome allocations. Consequently, meritocracy is seen by some authors
as a form of control where advocates of meritocracy, knowingly or unknowingly, help to
maintain and legitimize social inequality (Son Hing, et al., 2011). Appraisers can be goal
directed and may manipulate ratings upward or downward to fulfill these goals. This is
known as appraisal politics and it refers to the manipulative actions by appraisers to
influence ratings to achieve their self-serving performance appraisal goals (Dhiman &
Maheshwari, 2013). This can raise subjective perceptions of fairness, indicate worth as an
individual to an organization and may have significance as indicator of social status as
well as determining a standard of living (Pichler, 2012). Either way, it is clear that
meritocratic based-pay is a highly emotive subject to employees (Knowles & Lowery, 2012).

**Meritocracy and its Implications for the Attentional Phase of Appraisal**

One of the premises of this study is that different types of compensation systems will have different effects on perceived organizational values (Kuhn, 2009). This premise further suggests that different compensation systems may affect DeNisi’s cognitive approach to the performance appraisal, especially the attention phase, in different ways. These ideas highlight a critical void in the literature, and point to a need to study how compensation systems may cue employees to allocate their time to specific tasks or roles in regards to the values of the organization. More specifically, performance appraisal processes may receive more time and attention if the organization has a merit pay compensation system, in comparison to a seniority pay system. This premise is based on Equity Theory (Adams, 1963), which specifies that fairness in the allocation of rewards is a function of the comparison of one employee’s work-related outcomes to inputs with that of another (known as a referent other). It is also important to note that subordinates performance is often seen as a reflection of their supervisor, so even though the outcome is awarded to the subordinate, in essence, it has secondary benefit to the supervisor. Thus, as a manager working with a merit pay system, more attention must be given to the work-related inputs to justify the outcomes that are awarded. Thus, based on the existing theory and logic presented, it is hypothesized that

**H1(a): There will be a main effect of compensation system on time spent on performance**
appraisal, with those in the meritocracy condition (relative to non-meritocracy) devoting more time to the appraisal task.

In addition, these managers in the merit-based system who are allocating more time to the performance appraisal system may be more likely to be associated with higher reward allocation in comparison to managers who are not in a meritocratic environment. The managers who are not in a meritocratic environment would be more likely to allocate rewards more evenly across all employees, since they are not differentiating them based on their performance. Thus based on further logic and equity theory, it is hypothesized that

H1(b): There will be a main effect of compensation system on rewards allocated to employee performance appraisals, with those in the meritocracy condition (versus the non-meritocracy condition) being associated with higher reward allocations.

The Paradox of Meritocracy

Despite the apparent increase in organizational justice (inputs and outcomes are comparable), research has identified some potential problems with merit pay (e.g., Castilla & Benard, 2010). Although merit pay is based theoretically on an objective and fair rewarding system for all employees, Castilla and Benard, 2010 demonstrated a gender bias against women who were presented as performing equally to men. A similar effect has also been documented with regard to racial biases (Castilla, 2008). These authors have referred to this effect as “the paradox of meritocracy”.

The prediction emphasizing meritocracy may actually have a paradoxical effect in accordance with research on the link between culture and cognition. The understanding is
that cultures play a key role in shaping cognitive processes, with studies showing that specific elements of local cultures that can prompt individual cognitive and interactional biases against low-status groups (Correll & Ridgeway, 2003; Turco 2010). Building off this culture and cognition tradition, it is suggested that employers’ efforts to promote meritocratic beliefs or cultures in organizations may ironically yield unintended negative consequences, and as a result, become more likely to express biases toward low-status groups of employees. Furthermore, managers making decisions on behalf of organizations that emphasize meritocracy may show greater bias in favor of male employees than managers making decisions on behalf of an organization that does not emphasize meritocracy (Castilla & Benard, 2010).

Overall, salary increases have shown to be significantly lower for women, ethnic minorities, and non-U.S.-born employees when compared with white men with the same performance evaluation scores, in the same job and work unit and with the same supervisor (Castilla, 2008). It is important to explore gender differences within this “paradox of meritocracy” because women now represent an increasingly higher percentage of the workforce and are moving into fields with higher earning potential that were previously dominated by men (U.S. Bureau of Labor Statistics, 2013). Tocher, Field, and Giles (2006) examined the compensation and benefit preferences of those currently entering the professional workforce, as well as what gender differences exist to help employers enable themselves to offer compensation and benefit packages that are attractive recruiting tools. It was discovered in this study that most men preferred the compensation option in which all of their pay was performance based (e.g., meritocracy),
whereas women preferred a straight salary or a compensation plan that had only a small incentive component (Tocher et al., 2006). The finding that female entrants were less attracted to incentive compensation is consistent with findings from earlier studies of older, more experienced workers, which indicated that women in comparison with men are more satisfied with tradition fixed-pay systems (Balkin & Gomez-Mejia, 2002). These gender differences in preferences of compensation and benefits may be the outcome from decades of unfair merit pay practices towards females.

The current study aims to shed light on this phenomenon, and specifically, examine how managers in a simulation allocate their time and effort towards performance appraisal duties. It is possible that managers are not allocating enough time towards each cognitive step of the performance appraisal laid out by DeNisi, (1984) and are relying more on automatic cognitive processes, which may be prone to various biases. The main purpose of this study is to explore how different compensation structures within an organization can affect how someone in a managerial role allocates time and effort across different tasks and objectives required in their position. This study is proposed to replicate the finding of Castilla and Benard (2010), and add to this research by focusing on the amount of time the manager spends on the appraisal process. As a replication of Castilla and Benard (2010), it is hypothesized that

\[ H2: \text{There will be a two-way interaction between meritocracy condition and employee gender, such that the meritocracy condition (relative to non-meritocracy) will trigger more attention and higher monetary rewards for the male (relative to the female) employee.} \]
An additional aim of this study is to include managerial gender of the appraiser as an independent variable. Castilla and Benard (2010) did not explain whether the paradox of meritocracy occurs equally for male and female managers, and this is a fundamentally interesting question. Overall, there has been a lack of research that has directly looked at the gender differences between raters conducting the performance appraisal process (Castilla & Benard, 2010). It would be interesting to explore whether or not male and female managers significantly differ in regards to the gender inequalities within the paradox of meritocracy effect. In an examination of rater gender (Koch, D’Mello & Sackett, 2014), it was found that male raters tended to favor males, regardless of the sex distributions within the job. The finding that male raters exhibited stronger gender-role congruity bias than female raters for male-dominated jobs is consistent with the idea that men may be sensitive to changes in traditional gender hierarchy and may disapprove of women working in male-dominated, high-status occupations (Koch et al., 2014). It would seem logical that female managers would be less inclined to favor equal performing males more than equal performing females by rewarding or appraising their performance at higher levels. In addition, research has shown that there are gender differences in reactions to compensation systems (Tocher et al., 2006). Specifically, men showed stronger preferences for their salary to be based on merit pay. This suggests that male managers, compared to female managers, may respond to a merit pay system by giving greater attention to performance appraisals. Given its potential importance, this study will include participant gender in its exploration of performance appraisal processes as a
function of the compensation system. Based upon the preceding literature, it is hypothesized that

\[ H3: \text{There will be a 3-way interaction between meritocracy condition, employee gender, and participant gender such that male participants will show a greater amount of the “paradox of meritocracy” than will female participants.} \]
Chapter 2

METHODS

Pilot Study

There were two main objectives of conducting the pilot study. The first was to ensure that the manipulations were perceived as intended, and to verify this with manipulation check data. The second objective was to collect data to ensure inter-rater reliability of the assessment of participant time spent per task.

Participants

Participants were sampled from the undergraduate students who were in the human subjects pool at California State University, Sacramento. There were 17 males (31%) and 37 females (69%). The average age for the overall sample was 24.3; the average age for male participants was 25.1 and the average age for female participants was 23.6. Of this sample, 37% were White; 25% were Hispanic or Latino; 21% were Asian or Asian-American; 14% were African or African-American; 1% were American Indian or Native American; and 2% were indicated as “other.” In terms of graduation status, 14% were Freshmen; 22% were Sophomores; 39% were Juniors; and 25% were Seniors.

Manipulation Check

A pilot study was conducted to run manipulation checks to ensure that the manipulation was perceived as intended. The intended manipulation was for the participants to perceive the organization’s mission statement about compensation as
being either merit-based or seniority-based. The manipulation check items are contained in Appendix (B). Essentially, they asked the participant to correctly identify the mission statement from the Core Company’s Value page. In addition, they identified whether the Mission Statement they read aligned with a “merit-pay” or a “seniority-based pay” compensation system. A Chi-Square test showed a significant relationship between identifying the correct mission statement and compensation system (Merit-pay v.s. Seniority-based pay), \(X^2(1, N = 52) = 20.6, \phi = .63, p < .001\). Participants who received the non-meritocratic Company’s Core Values page; 17 of them (68%) indicated correctly that the Company’s core values were non-meritocratic and 8 of them (32%) indicated incorrectly. Participants who received the meritocratic Company’s Core Values page; 25 of them (93%) indicated correctly that the Company’s Core values page was meritocratic and 2 of them (7%) indicated incorrectly. These results indicate that the participants perceived the manipulation as intended.

**Reliability Check**

Reliability tests were conducted in the pilot study to ensure a consistent method of time measurement on the different in-basket exercises, especially since there was a research assistant who conducted a portion of the sessions. Webcams were used to record the participants working on the different in-basket exercises. The recordings were watched at a later time with a stopwatch to accurately record how much time was allocated to each different in-basket exercise. Two time coders watched the recordings of participants completing the in-basket exercises, resulting in two sets of time records for
each participant. There were three separate bivariate correlations ran, one for each different in-basket exercise. A significant correlation was found between both coders’ recordings of time for all three different in-basket exercises. The two time recording measurements for the e-mail task yielded, \( r(52) = .996, p < .001 \). The two time recording measurements for the performance appraisal task yielded, \( r(52) = .999, p < .001 \). The two time recording measurements for the scheduling task yielded, \( r(52) = 1.000, p < .001 \). The means and standard deviations for the recorded times are located in Table 1. Significant correlation coefficients indicated that the measurement of time for each participant was done with a highly reliable method.

Table 1

<table>
<thead>
<tr>
<th>Inter-Rater Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
</tr>
<tr>
<td>E-Mail Task</td>
</tr>
<tr>
<td>Researcher 1</td>
</tr>
<tr>
<td>Researcher 2</td>
</tr>
<tr>
<td>Performance Appraisal</td>
</tr>
<tr>
<td>Researcher 1</td>
</tr>
<tr>
<td>Researcher 2</td>
</tr>
<tr>
<td>Scheduling Task</td>
</tr>
<tr>
<td>Researcher 1</td>
</tr>
<tr>
<td>Researcher 2</td>
</tr>
</tbody>
</table>

Note. ** Correlation is significant at the 0.01 level (2-tailed).
Thesis Study

Participants

Participants were sampled from the undergraduate students who were in the human subjects pool at California State University, Sacramento. There were 61 males (37%) and 105 females (63%). The average age for the overall sample was 23.6; the average age for male participants was 24.9 and the average age for female participant was 22.9. Of this sample, 37% were White; 25% were Hispanic or Latino; 21% were Asian or Asian-American; 14% were African or African-American; 1% were American Indian or Native American; and 2% that indicated “other.” In terms of graduation status, 14% were Freshmen; 22% were Sophomores; 39% were Juniors; and 25% were Seniors. Further participant demographics are located in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Participant Demographics</th>
<th>Frequency</th>
<th>Percent</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>61</td>
<td>36.7%</td>
<td>166</td>
</tr>
<tr>
<td>Female</td>
<td>105</td>
<td>63.3%</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>2</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>Asian or Asian-American</td>
<td>34</td>
<td>20.5%</td>
<td></td>
</tr>
<tr>
<td>African or African American</td>
<td>22</td>
<td>13.3%</td>
<td>166</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>42</td>
<td>25.3%</td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic or White</td>
<td>62</td>
<td>37.3%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>2.4%</td>
<td></td>
</tr>
<tr>
<td>CSUS Tenure</td>
<td>Freshmen</td>
<td>24</td>
<td>14.5%</td>
</tr>
</tbody>
</table>
Sophomore 36 21.7%  
Junior 64 38.6%  
Senior 42 25.3%  

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Years Worked</td>
<td>3.98</td>
<td>3.31</td>
</tr>
</tbody>
</table>

**Materials**

A consent form was included to ensure that the participants had enough information to make an informed decision on whether or not to participate in the study (See Appendix A). A demographics page was filled out by the participants to collect basic information about their age, gender, ethnicity, major, and graduation status (See Appendix B). A debriefing form was provided to each participant to make the actual purpose of the study clear and to address participants’ questions (See Appendix C).

**Company’s core values description page.** Adapted from Castilla and Benard (2010), this was a short description of the services/products the company provided. That was followed by a brief layout of the core values the company has in regards to how, when, or why an employee is rewarded with raises, promotions, bonuses and other benefits. There were two different versions of this page, one version described the company as using merit-based pay and the other version described a company that uses seniority-based pay (See Appendices D & E)

**In-basket simulation tasks.**
**E-mail inbox.** This task involved an e-mail that described a customer complaint, which was to be read and then addressed in a written format. There were a series of questions below the e-mail, which structured the participant’s response to how they addressed the complaint (See Appendix F).

**Schedule.** This included a Monday through Friday calendar with the hours of 8 A.M. to 8 P.M. The task involved the participant following a specified set of rules to schedule a list of employees throughout the week (See Appendix G).

**Performance appraisal.** This was a written performance report of three employees that gave details on their productivity rate and other work attributes. After reviewing this information, the participant was asked to allocate bonuses to three different employee profiles on the performance appraisal sheets. They had a total of $1,000 to divide based upon the performance feedback provided about the different employee. Employee One and Employee Two had identical high ratings and positive feedback, but Employee One had a female name and Employee Two had a male name. Employee Three was a male’s name with mediocre performance feedback. There were also three additional questions on a 1 to 7 scale that the participant rated the employee profiles on decisions regarding initial hiring consideration, promotion consideration, and termination consideration (See Appendices H, I, & J).

**Procedure**

Participants were recruited from the Psychology Department’s human subjects research pool. Upon arrival to the experimental location, participants were randomly
assigned to either the meritocracy or the non-meritocracy condition. It was explained that they would be going through a simulation of managerial roles. After reading and signing consent forms, participants were provided a description of a company’s core values (adapted from Castilla & Benard, 2010) and a folder with the managerial tasks to be completed. Participants were given five minutes to read the company’s core values and were given a few brief questions to check their understanding of the tasks. This was intended to raise their attention to the instructions, and also contained manipulation items to help reinforce the compensation manipulation.

Participants then were instructed to open their packet and begin work on the three managerial tasks. These tasks were color-coded on different sheets of paper so that it was easy for coders to record the length of time spent on each task. Participants were informed that they were not expected to finish all the tasks during the fifteen-minute period, and that they were free to complete the tasks in any order that they wish. A webcam was used to record each fifteen-minute period, while the participant worked on the in-basket exercise. After the in-basket time elapsed, participants placed all materials back into the manila folder. Participants then filled out a short demographics page, also placed in the manila folder after completion. Once all materials were collected from participants, they were provided with a debriefing form. Participants were then dismissed after being thanked and having any questions addressed. The webcam recording was viewed by the end of the day to code how much time was spent on each different task and then deleted after.
Chapter 3

RESULTS

Descriptive Statistics

There were three different tasks in the in-basket exercise, including responding to an e-mail, filling out performance appraisals, and scheduling trainees on a calendar for the week. The average time for participants on the e-mail task was 4 minutes and 36 seconds, \((SD = 1 \text{ minute and 6 seconds})\); the average time for the performance appraisal task was 5 minutes and 18 seconds \((SD = 1 \text{ minute and 5 seconds})\); the average time for the scheduling task was 5 minutes and 4 seconds \((SD = 1 \text{ minute and 16 seconds})\). The means and standard deviations are located in Table 3.

Table 3

<table>
<thead>
<tr>
<th>In-Basket Exercises</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail Response</td>
<td>0:00:00</td>
<td>7:40:00</td>
<td>4:36:35</td>
<td>1:06:10</td>
<td>166</td>
</tr>
<tr>
<td>Performance Appraisals</td>
<td>1:04:00</td>
<td>8:02:00</td>
<td>5:18:03</td>
<td>1:05:11</td>
<td>166</td>
</tr>
<tr>
<td>Training Schedule</td>
<td>0:43:00</td>
<td>9:12:00</td>
<td>5:04:09</td>
<td>1:16:24</td>
<td>166</td>
</tr>
</tbody>
</table>

The participants were asked to allocate bonuses to three different employees on the performance appraisal sheets. They had a total of $1,000 to divide based upon the
performance feedback provided about the different employee. Employee One and Employee Two had identical high ratings and positive feedback, but Employee One had a female name and Employee Two had a male name. Employee Three was a male’s name with mediocre performance feedback. Employee one, on average, was rewarded $358 (SD = $47.5) in bonus allocations; Employee two, on average, was rewarded $421 (SD = 69.5); Employee Three, on average, was rewarded $223 (SD = $77.2). The means and standard deviations are located in Table 4.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employee 1</strong></td>
<td>$250</td>
<td>$500</td>
<td>$357.7</td>
<td>$47.5</td>
<td>166</td>
</tr>
<tr>
<td><strong>Employee 2</strong></td>
<td>$300</td>
<td>$600</td>
<td>$421.3</td>
<td>$69.6</td>
<td>166</td>
</tr>
<tr>
<td><strong>Employee 3</strong></td>
<td>$0</td>
<td>$375</td>
<td>$223.1</td>
<td>$77.3</td>
<td>166</td>
</tr>
</tbody>
</table>

*Note:* Employee 1 and 2 are female and male, respectively, with identically high performance ratings. Employee 3 is a male with mediocre performance ratings.

There were three additional questions on the performance appraisal sheets to act as distractors to the main dependent variable. All three questions were answered on a 7-point scale. The first question was “Do you think hiring this employee was the right decision?” The first question’s scale was from 1 = “Definitely Right” to 7 = “Definitely
Wrong.” Employee one, on average, rated 1.87 on the scale \( (SD = .57) \); Employee two, on average, rated 1.52 on the scale \( (SD = .54) \); Employee three, on average, rated 3.44 \( (SD = .81) \).

The second question was “Should this employee be considered for promotion?” The second question’s scale was from 1 = “Definitely Should” to “Definitely Should Not.” Employee one, on average, rated 1.92 on the scale \( (SD = .64) \); Employee two, on average, rated 1.57 on the scale \( (SD = .59) \); Employee three, on average, rated 3.57 \( (SD = .92) \).

The third question was “Should this employee be considered for termination?” The third question’s scale was from 1 = “Definitely Should” to “Definitely Should Not.” Employee one, on average, rated 6.64 on the scale \( (SD = .54) \); Employee two, on average, rated 6.81 on the scale \( (SD = .44) \); Employee three, on average, rated 5.34 \( (SD = .84) \).

**Inferential Statistics**

**Main Effect Hypotheses**

Hypothesis 1(a) stated that the meritocracy condition (versus the non-meritocracy condition) would be associated with more managerial time spent on the performance appraisal task. An analysis of variance showed that the meritocratic condition had a significant effect between groups on time allocated towards the performance appraisal exercise \( F(1, 165) = 46.36, p < .001, \eta^2 = .22 \). This effect size found from the analysis indicates that there was a relatively large effect between the merit and non-merit condition. This main effect revealed that the time allocated to the performance appraisal exercise was significantly higher for participants in the Meritocratic group \( (M = 5:47:07, \)
than the participants in the non-meritocratic group ($M = 4:46:02, SD = 1:04:00$). The mean and standard deviations for time allocated to the performance appraisal exercises is located in (Table 5).

Table 5

<table>
<thead>
<tr>
<th>Compensation Condition</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merit Condition</td>
<td>5:47:07</td>
<td>0:51:22</td>
<td>87</td>
</tr>
<tr>
<td>Non-Merit Condition</td>
<td>4:46:02</td>
<td>1:04:01</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>5:18:03</td>
<td>1:05:11</td>
<td>166</td>
</tr>
</tbody>
</table>

Note: The means were significantly different at the $p \leq .001$ based on Tukey post-hoc test.

Hypothesis 1(b) stated that the meritocracy condition (versus the non-meritocracy condition) would be associated with higher reward allocations. A one-way multivariate analysis of variance (MANOVA) was conducted to determine the effect of compensation system on the rewards allocated to the three different employee profiles. Significant differences were found among the different compensation systems on the dependent measures, $\text{Wilks } \Lambda = .81, F(3, 162) = 12.7, p < .001, \eta^2 = .19$. This effect size found from the analysis indicates that there was a moderately large effect between the merit and non-merit condition.
Analyses of variances (ANOVA) on each dependent variable were conducted as follow-up tests to the MANOVA. Using the Bonferroni method, each ANOVA was tested at the .025 level. The ANOVA on employee #1 reward allocations was not significant, $F(1, 164) = 4.1, p = .044, \eta^2 = .025$. The ANOVA on employee #2 reward allocations was significant, $F(1, 164) = 36.6, p < .001, \eta^2 = .18$. This is a moderately large effect size and it indicates that a good portion of the difference in rewards allocated to employee profiles were due to the merit and non-merit condition. The ANOVA on employee #3 reward allocations was significant, $F(1, 164) = 15.9, p < .001, \eta^2 = .088$. This is a smaller effect size and it indicates that a very minimal amount of differences in rewards allocated were due to the merit and non-merit conditions.

Post hoc analyses to the univariate ANOVA for the reward allocations consisted of conducting pairwise comparisons to find which compensations system affected reward allocations most strongly. Each pairwise comparison was tested at the .025 level divided by 3 or .008 level. It was found that rewards allocated to employee #2 were significantly higher in the merit condition ($M = $449.51, $SD = 66.8$) in comparison to the non-merit condition ($M = $390.15, $SD = 58.8$). It was also found that rewards allocated to employee #3 were significantly higher in the non-merit group ($M = $247.11, $SD = 76.6$) in comparison to the merit group ($M = 201.23, SD = 71.4$). The mean and standard deviations of reward allocations are presented in (Table 6).
Paradox of Meritocracy Hypotheses

The second hypothesis is a replication of Castilla and Benard (2010), which predicted a two-way interaction of compensation system and employee gender on reward allocations. Specifically, that male employees under the meritocracy condition would receive the highest monetary reward, compared to other conditions. This is the “Paradox of meritocracy” effect. The interaction effect, $F(2, 324) = 17.2, p < .001$, partial $\eta^2 = .097$, was analyzed using interaction comparisons in conjunction with a Bonferroni procedure based on an overall alpha level of .05. A comparison of the interaction contrasts indicated two of them as being significant. The first interaction contrast controlled for performance between employee #1 and employee #2 and was significant, $F(1, 164) = 31.47, p < .001$, $\eta^2 = .16$. This is a moderate effect size found from the first interaction contrast. The second interaction contrast was non-significant, $F(1, 164) = 3.56, p = .061$. The third interaction contrast controlled for gender between employee #2 and #3 and was significant, $F(1, 164) = 28.33, p < .001$, $\eta^2 = .15$. This is another moderate effect size found from the third interaction contrast.

The first interaction contrast revealed the male employee in the meritocratic condition received higher reward allocations ($M = $449.11, $SD = 66.7$) than the equal performing female employee in the meritocratic condition ($M = $349.44, $SD = 5.2$). This interaction is displayed in Figure 1. In addition, the third interaction contrast revealed that the same male employee received significantly less reward allocations in the non-meritocratic group ($M = $390.15, $SD = 58.8$) than the male employee in the meritocratic
group ($M = $449.11, $SD = 66.7$). The mean and standard deviations of reward allocations are presented in Table 6.

Table 6

<table>
<thead>
<tr>
<th>Compensation Condition</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Merit</strong></td>
<td>$350.7</td>
<td>$48.5</td>
<td>87</td>
</tr>
<tr>
<td><strong>Employee 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Merit</td>
<td>$365.5</td>
<td>$45.4</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>$357.8</td>
<td>$47.5</td>
<td>166</td>
</tr>
<tr>
<td><strong>Employee 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merit</td>
<td>$449.5</td>
<td>$66.8</td>
<td>87</td>
</tr>
<tr>
<td>Non-Merit</td>
<td>$390.2</td>
<td>$58.8</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>$421.2</td>
<td>$69.6</td>
<td>166</td>
</tr>
<tr>
<td><strong>Employee 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merit</td>
<td>$201.2</td>
<td>$71.4</td>
<td>87</td>
</tr>
<tr>
<td>Non-Merit</td>
<td>$247.1</td>
<td>$76.8</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>$223.1</td>
<td>$77.3</td>
<td>166</td>
</tr>
</tbody>
</table>

*Note:* The means were significantly different at the $p \leq .001$ based on Tukey post-hoc test.
The third hypothesis stated that there would be a three-way interaction of compensation system, employee gender, and participant gender on reward allocations. Essentially, this would mean greater levels of the paradox of meritocracy effect for male participants than female participants. Rewards allocated were subjected to a mixed model of analysis of variance by having two levels of compensation system (merit and non-merit), gender of the employee profile and gender of the participant (male and female). However, there was no significant effect from a three-way interaction between
compensation system, employee gender, and participant gender on reward allocation $F(2, 161) = .739$, $ns$, $\eta^2 = .005$. A summary table of the mixed model ANOVA is listed in Table 7.

Table 7
*Mixed Model ANOVA Assessing the Effects of Gender and Compensation System on Rewards Allocated*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between-Subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merit (A)</td>
<td>39.25</td>
<td>1</td>
<td>39.25</td>
<td>.317**</td>
<td>.002</td>
</tr>
<tr>
<td>Participant Gender (B)</td>
<td>87.22</td>
<td>1</td>
<td>87.22</td>
<td>.704</td>
<td>.004</td>
</tr>
<tr>
<td>Merit X Participant Gender (A x B)</td>
<td>21.20</td>
<td>1</td>
<td>21.20</td>
<td>.171</td>
<td>.001</td>
</tr>
<tr>
<td>Error$\text{Between (S/ AB)}$</td>
<td>20064.58</td>
<td>162</td>
<td>123.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within Subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Gender (C)</td>
<td>3079308.79</td>
<td>2</td>
<td>1539654.4</td>
<td>266.08</td>
<td>.62</td>
</tr>
<tr>
<td>Merit X Employee Gender (A x C)</td>
<td>199578.44</td>
<td>2</td>
<td>99789.22</td>
<td>17.26**</td>
<td>.097</td>
</tr>
<tr>
<td>Participant Gender x Employee Gender (B x C)</td>
<td>10131.09</td>
<td>2</td>
<td>5065.54</td>
<td>.86</td>
<td>.005</td>
</tr>
<tr>
<td>Merit x Participant Gender x Employee Gender (A x B x C)</td>
<td>9664.47</td>
<td>2</td>
<td>4832.24</td>
<td>.84</td>
<td>.005</td>
</tr>
<tr>
<td>Error$\text{Within (C x S/ AB)}$</td>
<td>1874822.89</td>
<td>324</td>
<td>5786.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** is a significant finding with a $p < .001$
Chapter 4
DISCUSSION

Re-cap of Study Findings and Integration with the Literature

The use of meritocratic organizational policies and procedures, particularly merit-based reward practices, has gained support over the past few decades (Noe, 2008). Although these efforts by employers are aimed at improving equal opportunity and linking merit to employees’ outcomes, recent empirical studies have found that workplace disparities persist even with the adoption of merit-based pay programs (Castilla, 2008). This study has provided a significant contribution to the literature by furthering the cognitive perspective on performance appraisals set forth by DeNisi (1984) by focusing on the attention step of the appraisal. It is the most important step of this cognitive process because if managers do not allocate sufficient time to the performance appraisal process, then there is diminished chance for accuracy in the latter stages.

This study also helped to elaborate how performance appraisal processes may be influenced by the compensation system. More specifically, it was found that the meritocracy condition resulted in significantly more time being spent on the appraisal task. This is the first experimental study to document this effect, which is in line with concepts suggested by Equity Theory (Adams, 1963). This contributes to the literature because prior research on performance appraisals had most commonly been devoted to examining employee reactions, procedural justice, timeliness of appraisals and the biases which exist within the rater (DeNisi, 2014). Furthermore, this lends support to the theory
that compensation systems can play a critical role in shaping organizational culture and more specifically, affect employees’ behavior and motivation (Kuhn, 2009). It is important to explore how compensation can affect the culture of an organization because it is what communicates the philosophy, values, and practices of that organization (Kuhn, 2009). Furthermore, it was also found that these participants in the meritocratic condition were also significantly associated with higher reward allocations in comparison to the participants in the non-meritocratic condition. This further helps to support the meritocratic literature in connection with equity theory because the participants in the non-meritocratic condition should have lower reward allocations because they were more evenly distributed, since they were not allocating rewards based off the differentiation of employee’s performance ratings.

There were no significant findings from the data collected regarding a main effect of participant gender on time allocated towards the performance appraisals. The initial assumption was that males would allocate more time to the performance appraisal during the in-basket exercise simulation, since males tend to prefer merit-based incomes, in comparison to females, who indicate they prefer a non-merit based income (Tocher et al., 2006) However, this was not the case in this study, but still is a hypothesis worth exploring in future research conducted in real-world settings. More specifically, the sample in the current study contained undergraduate psychology students, which might not have captured gender differences that occur among full-time workers in organizations.
In addition, this study also furthered past research on the paradox of meritocracy (Castilla & Benard, 2010). Similarly to these authors, the present study also found that the meritocracy condition resulted in greater financial bonuses to the male employees. These findings help to support the hypothesis from Castilla and Benard (2010), which identified that managers making decisions in a meritocracy condition ironically showed greater bias in favor of men over equally performing women (Castilla & Benard, 2010).

This research is vital because the persistence of gender and racial inequality in wages is especially puzzling given the claims that merit-based pay practices are supposed to be based upon greater fairness (Noe, 2008). Furthermore, the subtle nature of manipulations in this study highlights how little may be needed to trigger biases in performance-based decisions. It was also noticed that the participants in the non-meritocratic group had a much more even allocation of money rewards across all employees in the performance appraisals. This observation of the data lends support to the notion that the non-meritocratic condition may have shaped those participants to be considerably more equal in their money allocations across all employees.

The current study expanded upon this literature by showing how these variables related to the amount of time that the manager devoted to the task. It is interesting to find that the participants in the meritocratic condition who allocated more time towards the performance appraisal task were displaying more of the paradox of meritocracy effect. Especially, in comparison to the participants in the non-meritocratic condition who allocated their time more evenly across all tasks and displayed a significantly lesser degree of the paradox of meritocracy effect. This hints at the idea that a lack of time spent
on performance appraisals may not be the cause of unfair or negative consequences that arise from these appraisals in meritocratic organizations. These findings lead back to the notion that these injustices arising from the performance appraisal process are possibly based on individual biases and/or prejudices. Whether these biases towards employees during the performance appraisal process are conscious or unconscious, they point to potential practical application in the training of managers regarding the evaluation of performance.

Contrary to hypotheses, it was not found that male participants showed a greater degree of the paradox of meritocracy. This effect was surprising given the literature surrounding in-group/out-group preferences, and more specific literature that showed males’ preference for meritocracy in compensation. This non-significant finding does not fit the previous literature, which has shown that raters perceive same-sex ratees as members of their in-group and ratees of the opposite sex as the out-group, hence biasing them to give higher ratings to same-sex ratees (Davison & Burke, 2000). This concept is rooted in social identity theory. Supporting research has shown that raters were giving higher ratings to participants who were similar to their in-group (gender), in comparison to the evaluations of the out-group participants (Koch et al., 2014). These same concepts led to an exploratory analysis conducted on whether a possible two-way interaction existed between participant gender and employee gender on rewards allocated to the employee profiles during the performance appraisal task. However, there was no significant two-way interaction between participant gender and employee gender, even though the literature pointed to a possible finding.
Strengths and Weaknesses of the Study

In addition to contributing to the literature as reviewed above, there are several methodological strengths of this study. Internal validity was strengthened with the use of several features common to laboratory experiments, which allow for control over many extraneous variables occurring in the real world. For instance, participant factors were controlled through the use of random assignment to experimental conditions. This limited systematic sources of influence such as personality characteristics or inherent biases on the dependent variables of interest. In addition to random assignment, this study limited the potential of experimenter influences by keeping the experimenter and research assistant “blind” to hypotheses throughout the process of data collection. Experimenter influences were also minimized by the visual appearance of the meritocracy manipulation being too similar to identify upon dissemination of the materials.

By expanding upon the methods used by Castilla and Benard (2010), this study allowed for a direct replication of the paradox of meritocracy. In addition, the implementation of a pilot study allowed for confirmation of significant manipulation checks (in the intended direction regarding meritocracy), and also allowed for confirmation of the measurement reliability (inter-rater) regarding the time spent on the appraisal task. The chi-square analysis confirmed the effectiveness of the manipulation. This ensures that the participants correctly experienced the manipulation, meaning that they were able to differentiate between the Core Company’s Values and Mission Statement as being either more meritocratic or non-meritocratic. The very high inter-rater reliability coefficients between the two researchers who collected the data for this study
also helps to ensure that the methodological approach to measuring the time spent on the different tasks in the managerial simulation was highly reliable. These measurement features were an additional methodological strength of this study.

As with most laboratory studies, this experiment did have weaknesses. One limitation is that it was conducted in a laboratory with undergraduate student participants. Thus, the generalizability of findings to real organizations is unknown. It can be argued that practicing managers would have a better understanding of performance appraisals and hence would provide ratings that are different from those given by undergraduate students. The ideal sample of participants would have been individuals who either were currently in a managerial occupation or at least with or working on their degree in business or human resources. Having participants with a background or interest in managerial or human resources work would significantly reduce the chance of having a sample that does not relate to the population of interest to the research question.

Another potential methodological limitation to the current study is that the performance descriptions (of the three employees) were not counter-balanced among the stated gender of these employees. This decision was made due to an anticipated low number of male participants (thus adding a layer of complexity in the data analysis of ensuring that males read equal numbers of each version). Although this decision may have resulted in a potential confound in the manipulations, the text was developed in previous research (Castilla & Bernard, 2010). These authors empirically demonstrated through counterbalancing that the performance descriptions did not yield different perceptions of performance. In other words, these descriptions were interpreted as being
equal. Their finding limits the risk of a confound in the current study. Future research should replicate the current study, including counterbalancing as a methodological feature.

**Applied Implications**

This study has practical implications for both compensation systems and performance appraisals. It is important for an organization that has a merit pay compensation system to have objective and accurate performance appraisals to ensure high levels of perceived organizational justice amongst their employees (Byrne et al. 2012). As we know, the levels of employee satisfaction can significantly increase when they perceive that the performance appraisal process is fair (Kuhn, 2009). There are also legal implications based on Equal Employment Opportunity principles in regards to performance appraisals because they impact the livelihoods of people. Performance appraisal results should be fair, accurate, and supported by evidence and examples. Increasing our knowledge about performance appraisals can help organizations improve their performance management processes and safeguard against any negative legal consequences.

Theoretically, the findings about the unintended effects of certain organizational efforts to promote meritocracy in the workplace provides a theoretical explanation for why inequality remains, despite the increasing use of merit-based policies inside organizations. Additionally, this research will help further the work of Mulvaney, (2012) to improve performance appraisals so that they function as intended. One of the most significant benefits of performance appraisals is that, in the rush of daily work, it offers a
rare chance for a supervisor and subordinate to have a one-on-one discussion of important work issues that might not otherwise be addressed. Appraisal offers a valuable opportunity to focus on work activities and goals, to identify and correct existing problems, and to encourage better future performance. Thus, the performance of the whole organization is enhanced. Performance appraisals also provide employees with recognition for their work efforts, and this has been long noted to result in higher degrees of job satisfaction and motivation (Byrne et al., 2012).

Finally, this study contributed to the linking of DeNisi’s (1984) cognitive perspective of the performance appraisal to Castilla and Benard’s (2010) Paradox of Meritocracy effect. Specifically, by focusing in on the “attention” stage of DeNisi’s cognitive model and seeing how different compensation systems and gender of employees can affect this specific stage. This can help organizations understand how compensation systems may influence managers’ time and efforts toward various tasks and roles. It can also theoretically add to our understanding of how to improve the performance appraisal process by raising awareness of potential biases.

**Directions for Future Research**

This study could be effectively extended in several ways. One way to further this study would be to explore the relationship between culture and the paradox of meritocracy. More specifically, one aspect that has received very little emphasis in rating inflation research is the role of raters’ cultural values on the performance ratings they provide. Raters within one country, especially one as diverse as the United States, may not hold all the same values (Suh, Diener, & Updegraff, 2008). Incorporating this into the
study would require a more representative sample of all the different nationalities within the U.S. for participants and then having them complete a survey, which assesses their cultural values. For instance, future research could address whether meritocracy functions better in an individualistic (versus collectivistic) culture. These cultural differences may be of importance for performance appraisal research and practice (Mishra & Roch, 2013).

In addition, given that a manager’s tendency to be biased or inaccurate in their appraisals, the next important question is whether a manager’s personal attributes (e.g. personality and competencies) are related to rating-level bias and rating accuracy (Bernardin, et al., 2015). It would be interesting to examine participants personality characteristics via the Five Factor Model (FFM) or their competencies in performance management before having them go through this replication study of Castilla and Benard, (2010). One might hypothesize, for instance, that managers who are open to experience would benefit more from training about potential biases during performance appraisal. The relationship between different personality characteristics and performance management competencies could help shed some extra light on the paradox of meritocracy effect.

This study could also be extended by changing the characteristics of the pool of employees and the levels of employee performance. There were only three employees who were evaluated within the performance appraisal exercise; one male and one female with equally high performance ratings and then one male with mediocre ratings. This could be expanded upon by increasing the number of employees being assessed during the performance appraisal. Also, increasing the number of objective productivity
measures, such as sales or maybe even bonuses rewarded from previous years’ performance appraisals. Research should also continue exploring what real companies may be doing to achieve meritocracy and diversity in the workplace beyond hiring and promotion (Dobbin, Schrage, & Kalev, 2009). This research could help us understand under which conditions meritocratic processes foster fairness and equity in organizations.

This study could also help further its findings by collecting data from the participants on their perceived importance of each in-basket exercise, especially the performance appraisal. This would allow us to test for a hypothesis to determine if there is a relationship between the compensation system used in the organization and the perceived importance of performance appraisals. Since this study has already helped to support the theory that compensation systems can shape the organizational culture, (Kuhn, 2009) it would be hypothesized in future research that a meritocratic condition would be associated with higher ranks of perceived importance for performance appraisals. Furthermore, it could even be expected that there would be a two-way interaction of compensation system and gender on perceived importance of the performance appraisal. This two-way-interaction would be a logical hypothesis, given that men respond more favorably to merit pay (Tocher et al., 2006) and that they may have higher ranks of perceived importance of appraisals, but especially when in a meritocratic condition.
Consent Form

I hereby agree to participate in research that will be conducted by Bradley Thomson, a graduate student in psychology. Upon arrival to the experimental location, I will receive a packet of material containing a description of an organization, three different color-coded pieces of paper with different managerial tasks to be simulated, and demographic questions. After reading the description of the organization, I will be instructed to complete the assigned managerial tasks in the allotted time.

I also consent to the fact I will be recorded on camera through the duration of the study at the experiment location. The camera will be aimed at the workspace and not directly at me. The recording is being used to measure a specific behavior to be observed during this experiment. In addition to signing my consent for participating in this experiment, I also will sign my consent to be recorded throughout the duration of the experiment. Once this recording has been used for its measurement purposes, it will then be destroyed. Even after consenting and participating in the experiment, you will receive all of my contact information to withdraw your recorded participation after the fact.

The research will take place in one of the research rooms on the third floor of Amador Hall and will require 30 minutes of my time.

I understand that I will receive one half-hour of credit toward satisfying the Psychology Department’s research participation requirement by participating in this study.

I understand that I may not personally benefit from participating in this research, but it is hoped that the research may lead to a better understanding of psychology in the workplace.

I also understand that I may discontinue my participation at any time without any penalty other than loss of research credit and that the investigator may discontinue my participation at any time.

This information was explained to me by Bradley Thomson and I understand that he will answer any questions I may have now or later about this research. Bradley Thomson can be reached at thomsonb13@gmail.com.

Signature: ________________________  Date:  _____  (Consent to participate)

Signature: _______________________   Date: ________ (Consent to be video recorded during the experiment)
Demographic Questionnaire

1a.) Please check which of the following mission statements below you read at the beginning of this experiment.

_____ All employees will be rewarded on a fair basis. Bonuses and raises are completely based on the performance of the employee. The performance from the employee will determine whether they deserve a raise. Promotions will only be given to employees who show they have earned it through their performance at work. Moyes Insurance Group will reward all employees equitably every year.

_____ All employees are to be evaluated regularly. Raises and bonuses will be given yearly to employees who remain their tenure with the organization. Promotions given to employees’ will be decided by the discretion of the manager. Whether an employee deserves a raise is to be determined by their manager. Moyes Insurance group’s goal is to evaluate all employees every year.

1b.) Please check which of the following two descriptions you would say best describes the mission statement about the insurance company you read.

_____ Pay-by-performance rewards (meritocratic)

_____ Rewards based on seniority/fairness (non-meritocratic)

2.) Age ____________ (Years old)

3.) Sex ____________ Male  ____________ Female  (Check One)

4.) Race/Ethnicity (Check One)

_____ American Indian or Alaskan Native
_____ Asian or Asian American
_____ Black or African American
_____ Hispanic or Latino
_____ Non-Hispanic or White
_____ Other ______________ (Please Indicate Other)

5.) What is your tenure here at CSUS ________________ (Frosh, Soph., Junior, or Senior)

6.) How many years have you worked consistently in a row? __________________
Debriefing

Hypothesis and Supporting Research:
A large volume of research on the topic of performance appraisal have highlighted problems with the success of performance management systems (for a review, see DeNisi, 2011). A cognitive approach was introduced several decades ago (DeNisi, 1984) to explain the performance appraisal process. An important feature of this stage includes how much time has been allocated by management to gather information about employee performance. It is my contention that this attentional phase can be affected by the organizational culture in which the management is surrounded by. Compensation systems play a critical role in shaping the organizational culture and shape how employees’ perceive what the organization values (Kuhn, 2009).

More specifically, management personnel may allocate more time towards a performance appraisal process if the organization has a merit pay compensation system, in comparison to a seniority pay system. Thus, as a manager working with a merit pay system, more attention must be given to the work-related inputs to justify the outcomes that are awarded. Research has shown some problems with merit pay, however (Castilla & Benard, 2010). Although merit pay is based philosophically on an objective and fair rewarding system for all employees, this study (Castilla & Benard, 2010) demonstrated a gender bias against women who were presented as performing equally to men.

Based on premises of Equity Theory (Adams, 1963), it is hypothesized there will be a main effect of the compensation system manipulation on aspects of performance appraisal. It is also expected that there will be a two-way interaction of compensation system and employee gender on reward allocations. To test these hypotheses, I presented participants with a company’s core values that focused on either a meritocratic or non-meritocratic compensation system to potentially cue how the participants allocated their time towards the different managerial tasks.

Video Recording:
The recording of participants in this experiment was used so that I can go back after and measure the amount of time spent on each task in minutes and seconds. This method was selected instead of using a hand-held timer during the actual experiment for the sake of ease and to avoid giving the participant any insight into the purpose of the experiment. For any reason, if you feel uncomfortable now or within the next 2-3 weeks about being recorded, feel free to contact my email provided below to withdraw your participation and have your recording deleted.

Psychological Services:
If you have experienced any personal distress caused by the content or materials in this research and want to talk to someone, counseling services are available through the Student Health Center free of charge. Please contact Psychological Services at 278-6416 for assistance.

Contact Information:
The results of this study will be available the last week of the current semester. If you would like further information about this study or have questions regarding this study, please contact thomsonb13@gmail.com at your convenience.
Mission Statement:  (MERIT)

"Provide quality insurance protection and excellent service to our policyholders through teamwork with our independent agents and well-trained staff by promoting the financial health of the company; managing its assets prudently; and providing active leadership and support within the insurance industry and our local communities, thereby preserving the heritage of mutual insurance."

Core Values:  (Please check a box next to each core value to indicate whether you agree with it or not.)

- All employees will be rewarded on a fair basis.  

- Bonuses and raises are completely based on the performance of the employee.  

- The performance from the employee will determine whether they deserve a raise.  

- Promotions will only be given to employees who show they have earned it through their performance at work.  

- Moyes Insurance Group will reward all employees equitably every year.
Mission Statement: (NON-MERIT)

"Provide quality insurance protection and excellent service to our policyholders through teamwork with our independent agents and well-trained staff by promoting the financial health of the company; managing its assets prudently; and providing active leadership and support within the insurance industry and our local communities, thereby preserving the heritage of mutual insurance."

Core Values: (Please check a box next to each core value to indicate whether you agree with it or not.)

- All employees are to be evaluated regularly.  
  Yes  No

- Raises and bonuses will be given yearly to employees who remain their tenure with the organization.  
  Yes  No

- Promotions given to employees’ will be decided by the discretion of the manager.  
  Yes  No

- Whether an employee deserves a raise is to be determined by their manager.  
  Yes  No

- Moyes Insurance group’s goal is to evaluate all employees every year.  
  Yes  No
Dear Management,

We have recently received a customer complaint about Mr. Miller, one of our claim representative’s. We need management to read over the e-mail and to respond back to our dissatisfied customer. There are three different issues that our customer touched upon in regards to their complaint. Please address and resolve all three at the bottom of the page in the space provided. Thank You.

To Whom it May Concern,

I have been with Moyes Insurance Group for five years now and have had good experiences up until the past few months. I have always paid my premiums and monthly bills and have never made one claim over a five-year period. I have recently made an auto insurance claim this past June and there have been three unacceptable problems. I sent multiple requests to file my claim and did not hear back from my representative Mr. Miller for more than two weeks. This delay on filing my claim was a major inconvenience for many of reasons. Secondly, after not hearing back from Mr. Miller for close to three weeks, I was told that my claim was denied because the accident I was involved in happened during work hours and that it should be covered by my employer’s insurance provider. My employer’s provider does unfortunately not cover me for this type of insurance. I called back Mr. Miller and explained this to him and his response to me was that he could settle my claim, but that he would have to double my premium payments. So finally, in addition to my insurance claim being denied for reasons that were never explained to me up front when I signed up, Mr. Miller is threatening to double my premium payments if I am to be reimbursed for the claim. To say the least, I am very dissatisfied with the service I am receiving from Mr. Miller and I hope that higher-level management can resolve these issues for me.

Please answer the following questions in 2-3 sentences each to explain how these issues will be resolved and to display to the dissatisfied customer that these issues will never arise again in the future.

1.) How will management at Moyes Insurance group ensure Mr. Miller files his claims in a timely manner in the future?

2.) How will management ensure that claim coverage is clearly explained at the point of sale and that a higher level of customer service will be delivered by Mr. Miller when situations like the one above occur?

3.) Explain your final decision on how this customer complaint will be resolved?
To: Management  
From: Human Resources Dept.  
Date: 13th November, 2013  
Re: Training Schedule Revisions

Our recent training schedules for the sales department in the past year have unfortunately not been set up in a way that has allowed all the new trainees to gather the knowledge, skills and abilities necessary to perform well in our five main departments of insurance. We have a group of ten new sales employees starting training on Monday, December 30th, 2013 and we need to have management fix this scheduling problem by then. Our goal is to have management follow the instructions below and to set up a weekly schedule that the sales department can follow for a month of training.

**Instructions:** Assign one female and one male trainee to each department of insurance (Business, Auto, Home, Life & Health) for every day of the week to be trained in that area of insurance. Trainees must spend one day in each of the five departments of insurance by the end of the week and must not be scheduled to the same department more than once per week.

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Male Trainees**  
- Richard Trent  
- David Richardson  
- Scott Martinez  
- Jack Wilshere  
- Fred Manning

**Female Trainees**  
- Cathy Williams  
- Kristina Nguyen  
- Amy Robertson  
- Julia Smith  
- Katie Porter
To: Reviewing Manager  
From: Human Resources Dept.  
Date: 13th November, 2013  
Re: Employee Review for Patricia Anderson

Patricia Anderson:  
Employee #1

Please read through the Summary of Performance rated on a 5-point scale and then continue to read the verbal feedback in regards to our insurance salesperson Patricia Anderson. When finished, please indicate at the bottom of this review how much out of our limited ($1,000) bonus should be divided to Ms. Anderson based on the reviews done by the Human Resources department. After assigning the amount of bonus to Ms. Anderson, explain in 1-2 sentences why you decided on the amount of bonus to be given to her in the space provided below. Lastly, answer the three supplemental questions about the employee at the bottom of the page.

**Summary of Performance: (4/5)**
Staff member’s performance consistently meets and frequently exceeds all established goals/expectations for the position.

**Feedback:**
Patricia is hardworking and quick to find ways to solve clients’ problems. She is also generally popular with the clients. Patricia reliably completes projects on time. While the quality of Patricia’s work is excellent, several projects this year have gone over budget. In the next appraisal cycle, she needs to work on keeping costs down.

**Bonus Dividend for Patricia Anderson = $_______________**

**Explanation for bonus amount given:**

---

**Do you think hiring this employee was the right decision?**

<table>
<thead>
<tr>
<th>Definitely Right</th>
<th>Definitely Wrong</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Should this Employee be considered for promotion?**

<table>
<thead>
<tr>
<th>Definitely Should</th>
<th>Definitely Should Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Should this Employee be considered for termination?**

<table>
<thead>
<tr>
<th>Definitely Should</th>
<th>Definitely Should Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
Please read through the Summary of Performance rated on a 5-point scale and then continue to read the verbal feedback in regards to our insurance salesperson Michael Taylor. When finished, please indicate at the bottom of this review how much out of our limited ($1,000) bonus should be divided to Mr. Taylor based on the reviews done by the Human Resources department. After assigning the amount of bonus to Mr. Taylor, explain in 1-2 sentences why you decided on the amount of bonus to be given to him in the space provided below. Lastly, answer the three supplemental questions about the employee at the bottom of the page.

**Summary of Performance: (4/5)**

Staff member’s performance consistently meets and frequently exceeds all established goals/expectations for the position.

**Feedback:**

Michael’s proposals are always well thought-out and highly detailed. He always does an excellent job of communicating technical aspects of the proposals to clients. Clients respect and enjoy working with Michael. Michael is a valuable team member, but sometimes tries to take on too many projects at once. In the next year, he needs to work on staying focused.

**Bonus Dividend for Michael Taylor = $__________________**

Explanation for bonus amount given:

___________________________________________________________

Do you think hiring this employee was the right decision?

<table>
<thead>
<tr>
<th>Definitely Right</th>
<th>Definitely Wrong</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Should this Employee be considered for promotion?

<table>
<thead>
<tr>
<th>Definitely Should</th>
<th>Definitely Should Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Should this Employee be considered for termination?

<table>
<thead>
<tr>
<th>Definitely Should</th>
<th>Definitely Should Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Robert Miller: Employee # 3

To: Reviewing Manager
From: Human Resources Dept.
Date: 13th November, 2013
Re: Employee Review for Robert Miller

Please read through the Summary of Performance rated on a 5-point scale and then continue to read the verbal feedback in regards to our insurance salesperson Robert Miller. When finished, please indicate at the bottom of this review how much out of our limited ($1,000) bonus should be divided to Mr. Miller based on the reviews done by the Human Resources department. After assigning the amount of bonus to Mr. Miller, explain in 1-2 sentences why you decided on the amount of bonus to be given to him in the space provided below. Lastly, answer the three supplemental questions about the employee at the bottom of the page.

Summary of Performance: (3/5)
Staff member’s performance consistently meets established goals/ expectations for the position.

Feedback:
Robert does a good job of listening to the clients and meeting their expectations. His work has been consistently solid, but not spectacular. Robert has a tendency to miss minor deadlines when things get busy. He needs to do a better job of staying on top of his projects.

Bonus Dividend for Robert Miller = $__________________
Explanation for bonus amount given:
_____________________________________________________________
_____________________________________________________________

Do you think hiring this employee was the right decision?
Definitely Right 3 4 5 6 7
1 2

Should this Employee be considered for promotion?
Definitely Should 3 4 5 6 7
1 2

Should this Employee be considered for termination?
Definitely Should 3 4 5 6 7
1 2
Thesis Script

Hello and welcome to the study. Please take a seat in the back and begin to read the consent form. When finished, please sign both of the signatures at the bottom of the page. The 2nd signature is to consent to be video recorded during the study. There is a web cam in each room that will be aimed down at the papers you will be working on. The webcam is not aimed at your face and these recordings will be destroyed at the end of the week once the data has been collected.

(COLLECT CONSENT FORMS AND PLACE INSIDE APPROPRIATE ENVELOPE)

Now I am going to have you read a mission statement and core values from an insurance company. Once you have finished reading the core values, please check “yes” or “no” to indicate whether you “agree” or “disagree” with the core values.

(COLLECT MISSION STATEMENTS AND PLACE ON THE TABLE)

For the next 15 minutes, you will be working on 3 different simulated managerial tasks. You can work on the 3 tasks in any order that you like and finish as much as you can in the allotted 15 minutes.

One task will be responding to a customer complaint via e-mail and there will be 3 questions below to guide your response after reading the customer complaint above.

Another task will be filling out performance appraisals for 3 employees. First, you will read an employee review done by another manager and then you will use that review to answer the questions on the bottom of the page. One of the questions will ask you to decide the amount of bonus for each employee and for this you will have $1,000 to divide amongst the three employees.

The third task will be setting up a training schedule for new employees. There will be instructions at the top of the page on how to set up the schedule.

(SEM WEB-CAMS TO RECORD AND THEN ASSIGN PARTICIPANTS TO ROOMS)

Your 15 minutes have begun, you may begin working and I will let you know when the 15 minutes have elapsed.

(START TIMER AND THEN LAY OUT DEBRIEFING & DEMOGRAPHIC FORMS)

The 15 minutes is over, please stop and place your papers in the manila envelope on the desk next to you. Please take a seat back at this desk and fill out the demographic questionnaire. When you are finished, there is a debriefing form below for you to read
through to answer any questions you may have. If you do not have any questions at this moment, thank you for participating and you are free to go.

(Grab the demographic & mission statement forms and place them in the manilla envelopes respectively to each participant)
References


