The Effects of Perceived Organizational Justice of Inclusive Talent Management Practices on Employee Work Effort

Thomas Kramer

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THE EFFECTS OF PERCEIVED ORGANIZATIONAL
JUSTICE OF INCLUSIVE TALENT MANAGEMENT
PRACTICES ON EMPLOYEE WORK EFFORT

by

THOMAS E. KRAMER

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Human Resource Development

Kim Nimon, Ph.D., Committee Chair
Soules College of Business

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This is to certify that the Doctoral Dissertation Proposal of

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has been approved for the dissertation proposal requirement on
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Approvals:
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Table of Contents

List of Tables ........................................................................................................ iv
List of Figures ........................................................................................................ v
Abstract ................................................................................................................... vi
Chapter 1—Introduction ......................................................................................... 1
  Background to the Problem ................................................................. 1
  Statement of the Problem ............................................................... 3
  Purpose of the Study ........................................................................ 5
  Theoretical Framework ...................................................................... 6
  Theoretical Model and Research Hypotheses ...................................... 7
  Overview of the Design of the Study ............................................... 10
  Significance of the Study .................................................................. 12
  Assumptions ..................................................................................... 13
  Limitations ....................................................................................... 13
  Delimitations ..................................................................................... 14
  Definitions of Terms .......................................................................... 14
  Chapter Summary and Organization of the Dissertation Proposal ...... 16
Chapter 2—Literature Review ............................................................................... 18
  Introduction ....................................................................................... 18
  Talent Management ........................................................................... 19
    Origins of Talent Management ........................................................ 19
    Empirical Study of Talent Management ........................................... 21
    Practitioner and Scholarly Approaches ............................................ 22
    Employee as Subject or Object ....................................................... 24
    Inclusive and Exclusive Approaches ................................................ 26
    Inclusive Approach ....................................................................... 26
    Exclusive Approach ....................................................................... 27
    Workforce Differentiation .............................................................. 29
    Strategic Ambiguity ....................................................................... 30
    Future Directions ........................................................................... 31
  Organizational Justice ........................................................................... 32
    Organizational Justice Construct .................................................... 32
    The Study of Organizational Justice ................................................. 36
    Justice and Talent Management Practices ....................................... 39
    Justice, Fairness, Ethics, and Equity ................................................ 40
  Work Effort ......................................................................................... 42
  Theoretical Model and Research Hypotheses ...................................... 44
  Chapter Summary ............................................................................... 47
Chapter 3—Methodology .................................................................................... 48
Introduction .......................................................................................................................... 48
Purpose of the Study ........................................................................................................... 48
Research Hypotheses ......................................................................................................... 49
Pilot Study .......................................................................................................................... 50
Design of the Main Study .................................................................................................. 54
Population and Sample ...................................................................................................... 57
Sample ............................................................................................................................... 57
Sample Size ....................................................................................................................... 61
Measurement Instruments ................................................................................................. 62
Inclusive Talent Management Practices ........................................................................... 63
Organizational Justice ........................................................................................................ 63
Distributive Justice ............................................................................................................ 64
Procedural Justice ............................................................................................................ 64
Work Effort ......................................................................................................................... 65
Demographics ................................................................................................................... 66
Survey Design .................................................................................................................... 66
Survey 1 .............................................................................................................................. 68
Survey 2 .............................................................................................................................. 71
Survey 3 .............................................................................................................................. 71
Data Collection ................................................................................................................ 72
Survey 1 .............................................................................................................................. 74
Survey 2 .............................................................................................................................. 74
Survey 3 .............................................................................................................................. 75
Data Analysis ................................................................................................................... 75
Data Cleaning .................................................................................................................... 75
Sample Representativeness .............................................................................................. 76
Statistical Assumptions ..................................................................................................... 77
Construct Validity ............................................................................................................. 77
Structural Equation Modeling ......................................................................................... 80
Chapter Summary .............................................................................................................. 80
Chapter 4—Results ........................................................................................................... 82
Introduction ......................................................................................................................... 82
Data Analysis Results ....................................................................................................... 82
Data Collection and Participants ...................................................................................... 82
Survey 1 .............................................................................................................................. 83
Survey 2 .............................................................................................................................. 84
Survey 3 .............................................................................................................................. 84
Sample Representativeness .............................................................................................. 85
Descriptive Statistics ........................................................................................................ 87
Statistical Assumptions Results ....................................................................................... 91
Measurement Model Analyses ......................................................................................... 91
Statistical Analyses .......................................................................................................... 94
Hypotheses Summary ....................................................................................................... 97
Chapter Summary .............................................................................................................. 99
Chapter 5—Discussion ..................................................................................................... 100
Introduction ....................................................................................................................... 100
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of Study and Discussion of Results</td>
<td>100</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>101</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>102</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>103</td>
</tr>
<tr>
<td>Implications</td>
<td>104</td>
</tr>
<tr>
<td>Implications for Research</td>
<td>104</td>
</tr>
<tr>
<td>Implications for Practice</td>
<td>106</td>
</tr>
<tr>
<td>Limitations</td>
<td>108</td>
</tr>
<tr>
<td>Suggestions for Future Research</td>
<td>110</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>111</td>
</tr>
<tr>
<td>References</td>
<td>112</td>
</tr>
<tr>
<td>Appendix A: Pilot Study</td>
<td>145</td>
</tr>
<tr>
<td>Population and Sample</td>
<td>146</td>
</tr>
<tr>
<td>Measurement Instruments</td>
<td>146</td>
</tr>
<tr>
<td>Turnover Intention</td>
<td>146</td>
</tr>
<tr>
<td>Inclusive Talent Management Practices</td>
<td>147</td>
</tr>
<tr>
<td>Survey Design</td>
<td>148</td>
</tr>
<tr>
<td>Survey 1</td>
<td>149</td>
</tr>
<tr>
<td>Survey 2</td>
<td>151</td>
</tr>
<tr>
<td>Survey 3</td>
<td>151</td>
</tr>
<tr>
<td>Data Collection</td>
<td>151</td>
</tr>
<tr>
<td>Data Cleaning</td>
<td>153</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>155</td>
</tr>
<tr>
<td>Results</td>
<td>156</td>
</tr>
<tr>
<td>Appendix B: Pilot Study Survey</td>
<td>167</td>
</tr>
<tr>
<td>Appendix C: Pilot Study Syntax</td>
<td>182</td>
</tr>
<tr>
<td>Appendix D: Main Study Surveys</td>
<td>186</td>
</tr>
<tr>
<td>Appendix E: Main Study Syntax</td>
<td>198</td>
</tr>
<tr>
<td>Appendix F: Permission to Use Surveys</td>
<td>204</td>
</tr>
<tr>
<td>Appendix G: IRB Approvals</td>
<td>209</td>
</tr>
</tbody>
</table>
List of Tables

Table 1 Results of Chi-Square Analysis of Pilot Study Sample & Target Population ..... 55
Table 2 Population and MTurk® Sample Frame Chi-Square Analysis ..................... 60
Table 3 Needed to Collect 300 Useable Responses ............................................. 73
Table 4 Summary of Data Collection ................................................................... 83
Table 5 Sample and Population Demographics Comparison and Chi-square Results.... 88
Table 6 Descriptive Statistics ................................................................................. 89
Table 7 Pattern (P) and Structure (S) Coefficients for Four-Factor Correlated Model ............................................................ 93
Table 8 Implied Correlations, Average Variance Extracted (AVE), and Composite Reliability (CR) ......................................................................................... 94
Table 9 Fit Indices and Standardized Coefficients .................................................. 95
Table 10 Analysis of Simple Effects ........................................................................ 96
Table 11 Results of Predicted Hypotheses ............................................................. 97
Table A1 Results of Chi-square Analysis of Pilot Study Sample & Target Population ........................................................................................................... 158
Table A2 Implied Correlations, Average Variance Extracted (AVE), and Composite Reliability (CR) ................................................................................................. 162
Table A3 Fit Indices and Standardized Coefficients ................................................ 163
Table A4 Analysis of Simple Effects ....................................................................... 164
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Theoretical Model</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Organizational Justice and Talent Management Theoretical Model</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>Empirical Test of Organizational Justice and Talent Identification</td>
<td>9</td>
</tr>
<tr>
<td>4.</td>
<td>Statistical Model</td>
<td>49</td>
</tr>
<tr>
<td>5.</td>
<td>Measurement Model</td>
<td>78</td>
</tr>
<tr>
<td>6.</td>
<td>Baseline and Interaction Models</td>
<td>79</td>
</tr>
<tr>
<td>7.</td>
<td>Measurement Model</td>
<td>92</td>
</tr>
<tr>
<td>A1.</td>
<td>Initial Theoretical Model</td>
<td>145</td>
</tr>
<tr>
<td>A2.</td>
<td>Initial Measurement Model</td>
<td>159</td>
</tr>
<tr>
<td>A3.</td>
<td>Revised Theoretical, Baseline, and Interaction Models</td>
<td>160</td>
</tr>
<tr>
<td>A4.</td>
<td>Final Measurement Model</td>
<td>161</td>
</tr>
<tr>
<td>A5.</td>
<td>Mediated Models</td>
<td>165</td>
</tr>
</tbody>
</table>
Abstract

THE EFFECTS OF PERCEIVED ORGANIZATIONAL JUSTICE OF INCLUSIVE TALENT MANAGEMENT PRACTICES ON EMPLOYEE WORK EFFORT

Thomas E. Kramer

Dissertation Chair: Kim Nimon, Ph.D.

The University of Texas at Tyler
July 2021

Talent management is an immature but growing topic for both researchers and practitioners. The academic literature identifies two conflicting approaches to talent management which vary in their level of inclusivity of employees. Researchers have concentrated on the exclusive approach, which identifies a small percentage of the workforce eligible for talent management initiatives. Through the lens of organizational justice, these studies have evaluated the individual and organization-level outcomes of the exclusive approach but have neglected the outcomes for those not selected for inclusion. This study sought to empirically assess a theoretical model that hypothesized a moderated mediation effect of organizational justice on the relationship between inclusive talent management practices and work effort. Latent moderated structural equation modeling was used as a more robust and rigorous approach relative to the more commonly used multiple regression approach. As hypothesized, and based on the relevant literature, more inclusive talent management practices led to increased
perceptions of distributive justice. Distributive justice was found to mediate the relationship between inclusive talent management practices and work effort. Procedural justice was found to moderate the relationship between distributive justice and work effort such that distributive justice had a greater effect on work effort when perceptions of procedural justice were low. Implications for theory, research, and practice were discussed.

*Keywords:* inclusive talent management, distributive justice, procedural justice, work effort
Chapter 1—Introduction

Background to the Problem

Each year, U.S. organizations spend billions of dollars on talent management initiatives in the hopes of recognizing a return on their investment through the identification, recruitment, development, and retention of employees (Al-Hussaini et al., 2019; Bersin, 2012; Lewis & Heckman, 2006). Although sometimes compared to sound human resource development practices, talent management is a specific initiative involving the identification of key positions that disproportionately contribute to the organization’s competitive advantage (Collings & Mellahi, 2009). The oldest reference to talent management in this context can be traced to a 1998 McKinsey and Company report (Chambers et al., 1998) which identified a war for talent, making the study of talent management a developing area of research (Cappelli & Keller, 2014; Gelens et al., 2013). Since that time, there has been some debate about the most effective means of conducting talent management (Thunnissen et al., 2013).

Talent management initiatives fall into two categories: inclusive and exclusive, based on the degree to which employees are offered talent management initiatives. The inclusive approach to talent management considers talent universal and offers talent development opportunities to all employees. Conversely, the exclusive approach views talent as a scarce resource and disproportionately develops certain key employees while excluding talent development opportunities from most employees.
Academics and practitioners have focused more intently on the exclusive approach to talent management as a means of maximizing talent management expenses (Dries, 2015; Gelens et al., 2013). As the name implies, this approach considers the scarcity of resources, both talent development funds and talented employees, as a primary driver for workforce differentiation (Becker et al., 2009; Gelens et al., 2013; Swailes, 2013). Workforce differentiation procedures are used to select which employees will receive what level of talent management. These certain employees have been referred to as managerial talent (Preece et al., 2013), star performers (Bish & Kabanoff, 2014), or most commonly, high potentials (Asag-Gau & Dierendonck, 2011). Inclusive and exclusive approaches to talent management are not mutually exclusive, however. Rather than a binary selection, organizations make decisions that place them on a spectrum of inclusivity based on the degree to which they practice workforce differentiation. The exclusive approach to talent management is one way organizations can maximize their talent development investments. Similar to investments in traditional capital assets, resources for investing in human capital are often limited and firms must evaluate alternative investment strategies to ensure returns are maximized (Gelens et al., 2014).

Even the most successfully developed and executed talent management programs may have unintended, negative consequences when consideration is given to the effects on those employees excluded from participation. One of the major criticisms of exclusive talent management practices is the potential for perceptions (real or imagined) of injustice in the selection and categorization of included and excluded employees (Becker et al., 2009; Morrison & Robinson, 1997; Rousseau, 1995). One measure of this perceived inequity is organizational justice which is focused on the reaction of individuals and
groups to decisions, procedures, and authority figures (Colquitt, 2012; Greenberg, 1987). The nature of exclusive talent management programs that specifically identify a small percentage of the workforce for special treatment in the form of talent development opportunities makes the study of perceptions of organizational justice a natural extension. Cosier and Dalton (1983) recognized the importance of justice in the workplace and identified potentially significant consequences resulting from an organization’s mishandling of the concept.

A handful of studies have linked talent management practices to organizational citizenship behaviors such as work effort, job satisfaction, motivation, and engagement (Colquitt, 2012; Gelens et al., 2014). These outcomes have been shown to contribute to organizational success outcomes (Gallardo-Gallardo & Thunnissen, 2016). As an outcome variable, work effort is consistent with the goals of talent management and contributes toward organizational success outcomes. One of the most important roles of a manager is motivating workers to extend effort toward organizational goals (De Cooman et al., 2009). Work effort has been defined as the translation of motivation into finished work, demonstrating its position as a link between the psychological state and the physical work outcome (Parsons, 1968). In the context of this study, work effort is particularly appropriate as a link between the psychological perceptions of justice and the physical outcomes of work given the expected return on investment of talent management initiatives.

**Statement of the Problem**

Talent management is a popular and growing topic as evidenced by widespread and increasingly frequent appearances in the human resource development and
management literature (Gallardo-Gallardo et al., 2015; Lewis & Heckman, 2006). Over the past decade, talent management has become synonymous with the exclusive approach to employee development by using workforce differentiation to identify certain high-value employees for talent development initiatives. Workforce differentiation is considered the preferred method to maximizing the use of limited human capital development funds for investment in the most valuable, and highest-contributing employees – so-called high potential employees – who constitute 5-20% of an organization’s labor force (Dries, 2015).

A major goal of these talent management initiatives is to recognize a return on the talent management investment in terms of organization performance. While few studies have linked talent management to organization performance (Bethke-Langenegger et al., 2011; Chami-Malaeb & Garavan, 2013), a handful of empirical studies have quantified the effects of workforce differentiation on various individual-level outcomes including loyalty (Morrison & Robinson, 1997), job performance (Rousseau, 1995), and job satisfaction (Gelens et al., 2014). However, the vast majority of talent management research has looked at the issue from the perspective of those selected for inclusion in the talent management initiatives. Almost no empirical data exist to quantify, or even identify, the individual-level outcomes of workforce differentiation on those employees not selected for inclusion in talent management initiatives (Festing & Schäfer, 2014; Thunnissen et al., 2013). That means the effect of workforce differentiation on 80-95% of an organization’s employees is unknown. A talent management program that promotes work effort among participants may have the opposite effect on those not selected for
inclusion because of the perceived injustice of non-selection (Becker et al., 2009; Morrison & Robinson, 1997; Rousseau, 1995).

This connection between individual-level outcomes and organization performance, coupled with the lack of empirical research into individual outcomes of workforce differentiation, represents an incomplete understanding of workforce differentiation and talent management (Festing & Schäfer, 2014). Researchers have called for further research in the field of talent management using robust empirical methods, longitudinal designs, and alignment with appropriate theoretical frameworks (Gallardo-Gallardo et al., 2015; Tansley, 2011; Thunnissen et al., 2013).

**Purpose of the Study**

The purpose of this study was to conduct a test of a theoretical model (see Figure 1) which proposes that perceptions of distributive justice mediate the relationship between inclusive talent management practices and work effort and that the relationship between distributive justice and work effort is moderated by procedural justice.

*Figure 1. Theoretical Model. IN = inclusive talent management. DJ = distributive justice PJ = procedural justice. WE = work effort.*


Theoretical Framework

This study utilized two theories, social exchange theory (Festing & Schäfer, 2014) and the human resource architecture theory (Lepak & Snell, 1999), as the primary and secondary theoretical frameworks, respectively. The core of social exchange theory is mutually beneficial relationships and mutual perceptions of obligations between employees and employers (Festing & Schäfer, 2014). Social exchange theory is built on the construct of fair exchange, and from the earliest stages of development, has been applied to situations of justice (Blau, 1964; Homans, 1961). Social exchange theory is the dominant framework for describing the effects of justice on attitudes and behaviors (Blau, 1964; Colquitt, 2001; Masterson et al., 2000). Particularly in the context of distributive justice, social exchange theory can help explain an individual’s perceptions of justice related to the outcome of a decision. Distributive justice exists when the reward aligns with investment and is obtained when the profits (reward minus cost) of two individuals are equal (Cook & Rice, 2003). Social exchange theory helps to explain the use of organizational justice as an intervening variable between workforce differentiation and employee-level outcomes.

Human resource architecture theory is a compilation of three organizational behavior theories (transactional cost economics, human capital theory, and resource-based view) and helps to explain the unique and valuable nature of employees as human capital (Lepak & Snell, 1999). The theory is constructed around two central themes: the value of human capital and the uniqueness of human capital. Resources, including human resources, that promote efficiency and protect against threats are valuable (Barney, 1991). By extension, the value of an individual human resource is dependent on his or her ability
to contribute to the organization’s competitive advantage. Labor costs are evaluated relative to their return on investment and there is a great need for organizations to protect their investment in human capital from moving to a competitor (Flamholtz & Lacey, 1981). The degree of uniqueness of human capital is the result of many factors including previous experience and on-the-job experience (Lepak & Snell, 1999). These idiosyncratic learning processes are difficult to find on the open labor market, making the development of human resources a top priority for firms looking to capitalize on this strategic advantage (Lepak & Snell, 1999). Human resource architecture theory helps to explain the context of workforce differentiation and the nature of unique and valuable human resource assets.

**Theoretical Model and Research Hypotheses**

The inspiration for this research was a theoretical model (see Figure 2) developed by Gelens et al. (2013), which used the framework of workforce differentiation to explore how organizational justice relates to talent management practices and outcomes. The model proposed distributive justice as a mediator of the relationship between unequal resource allocation (workforce differentiation) and employee outcomes, and a moderation of the relationship between distributive justice and employee outcomes by perceptions of procedural justice (Gelens et al., 2013). This model was proposed to contribute to the development of a theoretical foundation for talent management and spur empirical research (Gelens et al., 2013). Gelens et al. proposed that an employee’s status as a high potential (or non-high potential) would affect his or her perceptions of justice and ultimately, organizational outcomes (2013).

The first adaptation (see Figure 3) of the theoretical model was an empirical study testing the link between high potential status to job satisfaction and work effort as mediated by distributive justice and moderated by procedural justice. Where the original theoretical model proposed evaluating outcomes at the organization level, this research evaluated individual outcomes (Gelens et al., 2014). They found that participants identified as high potential employees had significantly higher perceptions of distributive justice and that these perceptions fully mediated the relationship with the individuals’ level of job satisfaction.
This research differs from the previous empirical study by Gelens et al. (2014) by testing the alternative independent variable of inclusive talent management practices. The inclusive approach to talent management considers talent universal to all employees. Under this approach, the organization values the cultivation of all talents more or less equally (Ariss et al., 2014). In the context of talent management, distributive justice measures the extent to which an employee feels that the resources provided by the organization align with his or her own estimation of contributions (Gelens et al., 2014). This leads to the first hypothesis:

*Hypothesis 1: Employees of organizations that are perceived to have more inclusive talent management practices will report higher perceptions of distributive justice (positive association).*

Perceived justice helps to explain employee evaluations of inclusive talent management practices. Because the goal of talent management is to identify, develop, and retain talent, outcomes that measure the propensity of talent to apply effort in their
job is one of the most direct measures of success of a talent management practice. For this reason, work effort was selected as the dependent variable, reflected in the following two hypotheses:

*Hypothesis 2: Distributive justice will mediate the relationship between inclusive talent management practices and work effort controlling for the direct effects of inclusive talent management on work effort and procedural justice on work effort.*

*Hypothesis 3: The strength of the mediation by distributive justice will vary based on the strength of procedural justice. When perceptions of procedural justice are low, perceptions of distributive justice will have a greater mediating effect on the indirect relationship between inclusive talent management practices and work effort.*

**Overview of the Design of the Study**

This study was a multi-wave, quantitative survey (Podsakoff et al., 2012), utilizing data collected from Amazon® Mechanical Turk (MTurk®) workers via the online Qualtrics® survey tool. Participants were recruited from Amazon® MTurk®, an online platform that links workers with researchers. MTurk® has been used in previous studies on organizational justice (Brienza & Bobocel, 2017), and work effort (Brawley & Pury, 2016). Additional support for the use of MTurk® data was provided by a pilot study (see Appendix A) which demonstrated access to an employee group matching the target population for this proposed study.

Prior to the collection of data, the proposed study was submitted to the Institutional Review Board (IRB) of The University of Texas at Tyler for review and approval. Qualtrics® was used to administer the survey and collect the participants’
response data. Links to the Qualtrics® survey were provided via Amazon® MTurk® for the completion of three anonymous surveys which collected data in sequential order. To sync data across the three collection points, responses were matched via the participant’s MTurk® WorkerID which was collected automatically by custom HyperText Markup Language (HTML) code in the Human Intelligence Task or HIT.

In Survey 1, screening-type questions ensured respondents met sample requirements and representativeness including workforce and demographic characteristics. These characteristics included (a) age of 20 to 39 years; (b) full-time employment in the U.S. in a category of management, professional, and related occupations, service occupations, or sales and office occupations; and (c) at least some college education. These characteristics were identified from the U.S. Census Bureau (2019) and Bureau of Labor Statistics (2018a-b). Distributive justice and inclusive talent management scales were included in Survey 1. Survey 2 was administered at least seven days after the respondent completed Survey 1. Survey 2 was sent to only those MTurk® workers who qualified based on their responses to Survey 1. Survey 2 included questions related to procedural justice to temporally separate predictor and criterion variables (Podsakoff et al., 2012). Placing questions related to procedural justice in the second survey also avoided a priming effect that could affect how participants respond to questions related to the outcome variables which was conducted in Survey 3 (Salancik & Pfeffer, 1977). Survey 3 was administered at least seven days after the respondent completed Survey 2. Survey 3 was sent to only those MTurk® workers who successfully completed Survey 2. Survey 3 included questions related to the outcome variable of work effort.
Once the data were collected, they were cleaned and assessed for statistical assumptions. Data analyses were conducted with the Mplus® software (Muthén & Muthén, 2017). A construct validity analysis was used to assess the reliability and validity of the data. The indirect effects of procedural justice were analyzed for estimation and hypotheses testing (Edwards & Lambert, 2007; Sardeshmukh & Vandenberg, 2013; Preacher et al., 2007).

**Significance of the Study**

This study offers significant contributions to human resource development literature, talent management literature, organizational justice and talent management theory, and has a practical application for organizations currently using or considering workforce differentiation. According to Festing and Schäfer (2014), studies into the employee-level perspective of talent management is scarce. Contributions to the literature on talent management are made by assessing the effect of perceptions of organizational justice of workforce differentiation on the employee-level outcome of work effort. This extends and validates previous research by Gelens et al. (2014) which considered outcomes of work effort and job satisfaction by incorporating an alternative independent variable, inclusive talent management practices.

The present study contributes to the theories of organizational justice and talent management by empirically assessing a portion of the theoretical model developed by Gelens et al. (2013). This study partially addresses a call for further research in the field of talent management with robust empirical methods in a multi-wave design and in alignment with appropriate theoretical frameworks (De Boeck et al., 2018; Gallardo-Gallardo et al., 2015). Talent management, as a research field, is considered to be in the
growth phase (Gallardo-Gallardo et al., 2015). After the growth phase is the mature phase which is characterized by further research into the nuance of the phenomenon and predictable results from replication studies (von Krogh et al., 2012).

Finally, the present study makes a practical contribution to talent management practitioners and organizations using talent management initiatives. By evaluating the result of inclusive talent management practices, managers and organizations can make more informed decisions by understanding the potential outcomes of workforce differentiation and talent management decisions. Employees will benefit from this research as organizations make more informed decisions relating to talent management initiatives that result in improved work effort.

Assumptions

This study made two assumptions. First, that participants responded to survey questions of their employers’ inclusive talent management practices, their perceptions of distributive and procedural justice, and their work effort with honesty and truthfulness. Second, that survey participants answered the survey questions on work effort without being influenced by social desirability bias (Podsakoff et al., 2013; Triki et al., 2017). Attempts were made to mitigate these concerns by ensuring survey anonymity, making a request for participants to answer the questions honestly, and the overall design and look of the survey.

Limitations

As expected with any research endeavor, this study was not without limitations. Available controls were utilized to prevent a single individual from taking the survey multiple times. These included the ballot-stuffing feature in Qualtrics® and matching
redemption codes to MTurk® Worker IDs. However, these measures cannot prevent a determined individual from using multiple Amazon® Worker IDs on different devices. The survey included self-report data on the use of inclusive talent management practices at the respondent’s workplace. Ideally, this data would be collected from archive data to reduce misunderstandings and miscommunication. Because organizations use various terms and forms of workplace inclusivity, respondents may not have responded to this question correctly.

**Delimitations**

The present study incorporated three delimitations to focus the research. The sample frame was geographically limited to U.S.-based MTurk® workers. Secondly, the research was limited to full-time employees. Part-time employees were excluded due to their varying relationship status with their employer which may alter their expectations and perceptions of justice. Finally, the target population was delimited to individuals between the ages of 20 and 39 to minimize generational cohort as a confounding variable and focus on the largest cohort currently in the workplace (Fry, 2015).

**Definitions of Terms**

The following terms and definitions are relevant within the context of this proposed study:

- Distributive justice: the extent to which the implicit norms for allocations are consistent with an outcome such as equity or equality (Colquitt, 2001).
- Exclusive approach: an approach to talent management that considers the scarcity of resources as a primary driver for the differentiation of employees for talent management (Thunnissen et al., 2013).
- Full-time: employed and working at least 35 hours per week.
- High potential employee: employees who have been recognized, through a formal process, by the organization as having the potential to serve as a future leader within the organization (Gelens et al., 2013).
- Human capital: human capital refers to an organization's employees with the perspective that the employees are "assessed on their value (i.e., the potential to contribute to an organization's core competencies) and uniqueness (i.e., the extent to which the employee is difficult to replace)" (Gelens et al., 2013, p. 342).
- Human resource architecture theory: compilation of three organizational behavior theories (transactional cost economics, human capital theory, resource-based view) which helps to explain the unique and valuable nature of employees as human capital (Festing & Schäfer, 2014).
- Inclusive approach: an approach to talent management that considers talent universal to all employees and sees the organization as responsible for drawing out each employee’s talent (Ariss et al., 2014).
- Organizational citizenship behaviors: “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (Organ, 1988, p. 4).
- Organizational justice: the reaction of individuals and groups to decisions, procedures, and authority figures (Colquitt, 2012; Greenberg, 1987).
- Procedural justice: justice of a process leading to a decision outcome (Colquitt, 2001).
• Psychological contracts: “individual beliefs in reciprocal obligations between employees and employers” (Rousseau, 1990, p. 389).

• Social exchange theory: mutually beneficial relationships and mutual perceptions of obligations between employees and employers (Lepak & Snell, 1999).

• Talent management: “activities and processes that involve the systematic identification of key positions which differentially contribute to the organization’s sustainable competitive advantage;” the development of a high potential talent pool and a differentiated human resource management approach to staff and develop the talent pool (Collings & Mellahi, 2009, p. 305).

• Turnover: voluntary or involuntary separation from an organization by an employee (Allisey et al., 2014).

• Turnover intention: “the mediating factor between attitudes affecting intention to quit and actually quitting an organization” (Yücel, 2012).

• Work effort: “means by which motivation is translated into accomplished work” (De Cooman et al., 2009).

• Workforce differentiation: the disproportionate investment of resources in certain employees or roles where such investment will support disproportionate strategic success (Becker et al., 2009; Gelens et al., 2013).

**Chapter Summary and Organization of the Dissertation Proposal**

This dissertation contains five chapters. Chapter 1 presented the background to the problem, identified the statement of the problem, and explained the purpose of the study. An explanation of the theoretical and conceptual underpinnings was provided along with the theoretical model that was tested and the research hypotheses. The study’s
design was discussed, including the significance of the study, and followed by assumptions, limitations, and definitions of key terms. The chapter concluded with a summary and overview of the dissertation proposal’s organization.

Chapter 2 introduces a review of the referent literature applicable to this study and includes support for the proposed hypotheses. Topics covered include talent management, workforce differentiation, organizational justice, work effort, and turnover intention. Chapter 3 details the study design including a summary of the pilot study that was conducted to inform the main study. Additionally, the population, sample, measurement instruments, survey design, data collection and analysis, and reliability and validity analysis is discussed. Chapter 4 provides the results of the data analysis conducted for the study. Chapter 5 reports a discussion of the results, implications, limitations, and suggestions for future research. Supplemental information is included in the appendices.
Chapter 2—Literature Review

Introduction

This chapter reviews the relevant literature domains appropriate for examining inclusive talent management practices, distributive justice, procedural justice, and work effort. The literature review is organized into four sections. The first section provides an overview of the construct of talent management. The second section provides an overview of the construct of organizational justice with an emphasis on distributive and procedural justice. The third section provides a review of literature related to work effort. The fourth section provides support for the proposed research hypotheses.

Multiple resources were utilized in sourcing literature for this review. The primary source of peer-reviewed journal articles was Google® Scholar. The Robert R. Muntz Library system at The University of Texas at Tyler served as an additional source. Search terms included inclusive/exclusive talent management, workforce differentiation, talent development, organizational justice, distributive justice, procedural justice, work effort, and organizational citizenship behaviors. Primary search terms were used in the library’s electronic database with more detailed searches in the following databases: Business Course Complete, Emerald Insight, SAGE Journals, APA PsycINFO, and Wiley Online. To ensure the capture of seminal literature, no date range was specified in the search for peer-reviewed journal articles. Interlibrary loan services were utilized when necessary, and relevant articles were selected based on a review of the title, abstract, and
preliminary review of the article content. Combinations of search terms and slight variations were used to ensure a complete collection of referent literature.

**Talent Management**

Talent management, although broadly discussed in the practitioner and scholarly literature, lacks a defining theory and conceptual framework (Collings & Mellahi, 2009; Dries, 2014; Lewis & Heckman, 2006; Saks, 2006). In their seminal paper, Lewis and Heckman (2006) articulated the difficulty in defining talent management as separate and distinct from sound human resource management practices. Some consider talent management to be one of the most debated concepts in the human resource management field (Thunnissen et al., 2013). Beyond the academic realm, talent management appears frequently in practitioner-focused publications without the support of peer-reviewed, empirical research relying on unsupported analogies and anecdotes (Lewis & Heckman, 2006). Despite the lack of a consensus definition of talent management, there has been significant research linking human resource management initiatives and organizational or individual outcomes. The concept is considered one of the key themes of human resource management (Lewis & Heckman, 2006; Paauwe, 2004) and one of the "most important human capital challenges faced by twenty-first-century organizations" (Dries, 2015).

**Origins of Talent Management**

The earliest reference to talent management is a report by McKinsey Consultants Chambers et al. (1998) where the authors identified a war for talent (Thunnissen et al., 2013). The lack of a generally accepted definition of talent management may stem from the lack of a generally accepted definition of the word talent. Some argue that defining talent is the cause of the conceptual ambiguity within the field (Meyers et al., 2013;
While not broadly accepted, talent has been conceptualized by some peer-reviewed publications as "exceptional characteristics demonstrated by individual employees" (Gallardo-Gallardo et al., 2013).

While Thunnissen et al. (2013) identified a lack of consensus on the underlying principles of talent management, there are several theories and conceptual frameworks from which talent management borrows. In terms of volume of citations, the resource-based view appears to be the dominant theoretical framework used in talent management literature (Dries, 2015; Gallardo-Gallardo et al., 2015). The second-most cited theory used is the social exchange theory which requires consideration of the employee-employer relationship and contributes to reducing the siloed approach of the managerialist viewpoint (Dries, 2014). More broadly, talent management is primarily constructed from strategic human resource management principles and organizational behavior (Thunnissen et al., 2013). A more recent development is the application of psychological contract theory to examine employee perceptions of human resource management systems (Dries, 2015). In terms of frameworks, talent management scholars gravitate toward a unitarist approach where individuals (senior and line management, human resources, etc.) within the organization assume a unified effort to reach organizational goals (Garrow & Hirsh, 2008; Thunnissen et al., 2013).

As a field of study, talent management is relatively young. Some progress has been made toward establishing a definition, defining conceptual boundaries, and moving the field from infancy to adolescence (Collings et al., 2011). In recognition of the lack of significant advances in academic inquiry, Dries (2014) suggested the talent management field has not yet reached the mature stage. Similarly, Gallardo-Gallardo et al. (2015)
posited that talent management is in a growth stage due to the noticeable surge in publications, largely coinciding with special issue publications after 2013.

**Empirical Study of Talent Management**

As a relatively young academic field, talent management lacks the foundation of empirical research to validate the central conceptual ideas (Thunnissen et al., 2013). Historically, a majority of the peer-reviewed articles on talent management have been conceptual (Dries, 2014; Thunnissen et al., 2013). To date, the talent management literature has been concentrated on the issue of conceptualization, recognizing the outcomes of talent management, and understanding best practices in terms of talent management activities and practices (Lewis & Heckman, 2006; Thunnissen et al., 2013). Multiple scholars have found evidence for a distinction between talent management and strategic human resource management (Chuai et al., 2008; Huang & Tansley, 2012; Tansley, 2011). Although a consensus definition remains elusive, the most cited characterization (Collings & Mellahi, 2009) relates talent management to:

> Activities and processes that involve the systematic identification of key positions which differentially contribute to the organization's sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organization. (p. 305)

A study by The Chartered Institute of Personnel and Development (CIPD) found that only six percent of organizations rated their talent management practices to be very effective, supporting both the necessity and urgency of talent management research (CIPD, 2012).
Practitioner and Scholarly Approaches. Lewis and Heckman (2006) recognized a discrepancy between the scholarly or academic interest in talent management and that of the practitioner's interest in the field. While more than 7,000 articles have been written on the topic of talent management, most appear in the human resource (HR) practitioner literature and scholarly, peer-reviewed literature comes in a distant second place (Dries, 2014). Despite a surge in talent management scholarly activities around 1990, there remains very few empirical studies of talent management in the academic literature and several significant gaps (Dries, 2015; Lewis & Heckman, 2006; Thunnissen et al., 2013). Dries (2014) identified three potential explanations for this discrepancy: the absence of clear definitions (Lewis & Heckman, 2006), incremental value above similar constructs including strategic human resource management (Chuai et al., 2008), and empirical findings (Dries, 2015). As a result of the practitioner-dominated literature, many articles concentrate on talent management practices (the how-to of talent management) rather than identifying who is included or why (Gallardo-Gallardo et al., 2013). This practitioner-dominant approach has likely resulted in implicit, though unsupported, theories about what constitutes as talent (Barab & Plucker, 2002).

Ethics and Exchange Relationship. Talent management practices are an inherent element of the employer-employee relationship. However, scholars in the talent management field predominantly assume that careers are characterized by stable employment with a single organization with upward mobility as a major priority for the employee (Thunnissen et al., 2013). Given the practitioner focus of the talent management literature, only a few scholars have recognized the potentially conflicting goals and desires of various stakeholders in the talent management arena (Thunnissen et
al., 2013). For example, Pepermans et al. (2003) recognize that performance evaluations are often reflected in the judgments made by management rather than objective indicators. Talent management literature is presented as a tool for use by human resource professionals and management to confront the talent management challenges with which they are faced (Thunnissen et al., 2013). However, this is an oversimplified view of the employer-employee relationship and over-emphasizes the exchange nature of the relationship. Very few scholars have examined this more complex relationship including the importance of justice in talent management and only in limited circumstances of differentiating workers into talented and non-talented groups (Frank & Taylor, 2004; Garrow & Hirsch, 2008). Citing the fact that an employment relationship is more complex than a simple economic exchange (Thunnissen et al., 2013), the importance of justice is frequently cited in calls for additional empirical research on the topic of talent management (Gelens et al., 2013; Thunnissen et al., 2013).

**Outcomes.** The primary objective of talent management is to achieve organizational goals (Thunnissen et al., 2013). However, most talent management scholars examine outcomes at the individual level of the employee (Gallardo-Gallardo et al., 2015; Thunnissen et al., 2013). As primary drivers of achieving this goal, employee motivation, commitment, and engagement are often studied in the talent management literature. The assumption is that an engaged and motivated workforce will produce a better business result than the opposite (Cheese et al., 2009). Employees who perceive that their employer’s talent management practices are unfair are more likely to have negative perceptions of organizational justice (Gelens et al., 2014; Malik & Singh, 2014). Therefore, the moderating effect of organizational justice suggests that employees who
are treated and awarded with fairness and justice will have a more positive reaction to
talent management practices despite their inclusion or exclusion from the talent
development (Biswas et al., 2013; Gelens et al., 2014; Ghosh et al., 2014; O’Connor &
Crowley-Henry, 2019).

**Unintended Consequences.** Research has shown there is a disconnect between
the intention of talent management practices and how they are perceived by employees
resulting in unintended consequences for the organization (O’Connor & Crowley-Henry,
2019). For example, exclusive talent management practices may result in higher turnover
rates by those employees excluded from participation (Pfeffer, 2001). Such a
consequence is often not considered by organizations even when the loss of these
employees may represent a greater expense than the benefit of retaining the identified
talented individuals (Marescaux et al., 2013).

**Employee as Subject or Object**

The lack of a consensus for terms describing talent management contributes to the
ongoing debate about the nature of talented employees. That is, is employee talent innate
(nature) or acquired (nurture)? When talent is defined as primarily acquired, it implies
that anyone is capable of becoming an excellent performer (Meyers et al., 2013).
Alternatively, defining talent as innate implies that the exclusive approach to talent
management is more appropriate (Meyers et al., 2013). This debate is often captured in
the literature as a question of the employee as subject (innate factors) or object (learning
opportunities) (Dai, 2009; Howe et al., 1998; Meyers et al., 2013; Thunnissen et al.,
2013). This question of nature or nurture is reframed by Collings and Mellahi (2013, p.
323) as ‘how to maximize the contributions of talent within the organization?’
Meyers et al. explained that “knowledge and skills can be developed by most people, while abilities and personal characteristics are rather stable” (2013, p. 307). Most human resource management scholars and practitioners agree that to some extent, talent is innate (Gallardo-Gallardo et al., 2013). The object approach views employees through the lens of their unique attributes, knowledge, skills, and abilities (Appelbaum et al., 2000). Thus, the talent is managed by the talent management procedures and processes, which does not consider their individual goals and needs (Thunnissen et al., 2013). The ramification of this view is an expectation that talent management should focus more intently on the identification, recruitment, and retention of talented employees rather than focusing on their development (Meyers et al., 2013).

Despite the broad acceptance of the innate view of talent, findings by Arvey et al. (2006) suggest that the majority of variance in leadership role occupancy (70%) was explained by experiences and training while just 30% of the variance could be explained by genetic factors. This finding points to a need for a scaled approach to talent management rather than a binary inclusive or exclusive decision. Potential is frequently used in the context of talent management and denotes an individual’s potential to extend their current capabilities (Meyers et al., 2013). Here, the subject approach reflects this basic assumption of human potential and aligns with human capital theory as described in the human resources architecture model (Lepak & Snell, 2002; Thunnissen et al., 2013). While the object approach is a better fit with the popular meaning of talent (Tansley, 2011), the subject approach is more widely used in organizational practice (Gallardo-Gallardo et al., 2013). Ultimately, the organization’s mission, values, and culture may
likely be the best indicator as to which approach will be most appropriate (Garrow & Hirsch, 2008).

**Inclusive and Exclusive Approaches**

One of the primary debates in the talent management literature extends the consideration of subject versus object by considering the question of exclusive or inclusive approaches to talent management (Dries, 2014). More specifically, should an organization recognize that each employee has a talent and that the organization's role is to develop that talent? Or is talent a more specific and rarer trait and the organization should concentrate on recognizing talent through recruitment and retention efforts?

**Inclusive Approach.** Inclusivity identifies the extent to which an organization offers talent development opportunities to employees of the organization. An organization that offers talent development opportunities more or less equally to all employees is considered to leverage an inclusive approach to talent management (Iles et al., 2010). Inclusive talent management practices are typically related to a strengths-based approach where each employee is recognized as talented and the organization seeks to uncover and leverage those talents (Buckingham & Vosburgh, 2001). In terms of ethics, the inclusive approach is more egalitarian, distributing resources across the organization rather than concentrating them on a select few employees (Gallardo-Gallardo et al., 2013). Yost and Chang (2009) pointed to the labor market scarcities in identifying the risks associated with avoiding an inclusive approach to talent management. According to Leigh (2009), nearly half of those companies surveyed reported using the inclusive approach to define talent. An inclusive, strengths-based approach to talent management is
said to benefit from the ‘Mark Effect’ which creates a more inclusive and motivated work climate by treating all individuals equally (Bothner et al., 2011).

**Exclusive Approach.** At the opposite end of the spectrum, the exclusive approach is said to benefit from the ‘Matthew Effect’ where the increased allocation of resources to star performers results in a higher return on investment (Bothner et al., 2011). The effect is named after the parable of talents in the biblical Gospel of Matthew (Merton, 1968). The concept is mirrored by the adage, *the rich get richer and the poor get poorer.* The exclusive approach is rooted in the concept of segmentation of employees. Specifically, exclusive management seeks to identify and categorize those employees whose contributions to organizational outcomes is disproportionate, or those employees who demonstrate a particular aptitude for future success or leadership (Boudreau & Ramstad, 2005). Becker and Huselid (2006) explained that recent human resource practices are moving towards the exclusive approach for a variety of reasons, most significantly the scarcity of resources.

One of the more common research questions is the degree of exclusivity for these talent management programs (Lewis & Heckman, 2006; Meyers et al., 2013). Gallardo-Gallardo et al. illustrated this by comparing the relative impact of a front-line employee in a luxury hotel versus an operator at a call center (2013). In their example, all employees at the hotel share in a distributed workload, equally contributing to the customer’s experience. In their example of a call center environment, the operator has a disproportionate impact on the customer’s experience. In the former, a more inclusive talent management approach is warranted given the value of each employee’s contributions. In the latter example, an exclusive approach would better recognize the
disproportionate contributions made by the operator. Netessine and Yakubovich (2012) asserted that if an employee's performance can be objectively assessed, giving him or her better work assignments may encourage lower-performing employees to either quit or improve their performance, leading to a better-performing workforce overall. However, researchers have largely ignored the impact of talent management practices on those not selected for development (Beer et al., 1984; Paauwe, 2004; Thunnissen et al., 2013).

Despite broad acceptance in the academic literature and application in the practitioner arena, the exclusive approach is not without drawbacks. Dries (2014) recognized that the exclusive approach may promote inequality and feelings of injustice among employees and raise concerns of ethics and morality. Gallardo-Gallardo et al. (2013) identified several shortcomings with the exclusive approach to talent management. The exclusive approach may be flawed by failing to account for the possibility that the difference between talents and non-talents may disappear (or reverse) under certain conditions (Pfeffer & Sutton, 2006). Inclusion in exclusive talent management opportunities is decided based on past performance, a controversial practice since past performance does not necessarily indicate future success (Martin & Schmidt, 2010). Further, the distinction of performance before and after identification of talent may be due to the self-fulfilling prophecy of the Pygmalion effect (Walker & LaRocco, 2002). Taken further, the Pygmalion effect could be used to support a more inclusive approach to talent management as all employees, even mediocre or so-called non-talents, would benefit from the phenomenon (Eden, 1992). Examining potential negative impacts on those identified as talented, Kotlyar and Karakowsky (2012) demonstrated that those employees may have amplified sensitivity to feedback and a fear of failure. Lastly,
DeLong and Vijayaraghavan (2003) identified the potential for damage to organizational morale by allocating a significant portion of development funds to a relatively small fraction of the workforce. Swailes (2013) identified support for the exclusive approach to talent management by stating that avoiding differentiation among individuals who exhibit disproportionate levels of effort and motivation is unethical.

**Workforce Differentiation.** Most scholars agree that the distinguishing feature of exclusive talent management is the use of workforce differentiation (Becker & Huselid, 2009). An organization’s human resource department has a scarcity of resources available to support the development of an organization’s workforce. Workforce differentiation asserts that an organization should invest in the attraction and development of talented individuals as they are most likely to generate higher productivity, and thus higher returns for the organization (Collings & Mellahi, 2009; Gelens et al., 2013; Lepak & Snell, 1999). This workforce differentiation is central to the concept of exclusive talent management programs (Ledford & Kochanski, 2004) and is considered by some to be the singular differentiator between talent management and generalized human resource management (Boudreau & Ramstad, 2005; Chuai et al., 2008; Collings & Mellahi, 2009). Without workforce differentiation, organizations may increase their expenditures unnecessarily (Becker & Huselid, 1998; Williamson, 1981).

Talent management and workforce differentiation literature focus on the positive aspects of exclusive talent management such as cost savings, return on investment, and increasing retention of those selected (Collings & Mellahi, 2009; Becker & Huselid, 2009; Marescaux et al., 2013). Developing and implementing a process to identify talented employees takes considerable effort for organizations practicing workforce
differentiation (Meyers et al., 2013), and opinions vary on which principles should be used (Thunnissen et al., 2013). Surprisingly, many human resource “practitioners believe that valid identification of talented employees does not require formal assessment policies or even a formal definition of talent” (Dries, 2015, p. 280). One popular approach is the concept of pivotal positions where not only the employee’s talents are considered, but the relative strategic importance or significance of the role that employee holds (Gallardo-Gallardo et al., 2013).

Talented employees are a select group of employees who demonstrate an aptitude for accelerated career ascension, have alternative motivations and behaviors from the larger employee pool, and are considered likely successors to the company's top leadership positions (Pepermans et al., 2003). While talented employees may represent the greatest opportunity for return on investment of development expenditures, the process of identifying talent affects all employees. Identification of talented employees represents several unresolved questions. Although lacking consensus, researchers have identified the first year of tenure during the performance appraisal period as the best time to identify an employee as talented (Pepermans et al., 2003; Remdisch, 1998). Talent identification practices are distinct from general human resource management development practices because the former involves a specific identification procedure where employees meeting specific criteria are identified for inclusion (Lewis & Heckman, 2006). Who should make this selection is not addressed in the academic literature (Pepermans et al., 2003).

**Strategic Ambiguity.** “However, an issue inhibiting the effective use of this possible buffer to perceived injustice is the secrecy under which some organizations
operate their HRM (including specific TM) systems (Gelens et al., 2013, 2014; Lacey & Groves 2014), which can prohibit the provision of clear information and open procedures” (O’Connor & Crowley, 2019, p. 903). “Powerful but unscrupulous managers may have the ability to alter or otherwise shape employee fairness judgments, perhaps by lying or distorting the evidence” (Goldman & Cropanzano, 2015, p. 317).

**Future Directions**

Talent management is a relatively youthful field of study which provides ample room for future study. With the goal of providing management and human resource professionals with guidance to enact talent management strategies, advancing the field will allow for contributions that are useful to talent management practitioners. To this end, recommendations for future research fall into four broad categories. First, scholars are advised to consider the ethical implications of talent management, particularly in the realm of corporate social responsibility, employee well-being, and organizational justice (Dries, 2014). Second, scholars should consider the value of talent management at the individual level to better understand the link between talent management practices and both employee- and organization-level outcomes (Gallardo-Gallardo et al., 2013; Thunnissen et al., 2013). Third, empirical work should continue towards defining talent management, identifying the intended outcomes, and the specific talent management practices leading to those outcomes (Thunnissen et al., 2013). The fourth category is the most frequently cited area for future study: empirical research. Both quantitative and qualitative studies will be instrumental in advancing and legitimizing the field (Dries, 2015; Gallardo-Gallardo et al., 2013). Much of the talent management literature appears
in the practitioner realm and needs empirical testing to be validated (Gallardo-Gallardo et al., 2013).

**Organizational Justice**

From the very beginning of human resource management, fairness and justice have been cornerstone principles. The Code of Hammurabi, an ancient code of law dating to around 1754 BC, is considered one of the earliest examples of human resource management (Fish, 2008; Folger & Cropanzano, 1998). The ancient Babylonian code of law includes regulations for the fair and just treatment of employees by describing a philosophy of proportionality, or the legal concept of *lex talionis* – better known as an eye for an eye (Alagara & Dooley, 2003; Fish, 2008). More recently, organizational justice has been described as the reaction by individuals and groups to decisions, procedures, and authority figures (Colquitt, 2012; Greenberg, 1987), and quantified as the extent to which an employee agrees that their relationship with their employer is fair, just, and equitable (Cropanzano et al., 2007; Greenberg, 1990; Malik & Singh, 2014).

**Organizational Justice Construct**

Some of the earliest academic work on organizational justice can be traced to Adams (1965) who drew on previous work by Homans (1961) to consider individual reactions to outcome allocations. Adams (1965) found that individuals measured their outcomes relative to their inputs and compared them against the outcomes received by others. When employees perceive that they are being treated fairly, they are more likely to be motivated, resulting in positive work behaviors and attitudes (Yean & Yusof, 2016). As the ratios of outcomes to inputs between individuals grow closer, perceptions of equity, or justice, increase (Colquitt, 2012). However, individual equity is not always the
primary driver of perceptions of justice. In situations where group harmony is the result of inequitable outcome distributions, individuals still perceived the outcome as fair (Deutsch, 1975; Leventhal, 1976). While employees compare the rewards received for the effort extended, it is unlikely that all contributions will be rewarded (Yean & Yusof, 2016).

Organizational justice is widely accepted as a three-factor construct comprised of distributive, procedural, and interactional justice (Cohen-Charash & Spector, 2001; Konovsky, 2000). The formation of this three-factor construct can be traced back to the mid-1960s when research into perceptions of fairness began to take shape in the organizational behavior and industrial/organizational psychology literature (Colquitt, 2012). Initial research into organizational justice (primarily distributive justice) was more closely aligned and derived from larger philosophical questions of justice and morality (Crawshaw et al., 2013; Cropanzano & Stein, 2009). Distributive justice measures the extent to which allocation, or distribution, of outcomes is fair or just (Colquitt, 2001).

However, distributive justice models were unable to sufficiently explain or predict reactions to perceived injustice (Crosby, 1976; Folger, 1984). The research shifted from an emphasis on reward allocation (distributive justice) to a focus on the process by which rewards were made (Leventhal, 1980; Thibault & Walker, 1975). Procedural justice emerged to fill this gap and to address structural elements of justice including policies, rules, and the opportunity to be heard (Greenberg, 1990; Lind & Tyler, 1988). “Many of the earliest studies on justice in the mainstream organizational behavior and industrial/organizational psychology literature were focused on differentiating procedural justice from distributive justice” (Colquitt, 2012, p. 2). Procedural justice refers to the
consideration of fairness for a system or institutional process and extends the conceptualization of distributive justice (Folger & Konovsky, 1989; Greenberg & Folger, 1983). Folger and Konovsky (1989) found that procedural justice was well suited to predicting employee attitudes toward authority while distributive justice “predicted attitudes toward specific outcomes such as pay satisfaction” (Konovsky, 2000, p. 503). These findings support the concept of procedural justice as a more interpersonal element occurring during the process with distributive justice predicting the outcome or distribution of justice.

Bies and Moag (1986) presented interpersonal justice as a third dimension of the organizational justice construct. Interpersonal justice is comprised of two elements. First, interactional justice measures the issue of treating others with dignity and respect (Bies & Moag, 1986). Second, informational justice evaluates the fairness of communications related to a process or outcome and can also include measures of the transparency of information shared (Bies & Moag, 1986; Folger & Konovsky, 1989). “The differentiation of interpersonal and informational justice acknowledges that the politeness and respectfulness of communication is distinct from its honesty and truthfulness” (Colquitt, 2012, p. 4). This study focused on distributive and procedural justice given the context of perceptions of talent management practices in general, and not a specific talent management event. There is some debate in the literature about the interpersonal components of procedural justice due to limited empirical work demonstrating convergent and discriminant validity among interpersonal and informational justice (Colquitt et al., 2001; Cropanzano & Prehar, 1999; Konovsky, 2000).
Four meta-analyses have been conducted on organizational justice with three or more constructs and organizational citizenship behavior outcomes. Each of these meta-analyses investigated slightly different constructs of organizational justice and specific organizational citizenship behaviors as outcomes. Unanimously, each of the studies has argued for the separation of procedural justice from interactional justice (Cohen-Charash & Spector, 2001; Colquitt et al., 2001).

Colquitt et al. (2001) conducted a seminal, comprehensive meta-analysis of 25 years of organizational justice research commencing in 1975. This date coincides with the publication of the procedural justice construct by Thibault and Walker (1975). Colquitt et al. (2001) took a different approach in identifying the forms of organizational justice and considered four types: distributive, procedural, informational, and interpersonal. The remaining two studies evaluated organizational justice as a three-factor construct comprised of distributive, procedural, and interactional.

Colquitt et al. (2001) analyzed a four-dimensional construct made up of distributive, procedural, informational, and interpersonal justice as recommended by Cropanzano and Greenberg (1997). One of the three research questions was that of construct discrimination. That is, how related are the various facets of organizational justice (Colquitt et al., 2001)? Given the dispute in the construct of interactional justice between researchers, results from Colquitt et al. indicated that informational and interpersonal justice are highly related, but not so high as to encourage or necessitate combining them as interactional.

A similar meta-analysis was conducted by Cohen-Charash and Spector (2001) with a slightly different construct of justice. Compared to Colquitt et al. (2001), Cohen-
Charash and Spector (2001) analyzed a more traditional, three-factor construct of justice which combines informational and interpersonal justice as a single construct of interactional justice. Cohen-Charash and Spector (2001) found support for having separate operationalizations of justice despite the three constructs being highly correlated. Positive outcomes of organizational justice were supported with procedural justice as the best predictor of work performance and affective commitment (Cohen-Charash & Spector, 2001). Findings by Cohen-Charash and Spector (2001) also show field and laboratory settings yield similar results, though the relationship between procedural and distributive justice was found to be stronger in the laboratory.

The Study of Organizational Justice

Organizational justice is a popular research topic and multiple empirical studies have linked organizational justice to a variety of outcomes including organizational commitment (Folger & Konovsky, 1989; Korsgaard et al., 1995; Lambert, 2003), job satisfaction (Ambrose & Cropanzano, 2003; Lambert, 2003), work effort (Brockner et al., 1990), and organizational effectiveness (Paré & Tremblay, 2007). Organizational justice research consistently finds that organizations that treat employees fairly are more likely to see the adoption of beneficial behaviors towards the organization by the employees (Folger & Konovsky, 1989; Paré & Tremblay, 2007).

Organizational justice makes a significant contribution to the competitive advantage of organizations, particularly in the realm of employer-employee relationships (Yean & Yusof, 2016). Organizational justice is intuitively expected to affect employees’ emotions, a strong component in developing healthy, productive relationships. Researchers have demonstrated links between organizational justice and emotions (Weiss
et al., 1999), cognitions (Adams, 1965; Austin & Walster, 1974; Walster et al., 1978), and behavior (Cohen-Charash & Spector, 2001). The appeal of organizational justice to managers becomes more obvious when consideration is given to the fundamental value of diminishing interpersonal differences and stabilizing the social structure in the organization (Konovsky, 2000).

Perhaps surprisingly, people tend to perceive justice similarly. Perceptions of justice are not linked to age, gender, race, education level, or tenure (Cohen-Charash & Spector, 2001). However, concepts of individualism and collectivism may influence perceptions of organizational justice, particularly procedural justice (Lind & Earley, 1992). More individualistic employees in western cultures, such as the United States, expect higher levels of process control (procedural justice) relative to employees in other cultures who have no such expectation (Leung & Lind, 1986; Li & Cropanzano, 2009). Dispositional positive affect (Barsky & Kaplan, 2007) and an increased locus of control (Andrews & Kacmar, 2001) have also been found to result in increased perceptions of procedural and distributive justice.

Where distributive justice considers the fairness of the distribution of outcomes, research has shown that the fairness of the allocation process is often more influential in shaping employee perceptions of the organization (Cohen-Charash & Spector, 2001; Cropanzano & Folger, 1991; Sweeny & MacFarlin, 1993; Wan et al., 2012). Konovsky (2000) has suggested that the practical application of procedural justice research is nowhere more evident than human resource management. The understanding is that a fair procedure should lead to a favorable outcome (Konovsky, 2000). Research has demonstrated that individuals compare the fairness of outcomes relative to other
individuals in addition to assessing the absolute level of the outcome (Barsky & Kaplan, 2007). Colquitt (2012) illustrated this concept by explaining that in legal proceedings, disputants judge the fairness of both the verdict and the proceedings of the case when assessing justice.

Organizational justice plays an integral role in various career development areas, particularly those where employees consider the fairness of organizational decisions affecting themselves and colleagues (O’Connor & Crowley-Henry, 2019; Wooten & Cobb, 1999). Yean and Yusof (2016) identify three outcomes of organizational justice: building trust, fostering employee organizational citizenship behaviors (OCB), and improving job performance. Perceptions of procedural justice have been linked to personnel selection, staffing, performance evaluation, and compensation, and decreased resistance to workplace policy shifts (Greenberg, 1994; Grover, 1991). Multiple studies have suggested that an organization’s talent management procedures, and not the content of those programs, have the greatest influence on employee perceptions indicating the use of procedural justice as an appropriate measure of the employees’ reactions (Cohen-Charash & Spector, 2001; Katou, 2013; Wan et al., 2012).

Konovsky (2000) identified the study of fairness perceptions as important because it predicts significant employee outcomes such as employee behavior and attitude. Konovsky (2000) supported this by demonstrating that the identification of reactions to procedural justice has been the predominant theme of procedural justice literature in the 1990s. This remains true today as identifying positive outcomes dominates the organizational justice literature with a distant second being a delineation between the various justice constructs. Perceived procedural justice has been found as a major
predictor of organizational citizenship behaviors broadly, and discretionary work
behaviors more specifically (Cohen-Charash & Spector, 2001; Colquitt et al., 2001;
Konovsky & Pugh, 1994; Moorman, 1991). Organizational citizenship behaviors (OCB)
are some of the most highly studied correlates of organizational justice (Cohen-Charash
& Spector, 2001; Colquitt, 2012).

Research is beginning to show that the severity of negative outcomes can be
mitigated by procedural justice. As perceptions of procedural justice rise, the effect on
negative outcomes increases, minimizing the damage (Brockner et al., 1992; Konovsky,
2000). Ultimately, justice scholars offer specific strategies and tactics for managers to
improve the success in their organizations through the deliberate management of
organizational justice perceptions (Colquitt, 2012). "In short, the positive implications of
distributive, procedural, and interactional (and overall) justice perceptions are extremely
well-founded in the literature" (Crawshaw et al., 2013, p. 892).

Justice and Talent Management Practices

The core tenants of organizational justice have been recognized as fundamental to
the effective operation of organizations and to the satisfaction of their employees
(Greenberg, 1990) as well as the relationship that the organization has with those
employees (Greenberg, 1990; Purang, 2011). The linkages between talent management
and organizational justice have most often been studied through the lens of social
exchange theory (Biswas et al., 2013; Gelens et al., 2013; Mirvis, 2012; Saks, 2006;
Ghosh et al., 2014). At organizations practicing exclusive talent management, employees
not identified as talent have a negative justice perception and perceive a disconnect
between their inputs and the organization’s rewards (Björkman et al., 2013; Gelens et al.,
Organizational justice research has overwhelmingly considered the positive implications of organizational practices perceived as having high organizational justice.

More recently, researchers have begun empirically testing the antecedents of justice, including characteristics of the organization (Colquitt, 2012). Organizations leveraging an exclusive approach to talent management necessarily implement workforce differentiation which can create inequality between employees (Gelens et al., 2013). Perceptions of organizational justice help to quantify and illustrate this inequality. However, perceptions of organizational justice are notably absent from talent management literature (Gelens et al., 2013). Further, empirical research on general employee reactions to workforce differentiation is scant (Becker et al., 2009).

Similarly, some researchers have posited that justice may promote organizational commitment due to employees’ perception as respected members of the organization (Lind & Tyler, 1988; Paré & Tremblay, 2007). This idea is supported by research linking perceptions of procedural justice and discretionary behaviors (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Paré & Tremblay, 2007).

**Justice, Fairness, Ethics, and Equity**

Multiple studies have shown that justice is distinct and separate from outcome satisfaction indicating employees may be dissatisfied with an outcome but can agree that the outcome is fair because the process was just (procedural justice) or the policy was justly applied across all individuals (distributive justice) (Cohen-Charash & Spector, 2001; Colquitt et al., 2001). However, the terms ‘justice’ and ‘fairness’ are often used interchangeably within the organizational justice literature (e.g. Barsky & Kaplan, 2007;
Cohen-Charash & Spector, 2001; Konovsky, 2000; Paré & Tremblay, 2007). However, some researchers (e.g. Cugueró-Escofet & Rosanas, 2013; Goldman & Cropanzano, 2015; Fortin & Fellenz, 2008) have asserted that justice and fairness are not the same things. Goldman and Cropanzano (2015) argued that certain events may be “fair” but “unjust”, or “just” but “unfair”, and point to the distinction between the two concepts as accepted by legal scholars. Goldman and Cropanzano (2015) explained that early organizational justice researchers contributed to the issue through the development of psychological measurement scales with multiple items. These latent variable scales included items with both fairness and justice language (Goldman & Cropanzano, 2015). Colquitt et al. (2001) explained that scales measure justice as indirect (whether pay is divided equally, for example) or direct (how the perceiver responds). However, in both cases, the scale is measuring perception and not the objective existence of justice (or fairness).

One potential counterargument is the ego-centric nature of perceptions of justice. That is, neither justice nor fairness is universal, but specific to the perceiver. Multiple scholars have recognized that justice perceptions as positive or negative are determined by the receiver using an egocentric bias (Diekmann et al., 1997; Greenberg, 1994; Messick & Sentis, 1979). An organization's talent management practices are subjectively perceived and understood by each employee resulting in individualized reactions to the talent management practice (O'Connor & Crowley-Henry, 2019). Moral judgments about the fairness or justice of a particular situation are colored by individual mental biases, specifics of the situation, culture, background, and life experience (Crawshaw et al.,
Thus, decisions about fairness are unlikely to be made simply by objectively considering the relevant facts of the situation.

**Fairness Heuristic.** A heuristic is a cognitive shortcut based on life experiences that individuals use to formulate quicker and easier 'good enough' judgments, at the expense of accuracy, about the world in which they live (Crawshaw et al., 2013). The fairness heuristic helps to explain why perceptions of procedural justice can affect perceptions of distributive justice (Konovsky, 2000). Where the social exchange theory recognizes the consequences of procedural justice, the heuristic fairness model recognizes the link between objective and subjective fairness perceptions (Konovsky, 2000). Relative to organizational justice and social exchange theory, fairness heuristic is a relatively new research avenue with a small but growing number of articles supporting the construct (Gilliland et al., 2001; Kahn et al., 2013; McColl-Kennedy & Sparks, 2003). The fairness heuristic theory attempts to address the limitations of equity theory by asserting that a given situation will be considered unfair following three judgments by an individual: would, could, and should (Folger & Cropanzano, 1998). Konovsky stated that “fairness heuristic theory proposes that we are largely uncomfortable with authority relations because they provide opportunities for exploitation” (2000, p. 494). In the process of ceding control, individuals consider whether that authority can be trusted, resulting in a positive or negative reaction (Konovsky, 2000).

**Work Effort**

The study of work effort appears in several domains including talent management, gender equality, and burnout. Work effort has been defined “as the means by which motivation is translated into accomplished work, implying that it can be seen as a
mediator between the unobservable psychological state of motivation and work outcomes” (De Cooman et al., 2009, p. 266). This unique position, between motivation and outcome, makes work effort particularly insightful to the present study. Work effort appears in many theoretical frameworks (motivation theories, attribution theory, equity theory) but has no independent conceptualization or stand-alone theory (De Cooman et al., 2009). De Cooman et al. (2009) recognized that effort is sometimes confounded with motivation. Green and McIntosh (2001) posited that this equivalency to motivation may be the result of a measurement (lack of scales) problem.

Motivation reflects an individual's predisposition or psychological state in consideration of behavior choices (Naylor et al., 1980). Conversely, the effort is distinct as a measurable behavior (Bandura & Cervone, 1986) or the amount of energy expended by an individual (Brown & Peterson, 1994; Naylor et al., 1980). Multiple studies have conceptualized work effort with most including an explanatory element of work effort as the quantity of resources expended on a job (Yeo & Neal, 2004). However, some consider this an oversimplification of work effort to simply working hard (De Cooman et al., 2009). Other scholars have conceptualized work effort with three dimensions related to the action: direction, amplitude, and duration (Locke et al., 1981). Campbell (1990) offered a different approach by examining what the effort was extended on, the level of effort expended, and the individual’s persistence in expending that effort (De Cooman et al., 2009).

As an antecedent, work effort is related to performance and some scholars have treated work effort as a performance dimension (De Cooman et al., 2009). Campbell (1990) suggested that effort is better conceptualized as a determinant, not a dimension, of
performance. The link between work effort and performance has been demonstrated over multiple studies since the 1960s (Ferris, 1977; Vroom, 1964). Work effort has also been linked to job satisfaction where Brown and Peterson (1994) found that exertion “provides fulfillment to people’s intrinsic needs to be competent, effective, and self-determining” (1994, p. 70).

**Theoretical Model and Research Hypotheses**

The inspiration for this research was a theoretical model developed by Gelens et al. (2013), which used the context of unequal resource allocation (workforce differentiation) to explain how organizational justice mediates the relationship between talent management practices and employee-level outcomes. This model was proposed as a contribution to the development of a theoretical foundation for talent management and to spur empirical research (Gelens et al., 2013). Gelens et al. proposed that an employee’s workforce differentiation status would affect his or her perceptions of justice and ultimately, organizational outcomes (2013). The theoretical model proposed by Gelens et al. includes observations and outcomes at both the employee and organization levels and incorporates multiple moderators and mediators.

The first adaptation (see Figure 3) of the theoretical model was an empirical study testing the link between high potential status (workforce differentiation) and job satisfaction and work effort as moderated by distributive justice and mediated by procedural justice. Where the original theoretical model proposed evaluating outcomes at the organization level, this research evaluated individual outcomes (Gelens et al., 2014). They found that participants identified as high potential employees had significantly
higher perceptions of distributive justice and that these perceptions fully mediated the relationship with the individual’s level of job satisfaction (Gelens et al., 2014).

This research tested a portion of the original theoretical model of Gelens et al. (2014). The present study differs from the previous empirical study by Gelens et al. (2014) by replacing the binary independent variable of high potential status with a scale that measured the degree to which an employer utilizes inclusive talent management practices. Evaluating the perceptions of justice as they relate to outcomes of commitment and turnover further expands the empirical evidence for the original model, contributes to talent management theory development, and guides practitioners in implementing effective high potential talent management practices.

Gelens et al. (2014) illustrated the behavior of employees’ tendency to overestimate their contributions and consequently expect high outcomes (Nilsen & Campbell, 1993). Thus, an employee who does not receive what he or she expects in terms of inclusion in talent management activities perceives lower levels of distributive justice. Where inclusive talent management values the cultivation of all talents equally, exclusive talent management values talents differently based on value to the organization (Ariss et al., 2014). In the context of talent management practices, distributive justice measures the extent to which an employee agrees that the resources provided by the organization align with estimates of his or her contributions. This leads to the first hypothesis:

*Hypothesis 1: Employees of organizations with more inclusive talent management practices will report higher perceptions of distributive justice (positive association).*
Employee’s perceptions of distributive justice shape their cognitive, behavioral, and emotional reactions (Cropanzano & Folger, 1991). Applying social exchange theory, when an organization treats employees with justice, employees are more likely to hold positive attitudes and behaviors (Blau, 1964). To illustrate the return on investment from talent management practices, work effort was selected as the dependent variable. Because the goal of talent management is to identify, develop, and retain talent, outcomes that measure the propensity of talent to apply effort in their job are one of the most direct measures of success of a talent management practice. Work effort is an indicator of both the return on investment from talent management practices and, indirectly, employees’ perceptions of distributive justice. In alignment with calls for additional research into the antecedents and outcomes of organizational justice, evaluating the perceptions of distributive and procedural justice as they relate to work effort further expands the empirical evidence for the model, contributes to talent management theory development, and guides practitioners in implementing effective talent management practices. These goals are captured in the final two hypotheses:

*Hypothesis 2: Distributive justice will mediate the relationship between inclusive talent management practices and work effort controlling for the direct effects of inclusive talent management practice on work effort and for procedural justice on work effort.*

*Hypothesis 3: The strength of the mediation by distributive justice will vary based on the strength of procedural justice. When perceptions of procedural justice are low, perceptions of distributive justice will have a greater mediating effect on the
indirect relationship between inclusive talent management practices and work effort.

Chapter Summary

This chapter presented an overview of the relevant literature domains for the study. First an overview of the construct of talent management was provided. Next, organizational justice was presented with an emphasis on distributive and procedural justice. Next, a review of the literature related to work effort was presented. Finally, each relevant literature was reviewed to support formation of each of the three hypotheses. The chapter concluded with a summary.
Chapter 3—Methodology

Introduction

This chapter describes the design and method of the study as organized in the following sections: the purpose of the study, the research hypotheses, an overview of the pilot study, the design of the main study, a description of the population and the sample including sample representativeness, the instrumentation used for the survey, the survey design, the data collection procedures, and the data analysis procedures (data cleaning, statistical assumptions, and construct validity). The chapter concludes with a summary.

Purpose of the Study

The purpose of this study was to conduct an empirical assessment of a theoretical model (see Figure 1 for the theoretical depiction and Figure 4 for the statistical Model which highlights the interaction effect of distributive justice and procedural justice) that perceptions of distributive justice mediate the relationship between inclusive talent management practices and work effort and that that relationship is moderated by procedural justice for participants of Amazon® MTurk®. The population of interest was individuals age 20 to 39, living in the U.S., and employed full-time in management, professional, and related occupations, service occupations, or sales and office occupations. Individuals age 20 to 39 constitute the Millennial generational cohort which is the largest generational cohort in the workplace (Fry, 2015). Individuals who are employed full time and who live in the United States were targeted to create a
homogenous sample with similar attitudes and values related to the employer-employee relationship (Umphress & Bingham, 2011). The specific occupational categories were selected based on their consistent recognition (generally) as knowledge workers and because the organizations employing these individuals typically practice similar talent management opportunities (Pobst, 2014).

![Diagram of statistical model]

*Figure 4. Statistical Model. IN=inclusive talent management practices. DJ = distributive justice. WE = work effort. PJ = procedural justice. DJPJ = interaction effect of distributive and procedural justice.*

**Research Hypotheses**

The inclusive approach to talent management considers talent universal to all employees and sees the organization as responsible for drawing out each individual employee’s talent. Where exclusive talent management would value talents differently based on value to the organization, inclusive talent management values the cultivation of all talents equally (Ariss et al., 2014). In the context of talent management, distributive justice measures the extent to which an employee feels that the resources provided by the organization align with his or her own estimation of contributions (Gelens et al., 2014). This leads to the first hypothesis:
Hypothesis 1: Employees of organizations with more inclusive talent management practices will report higher perceptions of distributive justice (positive association).

The work effort outcome was selected as a strong indicator of the return on investment from talent management practices. Because the goal of talent management is to identify, develop, and retain talent, outcomes measuring the propensity of talent to apply effort in their job should support talent management practices. Evaluating the perceptions of distributive and procedural justice as they relate to work effort further expands the empirical evidence for the theoretical model, contributes to talent management theory development, and guides practitioners in implementing effective talent management practices.

Hypothesis 2: Distributive justice will mediate the relationship between inclusive talent management practices and work effort controlling for the direct effects of inclusive talent management on work effort and for procedural justice on work effort.

Hypothesis 3: The strength of the mediation by distributive justice will vary based on the strength of procedural justice. When perceptions of procedural justice are low, perceptions of distributive justice will have a greater mediating effect on the indirect relationship between inclusive talent management practices and work effort.

Pilot Study

A pilot study was conducted to accomplish three objectives (a) analyze the construct validity and statistical assumptions of the proposed theoretical model (see
(a) collect data to estimate the sample size required for the main study, and
(b) investigate five hypotheses as detailed below. The pilot study contained two
additional hypotheses beyond the three proposed for the main study. These two
hypotheses evaluated turnover intention as an additional outcome variable.

Hypothesis 1: Employees of organizations with more inclusive talent management
practices will report higher perceptions of distributive justice (positive
association).

Hypothesis 2: Distributive justice will mediate the relationship between inclusive
talent management practices and work effort controlling for the direct effects of
inclusive talent management practices on work effort and for procedural justice
on work effort.

Hypothesis 3: The strength of the mediation by distributive justice will vary based
on the strength of procedural justice. When perceptions of procedural justice are
high, perceptions of distributive justice will have a greater mediating effect on the
indirect relationship between inclusive talent management practices and work
effort.

Hypothesis 4: Distributive justice will mediate the relationship between inclusive
talent management practices and turnover intention controlling for the direct
effects of inclusive talent management practices on work effort and for procedural
justice on work effort.

Hypothesis 5: The strength of the mediation by distributive justice will vary based
on the strength of procedural justice. When perceptions of procedural justice are
high, perceptions of distributive justice will have a greater mediating effect on the
indirect relationship between inclusive talent management practices and turnover intention.

Amazon® MTurk® was used to gather data from study participants on talent management practices, organizational justice perceptions, work effort, turnover intentions, and demographic data. Demographic data consisted of age, gender, race/ethnicity, highest level of education, employer size, occupation, tenure with employer, and work experience. A series of Pearson’s chi-square tests were conducted to analyze the sample’s similarity to the target population. The results of the Pearson’s chi-square tests based on the demographic variables are provided in Table 1.

Statistical significance was determined at $p \leq .001$ and practical significance was determined at a Cramér’s $V > .30$ (Huck, 2012). Demographic variables of gender and occupation were neither statistically nor practically significantly different between the target population and the pilot study sample. While race/ethnicity ($V = .52$) and the highest level of education ($V = .57$) were practically and statistically ($p < .001$ for both) significantly different. Analysis of chi-square residuals revealed that the race/ethnicity categories of Asian or Pacific Islander (4.55) and Hispanic (-3.79) were statistically significantly different than the population. These findings suggested that there was a greater number of individuals reporting Asian or Pacific Islander and smaller number reporting Hispanic as their race/ethnicity in the sample than were in the population. Analysis of chi-square residual results revealed that the highest level of education categories of some college (-4.49) and 4-year degree (6.29) were statistically significantly different than the population. These findings suggest there that there was a smaller
number of individuals reporting some college and a greater number of individuals reporting a 4-year degree in the sample versus the population.

The pilot study informed the development of the main study by confirming the availability of a sample that, with the exclusion of highest level of education and race/ethnicity, is representative of the target population. The pilot study’s construct validity analysis of the theoretical model and evidence for the research hypotheses further supported pursuit of the main study. During the course of the pilot study baseline analysis, turnover intention was found to have a small and statistically insignificant correlation with distributive justice, suggesting a lack of mediation. A decision was made to remove turnover intention from further consideration. In addition to removal of the turnover intention variable, the six exclusive talent management practice items were removed from the talent management scale. These items, some of which were reverse coded, demonstrated relatively low factor loadings.

Initial and partial support were found for hypotheses 1, 2, and 3. Hypotheses 4 and 5 were eliminated when the turnover intention variable was removed. Hypothesis 1 was supported as the correlation between inclusive talent management practices and distributive justice was found to be .599 with $p < .001$. Support for hypothesis 2 was found as distributive justice mediated the relationship between inclusive talent management practices and work effort when controlling for the direct effects of inclusive talent management practices on work effort and for procedural justice on work effort. First, the indirect path of inclusive talent management to work effort through distributive justice is statistically significant ($\beta = -.231, p = 0.002$) and indicates mediation. Second, the direct path from inclusive talent management to work effort is statistically significant
Third, the product of these paths is negative ($\beta = -0.083$), indicating the mediation is competitive.

Hypothesis 3 was partially supported. While procedural justice did moderate the relationship between distributive justice and work effort, it acted opposite of what was hypothesized in the pilot study. When perceptions of procedural justice were low (one standard deviation below the mean), the strength of the relationship between distributive justice and work effort was stronger than when perceptions of procedural justice were high (one standard deviation above the mean).

**Design of the Main Study**

The present study utilized a quantitative, three-wave research design which collected anonymous survey data at three points in time. Qualtrics®, the online survey platform, was utilized to collect the survey data. The target population for this proposed survey was individuals in the U.S. between the ages of 20 and 39 with at least some college education and who are employed full time in management, professional, and related occupations, service occupations, or sales and office occupations. Participants were recruited via MTurk® and invited to complete three anonymous surveys with the option to discontinue their participation at any time. Demographic data was used to assess the degree to which the sample represented the target population. Data obtained from respondents across the three surveys was matched using the MTurk® Worker ID and the Qualtrics® survey ID.

The present study surveyed MTurk® workers with four previously validated scales. Inclusive talent management practices was measured using the six inclusive talent management approach items from the Talent Management instrument (Mousa & Ayoubi,
Table 1

Results of Chi-Square Analysis of Pilot Study Sample & Target Population (n = 133)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sample</th>
<th>Population</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>Residual</td>
<td>n</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
<td>61%</td>
<td>0.86</td>
<td>41,926</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>52</td>
<td>39%</td>
<td>-0.86</td>
<td>31,337</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td>9</td>
<td>7%</td>
<td>-1.53</td>
<td>9,467</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>American Indian or Native American</td>
<td>1</td>
<td>1%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>21</td>
<td>16%</td>
<td>4.55</td>
<td>5,427</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Caucasian or White</td>
<td>94</td>
<td>70%</td>
<td>1.61</td>
<td>55,792</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>5</td>
<td>4%</td>
<td>-3.79</td>
<td>13,616</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2%</td>
<td>NA</td>
<td>NA</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Highest Level of Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>17</td>
<td>13%</td>
<td>-4.49</td>
<td>37,875</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>2-year degree</td>
<td>13</td>
<td>10%</td>
<td>-1.98</td>
<td>19,810</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>4-year degree</td>
<td>81</td>
<td>61%</td>
<td>6.29</td>
<td>42,971</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Advanced degree</td>
<td>22</td>
<td>16%</td>
<td>-0.51</td>
<td>22,445</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management &amp; professional</td>
<td>86</td>
<td>65%</td>
<td>2.05</td>
<td>63,261</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Service occupations</td>
<td>20</td>
<td>15%</td>
<td>-1.12</td>
<td>21,040</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Sales &amp; office occupations</td>
<td>27</td>
<td>20%</td>
<td>-1.33</td>
<td>28,300</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Note. Population $n$ values are reported in thousands. Demographic categories of race/ethnicity for American Indian or Native American and Other are not provided by the BLS (BLS, 2020ab). These categories were excluded from the chi-square analysis. Residuals are standardized.
Distributive justice was measured using the five distributive justice items of the Organizational Justice scale by Moorman (1991). Procedural justice was measured using the seven procedural justice items from the Organizational Justice scale developed by Moorman (1991). Work effort was measured with the 10-item work effort scale developed by De Cooman et al. (2009). Screening questions, bot-checks, and demographic questions were also utilized. The purpose of the bot-check in the form of a graphical captcha was to assess whether the respondent was a human and understood English (Chambers and Nimon, 2019). After collection and cleaning, the data were analyzed including construct validity, confirmatory factor analysis, and structural modeling.

Data were collected at three points in time. Demographic and work characteristic information were collected in Survey 1 and used to identify candidates who met the sample requirements. Survey 1 also included the distributive justice scale and the inclusive talent management practices scale. Placing justice variables toward the beginning of the survey with the self-rated criterion measure (work effort) at the end of the survey helps to reduce self-generated validity (Feldman & Lynch, 1988). Survey 2 was shared only with qualified respondents to Survey 1 and included the procedural justice items. Collecting procedural justice at a time different than distributive justice helped to control common method bias that may have been present (Podsakoff et al., 2012). Survey 3 was shared only with respondents who successfully completed Survey 2 and included the work effort scale.
Population and Sample

The intended population for this research was English-speaking U.S. adults age 20 to 39 who are employed full-time, have at least some college education, and an occupation categorized as management, professional, and related occupations, service occupations, or sales and office occupations. To mitigate the impossibility of assessing all individuals in the target population, a sample frame of MTurk® workers, representative of the target population, was identified (Fowler, 2014). To be included in the study, respondents needed an MTurk® worker account and internet access.

The sample frame of MTurk® workers included respondents who were limited to the United States to address concerns of regional or cultural variances that could affect perceptions (Umphress & Bingham, 2011). Specific occupational categories were selected including management, professional, and related occupations, service occupations, or sales and office occupations. Employees in these occupational categories are generally recognized as knowledge workers and organizations employing these individuals typically practice similar talent management opportunities compared to production, manufacturing, and labor-related occupation (Pobst, 2014). Generational cohort was limited to Millennials, or individuals age 20 to 39, to avoid the potential for generational cohort as a confounding variable and because Millennials represent the largest generational cohort in the labor force (Fry, 2015).

Sample

Study participants were recruited from the sample frame of MTurk® workers with the expectation that, like the pilot study, they will be representative of the target population. To prevent participants from the pilot study from participating in the main
study, an MTurk® qualification was applied to each pilot study participant. A corresponding HIT rule prevented potential participants with that qualification from participating in the main study. MTurk® is an online platform that connects workers with requestors to complete human intelligence tasks (HITs). The MTurk® platform was selected because it provides access to a large pool of potential respondents and can accommodate a rapid survey response collection. Further, the MTurk® platform allows for random sampling of the population. According to Buhrmester et al. (2011), data collected from MTurk® respondents are within two-hundredths of a point of traditional-sample alphas, indicating the data quality meets or exceeds the psychometric standards expected in published research. Specific to this research, MTurk® represents a diverse population of employees from multiple industries and geographic regions in the United States (Woo et al., 2015).

A study by Huff and Tingley (2015) was conducted to analyze the demographic makeup of MTurk® workers. Their research found that MTurk® workers closely resembled the demographics of the target population for this proposed research (see Table 2). To better assess how the MTurk® sample frame compares to the target population, a series of Pearson’s chi-square tests were conducted on demographic variables of age, gender, race/ethnicity, and level of education. The Pearson’s chi-square test was conducted with the formula below where r signifies the number of cells in the table, $O_i$ represents the number of type i observations and $E_i$ represents the expected or theoretical count of type i

$$\chi^2 = \sum_{i=1}^{r} \frac{(O_i - E_i)^2}{E_i}$$
The Cramér’s $V$ values were obtained with the following formula where $n$ represents the total number of observations and represents the chi-square $\chi^2$ statistic.

$$Cramer's\ V = \sqrt{\frac{\chi^2}{n}}$$

Results of Pearson’s $\chi^2$ and Cramér’s $V$ tests are detailed in Table 2.

Data related to the age, race/ethnicity, gender, and hours of work were reported by the Bureau of Labor and Statistics (2020a). According to the BLS (2020a), 57% of employed (at least 35 hours per week) individuals are male while 43% are female. The United States Census Bureau (2019) reported educational attainment was 19% having completed some college, 10% with a 2-year degree, 22% with a 4-year degree, and 11% with an advanced degree.

Findings by Huff and Tingley (2015) were compared against demographic data obtained from the BLS (2020a, 2020b). The BLS data (2020a) indicate race/ethnicity distribution of 66% Caucasian or White, 11% African American or Black, 7% Asian or Pacific Islander, and 16% Hispanic. The BLS (2020a) data on race/ethnicity is reported for ages 20 to 54 and does not include data for the categories of American Indians or other Native Americans, or Other. Data describing employees’ occupation was provided by the BLS (2020b) and indicated 56% in management, professional, and related occupations; 19% in service occupations; and 25% in sales and office occupations.

Analysis of gender demographics between the population and the sample frame revealed a $\chi^2$ value of 30.70 with 1 degree of freedom, a $p$ value of <.001, and a Cramér’s $V$ of .09 indicating a statistically but not practically significant difference between the target population and the MTurk® sample frame. The demographic analysis of
Table 2

Population and MTurk® Sample Frame Demographics and Chi-Square Analysis

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sample</th>
<th></th>
<th>Population</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$%$</td>
<td>Residual</td>
<td>$n$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2,119</td>
<td>53%</td>
<td>-5.39</td>
<td>41,926</td>
<td>57%</td>
<td>&lt;.001</td>
<td>0.09</td>
</tr>
<tr>
<td>Female</td>
<td>1,887</td>
<td>47%</td>
<td>5.39</td>
<td>31,337</td>
<td>43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td>342</td>
<td>9%</td>
<td>-4.10</td>
<td>9,467</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>187</td>
<td>5%</td>
<td>-3.61</td>
<td>5,427</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian or White</td>
<td>3,071</td>
<td>77%</td>
<td>19.62</td>
<td>55,792</td>
<td>66%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>165</td>
<td>4%</td>
<td>-19.45</td>
<td>13,616</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Level of Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>1,292</td>
<td>32%</td>
<td>10.76</td>
<td>37,875</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-year degree</td>
<td>398</td>
<td>10%</td>
<td>-5.99</td>
<td>19,810</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-year degree</td>
<td>1,104</td>
<td>28%</td>
<td>-1.27</td>
<td>42,971</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced degree</td>
<td>469</td>
<td>12%</td>
<td>-5.65</td>
<td>22,445</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management &amp; professional</td>
<td>1,411</td>
<td>39%</td>
<td>-2.50</td>
<td>63,261</td>
<td>56%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service occupations</td>
<td>638</td>
<td>16%</td>
<td>7.27</td>
<td>21,040</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales &amp; office occupations</td>
<td>577</td>
<td>17%</td>
<td>-3.69</td>
<td>28,300</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Population figures given in thousands. Sample frame occupation categories were titled slightly different than BLS data. Residuals are standardized.
race/ethnicity revealed a \( \chi^2 \) value of 485.64 with three degrees of freedom, a \( p \) value of <.001, and a Cramér’s \( V \) of .36 indicating a statistically and practically significant difference between the target population and MTurk\textsuperscript{®} sample frame. Consideration of the chi-square residuals suggests that the category of African American or Black (-4.10), and Hispanic (-19.45) were smaller relative to the population while Caucasian or White (19.62) was larger than the population. Analysis of the education demographic revealed a \( \chi^2 \) value of 141.15 with three degrees of freedom, a \( p \) value of <.001 and a Cramér’s \( V \) value of .21 indicating a statistically but not practically significant difference between the target population and the MTurk\textsuperscript{®} sample frame. Analysis of occupational category revealed a \( \chi^2 \) value of 57.47 with two degrees of freedom, a \( p \) value of <.001, and a Cramér’s \( V \) of .15 indicating a statistically but not practically significant difference between the target population and MTurk\textsuperscript{®} sample frame. These findings, apart from race/ethnicity, indicate that the MTurk\textsuperscript{®} sample frame is statistically but not practically significantly different than the target population. Woo et al. (2015) suggested that MTurk\textsuperscript{®} is an appropriate fit for studies seeking a diverse population of workers across various industries and geographic areas in the United States. Based on this guidance and the chi-square findings, MTurk\textsuperscript{®} workers provided an acceptable sample frame for the study.

**Sample Size**

Under ideal conditions, a Monte Carlo sample size estimation analysis would be conducted with Mplus\textsuperscript{®} and based on guidance by Muthén and Muthén (2002). The Monte Carlo syntax uses factor loadings, correlations, and residual error variances. These values can be obtained from the pilot study data. Multiple analyses would be conducted
at varying sample sizes to identify the smallest sample size that met recommended criteria. Recommended criteria include solution propriety (no errors in analysis output), a 95% coverage value of $\geq .90$ to indicate an absence of bias, and a power of $\geq .80$ (Muthén & Muthén, 2002; Wolf et al., 2013). However, the complexity of the proposed model would require computing power in excess of what was available.

Various rules of thumb to estimate sample sizes needed for structural equation modelling (SEM) have been put forth. Some researchers have proposed that any $N > 200$ provides sufficient statistical power (Hoe, 2008; Singh et al., 2016) or as adequate when the measure has up to 40 items (Comrey, 1988). Tabachnick and Fidell (2013) suggest a minimum sample case of 300 observations. Comrey et al. (1973) suggest a sample of 300 is good while a sample of 500 is very good. Kline (2016) observed that the median sample size based on a review of studies is 200. Gorsuch (1983) recommended a ratio of 5 observations per scale item. A more common ratio is 10 cases per indicator variable (Nunnally & Bernstein, 1967; Tinsley & Tinsley, 1987; Wang & Wang, 2012). The pilot study conducted in preparation for the main study used a sample size of 133 and statistical significance was found for all three of the hypotheses used in this study. In light of this guidance and with 28 scale items, a minimum sample size of 300 observations was used for the present study.

**Measurement Instruments**

To test the study’s theoretical model (see Figure 1), four sets of previously validated measures were used. Inclusive talent management practices were assessed using the six inclusive talent management approach items from the Talent Management instrument (Mousa & Ayoubi, 2019). Perceptions of distributive justice was measured
with the five distributive justice items from the Organizational Justice Scale (Moorman, 1991). Procedural justice was measured with the seven procedural justice items of the Organizational Justice scale (Moorman, 1991). Work effort was measured with the 10-item Work Effort scale (De Cooman et al., 2009).

**Inclusive Talent Management Practices**

Inclusive talent management practices were measured with six items from the Talent Management scale (Mousa & Ayoubi, 2019). This scale was originally used to assess talent management practices in a higher-education setting. The item wording was altered slightly from ‘school’ to ‘employer’, and from ‘academics’ to ‘employees’. This instrument uses a five-point Likert-type scale to measure respondents’ perceptions of inclusive talent management practices. Responses range from 1 = *To a very small extent* and 5 = *To a very large extent*. A sample item is ‘My employer treats all employees as insiders’ (Mousa & Ayoubi, 2019).

The first-order factor structure of the Talent Management scale was analyzed during the pilot study and factor loadings ranged from 0.682 to 0.852. Mousa and Ayoubi (2019) reported a coefficient alpha value of .852 for the talent management scale. Data collected from the talent management scale has demonstrated convergent validity with a measure of workplace happiness \((r = 0.362)\) and discriminant validity with a measure of gender diversity \((r = 0.152)\) (Mousa, 2020). According to Ward et al. (2009), convergent validity values between .3 and .6 suggest acceptable convergent validity.

**Organizational Justice**

The specific scales used to measure distributive and procedural justice were selected to better capture the respondent’s perception of justice rather than self-report
observations of objective justice. Much of the organizational justice literature focuses on asking how and why organizations are judged as just (objective) (Crawshaw et al., 2013). The organizational justice scale offered by Colquitt et al. (2001) attempts to capture an objective view of the existence of organizational justice (Crawshaw et al., 2013). For a more subjective perspective of perceptions of justice, Moorman’s (1991) organizational justice scales were selected (Crawshaw et al., 2013).

**Distributive Justice**

Distributive justice was measured with five items from the Distributive Justice Index (Moorman, 1991). This instrument uses a 5-point Likert-type scale to measure respondents’ perceptions of distributive justice. Responses range from 1 = *To a very small extent* and 5 = *To a very large extent*. An example item is “To what extent are you fairly rewarded for the amount of effort that you have put forth?” (Moorman, 1991, p. 850).

The first-order factor structure of the Distributive Justice Index was reported by Moorman (1991) with factor loadings ranging from .82 to .92 and demonstrated adequate reliability with a reported coefficient alpha value of .94. Data collected from the distributive justice scale items have demonstrated convergent validity with procedural justice ($r = .49$) and discriminant validity with measures of altruism ($r = .15$) and civic virtue ($r = .05$) (Moorman, 1991).

**Procedural Justice**

Procedural justice was measured with the seven procedural justice items from the Organizational Justice scale (Moorman, 1991). This instrument uses a five-point Likert-type scale to measure respondents’ perceptions of procedural justice. Responses range
from 1 = *To a very small extent* and 5 = *To a very large extent*. A sample item is “To what extent has your employer provided opportunities to appeal or challenge a decision?” (Moorman, 1991, p. 850).

The first-order factor structure of the Procedural Justice scale was reported by Moorman (1991) with factor loadings ranging from .67 to .90 with adequate reliability and a reported coefficient alpha value of .94. Data collected from the procedural justice scale items have demonstrated convergent validity with distributive justice ($r = .49$), and discriminant validity with measures of courtesy ($r = .17$) and sportsmanship ($r = .16$) (Moorman, 1991).

**Work Effort**

Work effort was measured with a 10-item scale (De Cooman et al., 2009). Items were rated on a 5-point Likert-type scale where 1 = *strongly disagree* and 5 = *strongly agree*. A sample item is, “I really do my best in my job” (De Cooman et al., 2009, p. 268). The first-order factor structure of the Work Effort scale was provided by De Cooman et al. (2009) with factor loadings ranging from .75 to .95 with adequate reliability and a coefficient alpha value of .90. Data collected from the Work Effort scale has demonstrated convergent validity with work performance ($r = .53$; De Cooman et al., 2009) and discriminant validity with social extraversion ($r = .10$; Merino-Tejedor et al., 2015). The best fitting model supported construct validity and was demonstrated with work effort, performance, job satisfaction, and social desirability loading on separate factors, providing evidence of convergent validity for the Work effort scale (De Cooman et al., 2009).
Demographics

Prior studies have utilized demographic questions on age, gender, tenure, and education as controls (Cohen-Charash & Spector, 2001; Gelens et al., 2013). However, perceptions of justice are shaped by the conditions of the individual and members of the same demographic group may not share similar experiences, making the prediction of justice perceptions by demographic group impossible (Bauer, 1999; Cohen-Charash & Spector, 2001; Crosby, 1984; Heilman et al., 1996; Major, 1994). Including control variables not identified as part of a research study may result in diminishing the effects of interest or result in the evaluation of a wholly different hypothesis (Spector & Brannick, 2011). For these reasons, no demographic control variables were used in this study.

Survey Design

This study was a quantitative, three-wave survey design which utilized the Qualtrics® survey platform to collect responses from Amazon® MTurk® workers. Multiple design elements were common to all the surveys. To increase the likelihood of survey completion, the surveys were kept as short as possible. Fan and Yan (2010) also reported higher response rates for those surveys sponsored by an academic institution and each of these surveys included The University of Texas at Tyler branding and logo. Progress bars were not utilized because research suggests they increase drop off rates in surveys with monetary incentives (Villar et al., 2013). Research by Oppenheimer et al. (2009) showed several drawbacks to the use of instructional method checks (IMC), including harming the external validity and issues regarding the generalizability of the results. Ultimately, an IMC works best in situations where the instructions should be carefully read and followed. For these surveys, the instructions were short and simple. An
IMC may not identify individuals who did not read the instructions and as such, no IMC was used in any of the present surveys. The potential for missing data was mitigated by using a forced response survey style and accepting only one possible answer for each question (Wolf et al., 2013). To ensure participants were in the U.S., the MTurk® location requirement was set to the United States.

The survey instruction block in each survey informed participants that there were no right or wrong answers which minimized evaluation apprehension (Podsakoff et al., 2003). The Qualtrics® survey prohibited backtracking during the survey, preventing respondents from changing answers once submitted. According to Podsakoff et al. (2003), these procedures reduce participant’s apprehension and “make them less likely to edit their responses to be more socially desirable” (p. 888). The Qualtrics® ballot box stuffing feature was utilized to limit internet protocol (IP) addresses to one response per survey (Goodman & Paolacci, 2014). Each survey began with an informed consent which recorded participants’ consent to participating in the survey, confirmed they were at least 18 years of age, communicated their rights, assured them of privacy of responses, and explained that they may leave the survey at any time. Topic salience was addressed by providing a rationale for the research topic as an element of the MTurk® Human Intelligence Task (HIT), which served as the participant invitation. Counterbalancing was not used in the surveys.

The Amazon® MTurk® platform allows users to customize the hypertext markup language (HTML) code associated with a HIT. For this study, the HTML code was modified (see Appendix E) to allow Qualtrics® to automatically capture the MTurk® Worker ID without any action by the MTurk® worker. This code linked the Qualtrics®
survey data with the individual MTurk® worker IDs and enabled the targeted invitation to complete subsequent surveys. Once a respondent completed Survey 1, a qualification was added to their worker ID indicating their completion of Survey 1 and, if they met the survey qualifications, their qualification for Survey 2. Respondents who successfully completed Survey 2 were awarded an additional qualification enabling them to access and complete Survey 3.

Respondents who successfully completed a survey were presented with an end-of-survey message thanking them for their time and providing a unique redemption code to be entered in MTurk® for payment. Respondents who did not consent or who responded to screening questions in a way that did not match the listed qualifications were presented with an end-of-survey message that thanked them for their time and informed them they do not currently meet the qualifications for the survey. Elements unique or specific to a particular survey are detailed in the following sections.

**Survey 1**

To minimize the financial expense associated with conducting surveys on MTurk®, Survey 1 was partially utilized as a screening tool prior to the deployment of Surveys 2 and 3. A location requirement was set in MTurk® for Survey 1 which required participants to be located in the United States. Survey 1 included six blocks. Block 1 was the informed consent. Capturing the informed consent first prevents participants from providing additional survey data without their consent to participate. Block 2 was an image captcha designed to identify and eliminate responses from bots (Rouse, 2015).

Blocks 3 and 4 collected demographic information used to identify participants who met the target population criteria. Placing demographic questions early in the survey
reduces the number of participants who would complete the full survey only to be removed from further study for failure to meet the target population criteria. Block 3 contained two screening questions including average hours worked each week and the respondent’s age. These qualifications were detailed in the HIT, so respondents who indicated they worked less than 35 hours per week or were less than 20 or greater than 39 years of age were excluded from further survey questions. Block 4 included the remaining demographic questions of gender, race/ethnicity, level of education, employer size, management status, occupational category, tenure, and years of work experience.

These demographic variables are consistent with similar research on talent management and organization justice (Gelens et al., 2014). Participant age was categorized in four levels based on generational cohort. Participants aged 18-19 were categorized as Gen Z; 20-39 as Millennials; and 40-54 as Gen X (Johnston, 2006). Generational cohort is important to the talent management discussion as different generations have diverse perspectives of the psychological contract within the context of talent management (Festing & Schäfer, 2014). Gender was measured on a two-level scale, comprised of male and female, in alignment with categories used by the Bureau of Labor and Statistics (2020a). Gender data may be especially appropriate given the recent attention to gender inclusivity, particularly in the context of talent management (Festing et al., 2015; Tatli et al., 2013). The question on race and ethnicity included six levels: African American or Black, American Indian or other Native American, Asian or Pacific Islander, Caucasian or White (other than Hispanic), Hispanic, and Other based on categories identified by the Bureau of Labor and Statistics (2020a). While the present study was limited to respondents in the United States, differences in culture, values, and
perceptions of justice may be related to a person’s race or ethnicity (Tansley & Tietze, 2013). In a study of perceptions of incongruent talent management practices, the level of education and industry were shown to have different correlations (Sonnenberg et al., 2014).

The question on level of education included six levels (less than high school, high school graduate, some college, 2-year degree, 4-year degree, advanced degree) based on categories identified by the U.S. Census Bureau (2019). The question on employer size was divided into two levels (1-499 employees, 500 or more employees). The size of an organization has been used in multiple studies on talent management (Benitez-Amado et al., 2015; Claussen et al., 2014; Sonnenberg et al., 2014).

Participants were asked if they currently manage or supervise other employees. Information related to participant occupation was collected at 5 levels corresponding to Bureau of Labor and Statistics categories: management, professional, and related occupations; service occupations; sales and office occupations; natural resources, construction, and maintenance occupations; production, transportation, and material moving occupations (2020a). Demographic questions related to years of professional work experience and tenure were added based on their inclusion in talent management and organizational justice literature and were collected as continuous-level data (Asplundh, 2019; Gelens et al., 2014; Meisler, 2013).

Block 5 contained the five distributive justice items. At the recommendation of Feldman and Lynch (1988), the demographic variables were assessed towards the beginning of the survey while the self-rated criterion measure (inclusive talent management practices) were placed at the end of the first survey to reduce self-generated
validity. Accordingly, block 6 contained the 12-item inclusive talent management practices scale. The survey ended with a thank you message for the participant’s time and a unique code, generated by Qualtrics® that respondents submitted to Amazon® MTurk® for compensation. The Qualtrics® code was cross referenced with the MTurk® Worker ID to send invitations for subsequent surveys. Based on completion time data collected during the pilot study, survey 1 was estimated to take 2 minutes for those respondents who finish the full survey. Participants were compensated $0.26 upon completing the full survey, corresponding to the federal minimum wage of $7.25 per hour.

Survey 2

Survey 2 was made available to potential participants seven days after they complete Survey 1. Survey 2 included two blocks. The first block was the informed consent. The second block included the procedural justice scale. The collection of distributive justice and procedural justice items in different surveys helped to control common method bias that may have been present ( Podsakoff et al., 2012). The survey ended with a message thanking the participant for his or her time and provided a unique code, generated by Qualtrics®, that respondents could enter into Amazon® MTurk® for compensation. Survey 2 was estimated to take approximately one minute to complete. Participants were compensated $0.13 upon completion of the survey.

Survey 3

The third and final survey collected the dependent variable, work effort. Survey 3 included two blocks. The first block was the informed consent. The second block contained the Work Effort scale. The survey ended with a message thanking the participant for his or her time and provided a unique code, generated by Qualtrics®, that
respondents could enter into Amazon® MTurk® for compensation. Survey three was estimated to take approximately one minute to complete. Participants were compensated $0.13 upon completion of the survey.

Data Collection

Prior to the collection of any data, the primary investigator obtained approval from The University of Texas at Tyler’s Institutional Review Board (IRB) to conduct the planned research. Self-report survey data was collected electronically from the respondents. Data were collected in Qualtrics® by respondents recruited from Amazon® MTurk®. Participants began the survey by selecting a Human Intelligence Task or HIT. The term HIT is used by Amazon® MTurk® platform to describe a job activity available for completion. Survey images, including the HIT posting, are available in Appendix D. Although there may be optimal times to launch a survey, this survey did not aim to maximize rapid survey collection. As such, the deployment time of the survey was not considered.

Respondents for this study were compensated at the rate of $0.13 per minute of completion time as estimated from pilot study data. This rate corresponds to the benchmark recommended by Harms and Desimone (2015), the U.S. Federal minimum wage of $7.25 per hour. The use of incentives to complete a survey is well documented and for varying amounts of compensation, the mean alphas were within one-hundredth of a point indicating the amount of compensation does not materially affect the response (Buhrmester et al., 2011; Johnson & Borden, 2012). Table 3 details the proposed quantity of surveys collected to arrive at the final sample size of 300.
Table 3

**Needed to Collect 300 Usable Responses**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Eligible</th>
<th>Completion</th>
<th>Screened-Out</th>
<th>Retained</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Survey 1</td>
<td>1913</td>
<td>1913</td>
<td>100%</td>
<td>920</td>
<td>48%</td>
</tr>
<tr>
<td>Survey 2</td>
<td>992</td>
<td>616</td>
<td>62%</td>
<td>79</td>
<td>13%</td>
</tr>
<tr>
<td>Survey 3</td>
<td>537</td>
<td>444</td>
<td>83%</td>
<td>144</td>
<td>32%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>537</td>
<td>537</td>
<td>144</td>
<td>144</td>
</tr>
</tbody>
</table>

*Note.* Fees include MTurk® worker compensation and a 20% charge paid to Amazon®.

For each survey, multiple batches were utilized. Each batch included between 10 and 500 unique worker assignments (the desired number of completed surveys). Batches were deployed sporadically in an attempt to capture as many respondents as possible. As batches age, they appear lower on the list of available HITs. To maintain a relatively higher ranking, older batches were closed and replaced with newer batches with no overlap between batches. Repeated participation by individual MTurk® workers was prevented through use of MTurk® qualifications and data cleaning.

The survey included customized HTML code (see Appendix E) that enables the automatic capture of the respondent’s MTurk® Worker ID as part of the Qualtrics® survey data. Upon completing one of the surveys, respondents who qualified for the subsequent survey were assigned an MTurk® qualification, enabling them to access and complete the next survey once released. Once the respondent completed the survey, the qualification was removed from their MTurk® profile to prevent the respondent from taking the survey multiple times. The MTurk® worker ID was also used to communicate with MTurk® workers. When a respondent qualified for a subsequent survey, an email invitation to complete that survey was sent via MTurk® using R code (see Appendix E) (R Core Team, 2013).
Survey 1

A HIT titled “Survey About Your Workplace” was created in MTurk® with multiple sequential batches. The HIT used the description “This is a survey about the nature of your employer’s career advancement training and development” and the keywords “survey, workplace, career.” Worker requirements were set to U.S. location. Once a respondent completed Survey 1, a custom qualification, CS1, was assigned. To prevent multiple submissions by the same respondent, Survey 1 had a qualification that CS1 had not been granted. If the respondent’s survey met the target sample characteristics, the qualification QS2 was assigned making the respondent eligible to participate in Survey 2. The data was cleaned continuously to identify respondents for subsequent surveys on a rolling basis.

Survey 2

Survey 2 was offered to participants who completed Survey 1, agreed to the informed consent, passed the bot check, indicated they were between the ages of 20 and 39, worked at least 35 hours per week, had at least some college education, and worked in management, professional, service, sales, office or related occupation. After matching the Qualtrics® redemption code to the MTurk® Worker ID, invitations to participate in survey two were sent via MTurk® using an R script (see Appendix E).

For Survey 2, a HIT was created in MTurk® with the title “Short Follow Up Survey About Your Workplace”, the description “survey about your perceptions of your workplace”, and the keywords “survey, workplace.” The HIT visibility was set to public. Eligible respondents were invited to participate no less than seven days following their completion of Survey 1. Eligible respondents who did not complete Survey 2 within three
days of meeting eligibility were sent an email invitation to complete the survey. A second email invitation was sent three days later.

**Survey 3**

For Survey 3, a HIT was created in MTurk® with the title “Short Follow Up Survey About Your Workplace”, the description “survey about your career”, and the keywords “survey, workplace, career.” The HIT visibility was set to public. Eligible respondents were invited to participate no less than seven days following their completion of Survey 2. Eligible respondents who did not complete Survey 3 within three days of meeting eligibility were sent an email invitation to complete the survey. A second email invitation was sent three days later.

**Data Analysis**

The data analysis process included multiple sequential steps. First, the collected data were cleaned. Next, construct validity was assessed, followed by testing of statistical assumptions. Finally, an assessment of direct and indirect effects for the moderated mediation model was conducted.

**Data Cleaning**

To best accommodate the three-survey design, collected data were cleaned and merged continuously. All collected data were downloaded from Qualtrics® onto the primary investigator’s computer as a comma separated values (csv) file. The file was analyzed using Microsoft® Excel®. As responses were collected and cleaned, they were matched to previous responses using the MTurk® Worker ID. Both the data analysis and data storage were completed on a password protected computer. Any response which did not include an informed consent agreement was removed as was any incomplete
submission. Each survey utilized forced responses, so any missing data indicated the survey was incomplete and the response was removed from further consideration. Additional data cleaning for the surveys is detailed in the subsequent sections.

For Survey 1, responses that did not complete the bot-check were removed. Although all three surveys listed age, location, and employment characteristics as qualifications to take the survey, these demographic variables were confirmed in Survey 1. Respondents who indicated they work less than 35 hours a week were removed. Respondents who reported their age as less than 20 or more than 39 were removed. Respondents who listed the highest level of education as less than high school or high school graduate were removed. Finally, respondents who indicated their occupational category was other than management, professional, service, sales, office, or related occupations were removed. For Survey 2, incomplete surveys were removed. For Survey 3, incomplete surveys were removed. Once all three surveys were cleaned, an additional cleaning step was conducted to remove survey responses completed in more or less than 1.2 standard deviations of the mean.

**Sample Representativeness**

To permit the generalizability of findings, the sample’s external validity was assessed by comparing the demographics of the sample with those of the target population on the basis of age, gender, race/ethnicity, highest level of education, and occupational category (Kline, 2009). Sample representativeness was assessed by comparing the demographic percentages of the respondents to the BLS and USCB percentages using Pearson’s chi-square tests. The statistical and practical significance of
demographic differences between the sample and the target population were determined at \( p \leq .001 \) and Cramér’s \( V \geq .30 \), respectively (Huck, 2012).

**Statistical Assumptions**

After the data was cleaned, a series of Pearson’s chi-square tests were conducted to analyze the sample demographic variables with the target population demographics. Statistical analysis and structural equation modeling were employed using the statistical software program, Mplus®. The data were fit to a measurement model prior to testing the theoretical structural models in alignment with guidance by Schumacker and Lomax (2016). Statistical significance was determined at \( p \leq .05 \) (Huck, 2012). Practical significance of moderated mediation models via an effect size is an emerging area of research (Lachowicz et al., 2018). Research by Preacher and Kelley (2011) found various effect size indices for mediated models were imperfect or lacking. Based on Hayes’ (2015) guidance, bootstrap confidence intervals were used and have the added benefit of not assuming normal distribution of the data, a key characteristic of DWLS method used by Mplus®.

**Construct Validity**

A measurement model analysis of the baseline (see Figure 5) was conducted. Indicators for each of the factors were constrained to load only on their respective factor (Schumacker & Lomax, 2016; Thompson, 2004). All latent-variable factors were allowed to correlate (Thompson, 2004).

Mplus® software provides diagonal weighted least squares (DWLS)-scaled results. No clear or universal cutoff values worked across all the various conditions for DWLS-scaled model fit indices (Garrido et al., 2016; Yang & Xia, 2015; Yu, 2002).
Figure 5. Measurement Model. IN = inclusive talent management practices. DJ = distributive justice. PJ = procedural justice. WE = work effort.

Researchers have made strong arguments against the application of conventional cutoff criteria with DWLS-scaled models (Barrett, 2007; Hu & Bentler, 1999; Marsh et al., 2004; McIntosh, 2007). Further, typical fit indices are inappropriate for models with latent variable interactions because the specified model is not nested within the unstructured model (Kelava et al., 2011). Accordingly, no cutoff criteria were applied to the goodness of fit for the measurement model.

Rather, Sardeshmukh and Vandenberg (2013), suggest researchers report the fit of the baseline model (see Figure 6), which includes the main effect of the moderator on the dependent variables, but ignores the latent interaction terms. The fit of the baseline model is reported with: (a) the root mean squared error of approximation (RMSEA) ≤ .08, (b) the standardized root mean square residuals (SRMRs) ≤ .08, (c) Tucker-Lewis Index.
(TLI) ≥ .90, (d) the comparative fit index (CFI) ≥ .90, and (e) the smallest value of the Akaike information criterion (AIC) (Shumacker & Lomax, 2016).

Subsequently, the Akaike Information Criterion (AIC) of the full model was compared to the baseline model (see Figure 3). A better fitting model is indicated by a lower AIC value which indicates less information loss (Rodell et al., 2017).

![Figure 6. Baseline and Interaction Models. IN = inclusive talent management practices. DJ = distributive justice. PJ = procedural justice. WE = work effort. DJPJ = interaction of distributive justice and procedural justice.](image)

To determine whether the construct variable correlated most highly with the appropriate factor, pattern and structure coefficients were assessed (Graham et al., 2003). Convergent validity was demonstrated by factor loadings between .5 and .95 (Bagozzi & Yi, 1988; Kline, 2016). Reliability was demonstrated at CR ≥ .6 and convergent validity at AVE ≥ .5 (Bagozzi & Yi, 1988). Composite reliability was calculated using the following formula:

\[
\frac{(\sum_{i=1}^{p} \lambda_i)^2}{(\sum_{i=1}^{p} \lambda_i)^2 + \sum_{i}^{p} V(\delta)}
\]

Average variance extracted was calculated with the following formula:
\[ \frac{\sum_{i=1}^{k} \lambda_i^2}{\sum_{i=1}^{k} \lambda_i^2 + \sum_{i=1}^{k} Var(e_i)} \]

Discriminant validity was evidenced when correlations between factors are lower than the square root of the AVE for the individual factors (Bagozzi & Yi, 1988).

**Structural Equation Modeling**

The structural equation modeling process closely followed guidance by Edwards and Lambert (2007) and Sardeshmukh and Vandenberg (2013) using Mplus® software. Hypothesis 1 was analyzed by examining the coefficient between inclusive talent management practices and distributive justice. A positive coefficient that is statistically and practically significant supports the positive association of hypothesis 1. Hypothesis 2 was analyzed by examining the coefficient of the indirect effect of inclusive talent management on work effort through distributive justice. A statistically significant coefficient indicates mediation is present in support of hypothesis 2. Hypothesis 3 was analyzed by considering the difference in the coefficients between inclusive talent management and work effort through distributive justice at different values of the moderator, procedural justice. Support for hypothesis 3 was found when the difference between the coefficient at high (plus 1 standard deviation above the mean) and low (minus one standard deviation below the mean) values of procedural justice was found to be statistically and practically significant.

**Chapter Summary**

This chapter presented a design and methodology for the proposed study. The chapter began by introducing the purpose of the study followed by the research hypotheses, a summary of the pilot study, the design methodology of the main study, a description of the population and sample including sample representativeness, the survey
instrumentation, the design of the survey, the data collection and analysis procedures including data cleaning, statistical assumptions, and construct validity. The chapter concluded with a summary.
Chapter 4—Results

Introduction

This chapter provides the results of the study. The chapter includes a description of the collected data, results of the data cleaning process, sample representativeness, statistical assumptions, measurement models, descriptive statistics, and a hypotheses discussion. The chapter concludes with a summary.

Data Analysis Results

The purpose of this study was to empirically test three hypotheses related to the theoretical model. The data were collected using the online survey platform Qualtrics® and a three-wave survey research method. Participants were recruited from the Amazon® MTurk® platform and invited to complete the three anonymous surveys. Survey responses were matched across the three waves by syncing the MTurk® Worker ID with the Qualtrics® redemption code.

Data Collection and Participants

Prior to commencing the data collection, permission was requested and granted by The University of Texas at Tyler Institutional Review Board (see Appendix G). Data were collected over a four-week period between March 24, 2021, and April 20, 2021. Participants who met the survey criteria, completed the full survey, and did not attempt to take a single survey multiple times were compensated through MTurk®. The collected data were downloaded from Qualtrics® as a comma separated value (csv) file and cleaned.
using Microsoft® Excel®. A summary of the results of the data collection process for the three surveys is presented in Table 4. The data collection results for each of the three surveys is detailed in the following sections.

Table 4

Summary of Data Collection

<table>
<thead>
<tr>
<th>Survey</th>
<th>Surveys Completed</th>
<th>Screened Out</th>
<th>Paid Respondents</th>
<th>Qualified Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey 1</td>
<td>1,695</td>
<td>523</td>
<td>1,172</td>
<td>980</td>
</tr>
<tr>
<td>Survey 2</td>
<td>597</td>
<td>1</td>
<td>596</td>
<td>596</td>
</tr>
<tr>
<td>Survey 3</td>
<td>472</td>
<td>6</td>
<td>466</td>
<td>371</td>
</tr>
</tbody>
</table>

Note. Screened Out represents participants that were not compensated and whose responses were eliminated for duplicate submission, incomplete surveys, age other than 20-39, or less than full time work status. The variance between the number of paid respondents and the number of qualified respondents is due to screening for occupational category, level of education, straight-lining, or time to complete.

Survey 1

A total of 1,695 responses were collected in Survey 1. All respondents agreed to the informed consent. The first step in the data cleaning process was the removal of 111 duplicate submissions which contained identical MTurk® worker IDs. Two screening questions asked participants about their age and employment status. A total of 142 responses were removed for indicating they did not work at least 35 hours per week and an additional 236 responses were removed for indicating they were not between 20 and 39 years of age. All survey questions employed forced responses so no missing data remained other than respondents who left the survey incomplete. Thirty-four responses were incomplete and removed from further consideration. Next, 92 responses from individuals who did not have at least some college education were removed. Finally, 100 responses were removed for indicating their occupation was other than management,
professional, service, sales and office, or related occupations. After data cleaning, Survey 1 resulted in 980 respondents qualified to participate in Survey 2, representing a 57.8% retention rate. Respondents who were not screened out of Survey 1 received an additional qualification in MTurk® making indicating their eligibility to participate in Survey 2. The cleaned data file was saved for subsequent analyses.

Survey 2

Individuals who qualified to take Survey 2 received an email invitation using the statistical software R. From the pool of 980 qualified respondents from Survey 1, 597 responses were collected in Survey 2 for a retention rate of 60.9%. All of the respondents agreed to the informed consent. All of the questions in this survey utilized forced responses. However, one respondent left the survey incomplete and his/her results were removed from further study. After removal of the incomplete survey, Survey 2 resulted in 596 usable responses, a completion rate of 99.8%. Those respondents who successfully completed Survey 2 and were qualified for Survey 3 received an additional MTurk® qualification.

Survey 3

Individuals who qualified to take Survey 3 received an email invitation using the statistical software R. From the pool of 596 qualified respondents from Survey 2, 472 responses were collected in Survey 3 for a retention rate of 79.2%. All of the respondents agreed to the informed consent. All the questions in this survey utilized forced responses; one response was removed due to the respondent abandoning the survey before it was completed. Six surveys were removed as duplicates submitted by the same MTurk® worker. With all three surveys collected, 16 respondents were removed after it was found
they straight-lined answers on two or more surveys (Cole et al., 2012). An additional 78 responses were removed due to unreasonable survey completion time. For the upper limit, the length of time for the upper limit cutoff was set at more than two times the standard deviation. For the lower limit, the cutoff time was set at 50% of the median completion time which Greszki et al. (2015) suggested would identify very fast responses while being unlikely to capture false positives. The cutoff time for Survey 1 was 31 seconds, 23 seconds for Survey 2, and 22 seconds for Survey 3. Completing the survey beyond these parameters suggested the participant was not fully engaged with the survey. After data cleaning, the final sample size was 371 responses.

Sample Representativeness

Completion of the data cleaning process for Survey 3 resulted in a final sample size of 371. This sample was compared to the population demographics using a series of chi-square analyses to investigate the sample representativeness (see Table 5). Demographic categories of race/ethnicity for American Indian or Native American and Other are not provided by the BLS (2020a-b). These categories were excluded from the chi-square analysis. Notable differences were observed between the USCB/BLS demographic profile and the final sample. The final sample consisted of more Caucasian or White (71%) and Asian or Pacific Islander (15%) than the USCB/BLS demographic profile (66% and 7%, respectively). Additionally, the final sample revealed higher levels of educational attainment compared to the USCB/BLS data, a finding in concert with literature on MTurk® workers (Paolacci et al., 2010).

Analysis of gender demographics revealed a $\chi^2$ value of 0.65 with one degree of freedom, a $p$ value of .420, and a Cramér’s $V$ of .04 indicating the difference between the
target population and the sample is neither statistically nor practically significantly different. Analysis of race/ethnicity revealed a $\chi^2$ value of 72.29 with three degrees of freedom, a $p$ value of <.001, and a Cramér’s $V$ of .45 indicating a statistically and practically significant difference between the target population and the sample. The chi-square residuals suggest the categories of African American or Black (-3.75) and Hispanic (-4.47) were reported at a lower rate in the sample compared to the population, while the category of Asian or Pacific Islander (6.57) was reported at a higher rate relative to the population. Analysis of highest level of education revealed a $\chi^2$ value of 116.31 with three degrees of freedom, a $p$ value of <.001, and a Cramér’s $V$ of .56 indicating a statistically and practically significant difference between the target population and the sample.

Results of the chi-square residual analysis suggest the categories of some college (-8.22) and 2-year degree (-4.05) were reported at a lower rate than the population while 4-year degree (8.53) was reported at a higher rate than the population. This suggests that the MTurk® sample frame is, as a whole, more educated than the population. Analysis of occupational category revealed a $\chi^2$ value of 5.09 with two degrees of freedom, a $p$ value of .078, and a Cramér’s $V$ of .12 indicating the difference between the target population and the sample is neither statistically nor practically significantly different. Two categories of race/ethnicity were unavailable for the population, American Indian or Native American and Other. Due to the lack of population data and because these categories represent less than three percent of the sample, the two levels were omitted from the chi-square analysis.
Descriptive Statistics

Mplus® was used to conduct the descriptive statistics analysis. The data symmetry was evaluated by the skewness (Taylor, 2008) while normal distribution was determined by kurtosis (Cameron, 2004). Skewness and kurtosis were converted to z-scores by dividing the values by their standard error as suggested by Field et al. (2012). Table 6 displays the descriptive statistics for the sample ($n = 371$).
Table 5

**Sample and Population Demographics Comparison and Chi-square Results**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sample</th>
<th>Population</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>p</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>%</td>
<td>Residual</td>
<td>( n )</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>220</td>
<td>59%</td>
<td>0.80</td>
<td>41,926</td>
<td>57%</td>
<td>0.65</td>
</tr>
<tr>
<td>Female</td>
<td>151</td>
<td>41%</td>
<td>-0.80</td>
<td>31,337</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td>18</td>
<td>5%</td>
<td>-3.75</td>
<td>9,467</td>
<td>11%</td>
<td>72.79</td>
</tr>
<tr>
<td>American Indian or Native American</td>
<td>5</td>
<td>1%</td>
<td>NA</td>
<td>NA</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>54</td>
<td>15%</td>
<td>6.57</td>
<td>5,427</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Caucasian or White</td>
<td>262</td>
<td>71%</td>
<td>2.56</td>
<td>55,792</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>27</td>
<td>7%</td>
<td>-4.47</td>
<td>13,616</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Highest Level of Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>41</td>
<td>11%</td>
<td>-8.22</td>
<td>37,875</td>
<td>31%</td>
<td>116.31</td>
</tr>
<tr>
<td>2-year degree</td>
<td>31</td>
<td>8%</td>
<td>-4.05</td>
<td>19,810</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>4-year degree</td>
<td>208</td>
<td>56%</td>
<td>8.53</td>
<td>42,971</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Advanced degree</td>
<td>91</td>
<td>25%</td>
<td>3.13</td>
<td>22,445</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management &amp; professional</td>
<td>218</td>
<td>59%</td>
<td>1.00</td>
<td>63,261</td>
<td>56%</td>
<td>5.09</td>
</tr>
<tr>
<td>Service occupations</td>
<td>78</td>
<td>21%</td>
<td>1.15</td>
<td>21,040</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Sales &amp; office occupations</td>
<td>75</td>
<td>20%</td>
<td>-2.18</td>
<td>28,300</td>
<td>23%</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Total sample \( n = 371 \). Population \( n \) values are reported in thousands. NA used to indicate lack of availability of population demographic data. Residuals are standardized.
Table 6

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>S</th>
<th>K</th>
<th>DJ01</th>
<th>DJ02</th>
<th>DJ03</th>
<th>DJ04</th>
<th>DJ05</th>
<th>IN01</th>
<th>IN02</th>
<th>IN03</th>
<th>IN04</th>
<th>IN05</th>
<th>IN06</th>
</tr>
</thead>
<tbody>
<tr>
<td>DJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DJ01</td>
<td>1</td>
<td>5</td>
<td>3.47</td>
<td>1.14</td>
<td>-0.65</td>
<td>-0.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DJ02</td>
<td>1</td>
<td>5</td>
<td>3.44</td>
<td>1.20</td>
<td>-0.46</td>
<td>-0.88</td>
<td>.717</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>DJ03</td>
<td>1</td>
<td>5</td>
<td>3.29</td>
<td>1.24</td>
<td>-0.45</td>
<td>-0.87</td>
<td>.784</td>
<td>.695</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DJ04</td>
<td>1</td>
<td>5</td>
<td>3.38</td>
<td>1.19</td>
<td>-0.48</td>
<td>-0.75</td>
<td>.794</td>
<td>.726</td>
<td>.825</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>DJ05</td>
<td>1</td>
<td>5</td>
<td>3.13</td>
<td>1.23</td>
<td>-0.20</td>
<td>-1.01</td>
<td>.725</td>
<td>.575</td>
<td>.691</td>
<td>.706</td>
<td>-</td>
<td>-</td>
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<tr>
<td>IN</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IN01</td>
<td>1</td>
<td>5</td>
<td>3.60</td>
<td>1.14</td>
<td>-0.64</td>
<td>-0.42</td>
<td>.483</td>
<td>.412</td>
<td>.419</td>
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<tr>
<td>IN02</td>
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<td>5</td>
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<td>1.13</td>
<td>-0.79</td>
<td>-0.15</td>
<td>.453</td>
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<td>.418</td>
<td>.500</td>
<td>.780</td>
<td>-</td>
<td>-</td>
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<tr>
<td>IN03</td>
<td>1</td>
<td>5</td>
<td>3.38</td>
<td>1.15</td>
<td>-0.36</td>
<td>-0.68</td>
<td>.423</td>
<td>.419</td>
<td>.414</td>
<td>.518</td>
<td>.437</td>
<td>.664</td>
<td>.657</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IN04</td>
<td>1</td>
<td>5</td>
<td>4.25</td>
<td>0.99</td>
<td>-1.37</td>
<td>1.31</td>
<td>.296</td>
<td>.259</td>
<td>.242</td>
<td>.273</td>
<td>.302</td>
<td>.439</td>
<td>.499</td>
<td>.387</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IN05</td>
<td>1</td>
<td>5</td>
<td>3.80</td>
<td>1.12</td>
<td>-0.68</td>
<td>-0.40</td>
<td>.438</td>
<td>.406</td>
<td>.372</td>
<td>.455</td>
<td>.396</td>
<td>.541</td>
<td>.556</td>
<td>.548</td>
<td>.526</td>
<td>-</td>
<td>-</td>
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<td>.046</td>
<td>.335</td>
<td>.389</td>
<td>.421</td>
<td>.357</td>
<td>.385</td>
<td>.549</td>
<td>.442</td>
<td>.494</td>
<td>.522</td>
<td>-</td>
</tr>
</tbody>
</table>
Statistical Assumptions Results

The statistical data analysis and Structural Equation Modeling (SEM) was conducted using the Mplus® version 8 software package. Latent moderated structural equation procedures (LMS) were used to assess the indirect effects hypothesized in the model (Edwards & Lambert, 2007; Sardeshmukh & Vandenberg, 2013).

Measurement Model Analyses

After cleaning the data and prior to testing the theoretical model, the data were fit to a measurement model (Schumacker & Lomax, 2016). The initial data fit was assessed with the 4-factor correlated measurement model and all factors were allowed to correlate (Schumacker & Lomax, 2016).

The standardized regression weights indicated an acceptable measurement model. All the factor loadings were found to be above the minimum threshold of 0.50 with most above the more stringent threshold of 0.70, and all were below the upper limit of 0.95 (Bagozzi & Yi, 1988; Kline, 2016). Consideration of the structure coefficients revealed that each variable correlated most highly with its respective factor (see Table 7). Pattern and structure coefficients were assessed to determine whether the construct variable correlated most highly with its corresponding factor, indicated by the structure coefficients (Graham et al., 2003). The range of composite reliability (CR; 0.876 to .930) and average variance extracted (AVE; 0.487 to 0.729) provided evidence of adequate reliability and convergent validity (Bagozzi & Yi, 1988; see Table 8). Although the AVE for work effort was below the minimum threshold of 0.5 as recommended by Hair et al. (2009), Fornell and Larcker (1981) suggest that an AVE value of 0.4 can be accepted if the composite reliability is higher than 0.6. The average variance extracted is a more
conservative estimate of the validity of the measurement model, and “on the basis of $p_c$ (composite reliability) alone, the researcher may conclude that the convergent validity of the construct is adequate, even though more than 50% of the variance is due to error” (Fornell & Larcker, 1981, p. 46). The composite reliability for work effort was 0.904.

Evidence of discriminant validity was demonstrated with correlations between factors lower than the square root of the AVE for the individual factors (Bagozzi & Yi, 1988).
Table 7

Pattern (P) and Structure (S) Coefficients for Four-Factor Correlated Model

<table>
<thead>
<tr>
<th>Construct Variable</th>
<th>Inclusive Talent Management</th>
<th>Distributive Justice</th>
<th>Procedural Justice</th>
<th>Work Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>Inclusive Talent Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN01</td>
<td>.840</td>
<td>.840</td>
<td>.517</td>
<td>.533</td>
</tr>
<tr>
<td>IN02</td>
<td>.862</td>
<td>.862</td>
<td>.531</td>
<td>.547</td>
</tr>
<tr>
<td>IN03</td>
<td>.775</td>
<td>.775</td>
<td>.477</td>
<td>.492</td>
</tr>
<tr>
<td>IN04</td>
<td>.588</td>
<td>.588</td>
<td>.362</td>
<td>.373</td>
</tr>
<tr>
<td>IN05</td>
<td>.709</td>
<td>.709</td>
<td>.437</td>
<td>.450</td>
</tr>
<tr>
<td>IN06</td>
<td>.710</td>
<td>.710</td>
<td>.437</td>
<td>.451</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DJ01</td>
<td>.545</td>
<td>.884</td>
<td>.884</td>
<td>.408</td>
</tr>
<tr>
<td>DJ02</td>
<td>.485</td>
<td>.788</td>
<td>.788</td>
<td>.363</td>
</tr>
<tr>
<td>DJ03</td>
<td>.546</td>
<td>.887</td>
<td>.887</td>
<td>.409</td>
</tr>
<tr>
<td>DJ04</td>
<td>.564</td>
<td>.916</td>
<td>.916</td>
<td>.422</td>
</tr>
<tr>
<td>DJ05</td>
<td>.483</td>
<td>.784</td>
<td>.784</td>
<td>.361</td>
</tr>
<tr>
<td>Procedural Justice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ01</td>
<td>.457</td>
<td>.332</td>
<td>.720</td>
<td>.720</td>
</tr>
<tr>
<td>PJ02</td>
<td>.519</td>
<td>.377</td>
<td>.818</td>
<td>.818</td>
</tr>
<tr>
<td>PJ03</td>
<td>.499</td>
<td>.362</td>
<td>.786</td>
<td>.786</td>
</tr>
<tr>
<td>PJ04</td>
<td>.455</td>
<td>.330</td>
<td>.716</td>
<td>.716</td>
</tr>
<tr>
<td>PJ05</td>
<td>.489</td>
<td>.355</td>
<td>.770</td>
<td>.770</td>
</tr>
<tr>
<td>PJ06</td>
<td>.376</td>
<td>.273</td>
<td>.592</td>
<td>.592</td>
</tr>
<tr>
<td>Work Effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE01</td>
<td>.118</td>
<td>.025</td>
<td>.127</td>
<td>.531</td>
</tr>
<tr>
<td>WE02</td>
<td>.159</td>
<td>.034</td>
<td>.172</td>
<td>.718</td>
</tr>
<tr>
<td>WE03</td>
<td>.135</td>
<td>.029</td>
<td>.146</td>
<td>.609</td>
</tr>
<tr>
<td>WE04</td>
<td>.162</td>
<td>.035</td>
<td>.175</td>
<td>.731</td>
</tr>
<tr>
<td>WE05</td>
<td>.160</td>
<td>.035</td>
<td>.173</td>
<td>.720</td>
</tr>
<tr>
<td>WE06</td>
<td>.163</td>
<td>.035</td>
<td>.177</td>
<td>.736</td>
</tr>
<tr>
<td>WE07</td>
<td>.159</td>
<td>.034</td>
<td>.172</td>
<td>.715</td>
</tr>
<tr>
<td>WE08</td>
<td>.175</td>
<td>.038</td>
<td>.189</td>
<td>.788</td>
</tr>
<tr>
<td>WE09</td>
<td>.170</td>
<td>.037</td>
<td>.184</td>
<td>.768</td>
</tr>
<tr>
<td>WE10</td>
<td>.137</td>
<td>.030</td>
<td>.148</td>
<td>.618</td>
</tr>
</tbody>
</table>

The measurement model’s goodness of fit was analyzed and compared against the following cutoff criteria: (a) the root mean squared error of approximation (RMSEA) was found to be 0.058 (≤ .08), (b) the standardized root mean square residuals (SRMRs) of .046 (≤ .08), (c) Tucker-Lewis Index (TLI) .927 (≥ .90), and (d) the comparative fit index (CFI) .934 (≥ .90) (Kline, 2016; Shumacker & Lomax, 2016).
Table 8

*Implied Correlations, Average Variance Extracted (AVE), and Composite Reliability (CR)*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distributive Justice</td>
<td>.854</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Procedural Justice</td>
<td>.461</td>
<td>.737</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Work Effort</td>
<td>.048</td>
<td>.240</td>
<td>.698</td>
<td></td>
</tr>
<tr>
<td>4. Inclusive Talent Management Practices</td>
<td>.616</td>
<td>.635</td>
<td>.222</td>
<td>.753</td>
</tr>
<tr>
<td>CR</td>
<td>.930</td>
<td>.876</td>
<td>.904</td>
<td>.886</td>
</tr>
<tr>
<td>AVE</td>
<td>.729</td>
<td>.544</td>
<td>.487</td>
<td>.567</td>
</tr>
</tbody>
</table>

*Note.* Square root of AVE along the diagonal

**Statistical Analyses**

Typical fit indices are not reported by Mplus® when evaluating indirect effects because the latent moderated structural equation procedure (LMS) approach is not based on normal multivariate theory. Instead, a baseline model is assessed where only the moderator’s main (direct) effects are specified and the maximum likelihood estimation is used (Sardeshmukh & Vandenberg, 2013). Results of the interaction analysis can then be compared to the baseline results as illustrated in Table 9. The baseline model should demonstrate acceptable fit criteria for the interaction model to be considered (Sardeshmukh & Vandenberg, 2013).

The mediation effect proposed by hypothesis 2 was evaluated based on guidance by Zhao et al. (2010). To evaluate the mediation by distributive justice, the baseline model was analyzed. First, the indirect path of inclusive talent management to work effort through distributive justice was found to be statistically significant ($\beta = .622 \times - .161 = -.100 p = 0.028$) and indicated mediation. Second, the direct path from inclusive talent management to work effort was statistically significant ($\beta = .206, p = 0.022$).
Third, the product of these paths was negative ($\beta = -.021$), indicating the mediation was competitive.

**Table 9**

*Fit Indices and Standardized Coefficients*

<table>
<thead>
<tr>
<th>Index</th>
<th>Baseline</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>6,262.617</td>
<td></td>
</tr>
<tr>
<td>$df$</td>
<td>351</td>
<td></td>
</tr>
<tr>
<td>$p$</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-12,067.653</td>
<td>-12,060.329</td>
</tr>
<tr>
<td>Estimated paths</td>
<td>86</td>
<td>88</td>
</tr>
<tr>
<td>Comparative Fit Index</td>
<td>.934</td>
<td></td>
</tr>
<tr>
<td>Tucker-Lewis Index</td>
<td>.927</td>
<td></td>
</tr>
<tr>
<td>Root mean square error of approximation</td>
<td>.058</td>
<td></td>
</tr>
<tr>
<td>Standardized root mean square residual</td>
<td>.048</td>
<td></td>
</tr>
<tr>
<td>Akaike Information Criterion</td>
<td>24,307.306</td>
<td>24,296.658</td>
</tr>
<tr>
<td>Bayesian Information Criterion</td>
<td>24,644.100</td>
<td>24,641.284</td>
</tr>
<tr>
<td>$WE \ R^2$</td>
<td>.085*</td>
<td>.111*</td>
</tr>
<tr>
<td>$IN \rightarrow DJ$</td>
<td>.622*</td>
<td>.622*</td>
</tr>
<tr>
<td>$IN \rightarrow WE$</td>
<td>.206*</td>
<td>.227*</td>
</tr>
<tr>
<td>$DJ \rightarrow WE$</td>
<td>-.161*</td>
<td>-.149*</td>
</tr>
<tr>
<td>$PJ \rightarrow WE$</td>
<td>.181*</td>
<td>.176*</td>
</tr>
<tr>
<td>$IN \rightarrow DJ \rightarrow WE$</td>
<td></td>
<td>-.100*</td>
</tr>
<tr>
<td>$DJPJ \rightarrow WE$</td>
<td></td>
<td>.126*</td>
</tr>
</tbody>
</table>

*Note. N = 371. All the coefficients are standardized. Bold indicates a hypothesized path. *$p \leq .05$. IN=inclusive talent management practices; DJ=distributive justice; WE=work effort; PJ=procedural justice.*

The statistical analyses were conducted based on guidance by Edwards and Lambert (2007) and Sardeshmukh and Vandenberg (2013). Interpretation of moderated mediation requires consideration of both the interaction terms and the statistical significance of the different values for the moderated, indirect, and total effects (see Table 10). The indirect effect is the product of the first and second stage effects. The total effect is equal to the sum of the direct and indirect effects.
To further probe the moderation, simple effects are calculated for each of the dependent variables. Effects analyzed include first stage, where the path from the independent variable to the mediator is moderated, second stage, where the path from the moderator to the dependent variable is moderated, direct, indirect, and total (Edwards & Lambert, 2007). These paths were analyzed at high and low values of the moderator, one standard deviation above and below the mean, respectively. Finally, the difference between the high and low values was calculated. The coefficient estimates in Table 10 show that procedural justice moderated the (second) path from distributive justice to work effort (\(-.146, p < .05\)). This contributed to a much stronger indirect effect for procedural justice on work effort (\(-.095, p \leq .05\)). Differences in the effects for low and high procedural justice (\(-.133, p \leq .05\)) show that the indirect effect was stronger for low procedural justice (\(-.146, p \leq .05\)) than for high procedural justice (\(-.013, p = .739\)). The results listed in Table 10 are depicted graphically in Figure 8. The negative weight of distributive justice (\(\beta = -.149\)) and the positive implied correlation between distributive justice and work effort (.048) indicated a potential suppression. As described by Falk and Miller, “when the sign of the path coefficient and of the correlation coefficient are not the same, i.e. both positive or negative, there is a suppressor effect operating in the model” (1992, p. 75).

### Table 10

<table>
<thead>
<tr>
<th>Moderator Variable</th>
<th>Stage</th>
<th>Effect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First</td>
<td>Second</td>
<td>Direct</td>
</tr>
<tr>
<td>Low Procedural Justice</td>
<td>.649</td>
<td>-.146</td>
<td>.125</td>
</tr>
<tr>
<td>High Procedural Justice</td>
<td>.649</td>
<td>-.013</td>
<td>.125</td>
</tr>
<tr>
<td>Difference</td>
<td>0</td>
<td>-.133</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note. N = 371. All the coefficients are unstandardized. Bold indicates \(p \leq .05\).*
Figure 8. Mediated models showing simple effects for low and high procedural justice. IN = inclusive talent management practices, DJ = distributive justice; WE = work effort. Bold indicates coefficients were statistically significantly different ($p < .05$) across levels of the moderator variable. * = $p < .05$.

Hypotheses Summary

This study proposed three hypotheses, all of which were supported by the findings (see Table 11).

Table 11

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Identification</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>IN $\rightarrow$ DJ, Direct, positive relationship</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>IN $\rightarrow$ DJ $\rightarrow$ WE mediation</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>Moderation by PJ of DJ $\rightarrow$ WE</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note. IN = inclusive talent management practice; DJ = distributive justice; PJ = procedural justice; WE = work effort.

The first hypothesis predicted a positive, direct relationship between inclusive talent management and distributive justice. That is, as respondents report increased use of inclusive talent management practices, they will also report higher levels of perceptions of distributive justice. Support for Hypothesis 1 was indicated by a positive and statistically significant correlation coefficient between inclusive talent management and distributive justice ($\beta = .622, p \leq .05$) using the baseline model. The second hypothesis predicted that distributive justice mediated the relationship between inclusive talent
management and work effort. According to guidance by Zhao et al., competitive mediation is evidenced, and the mediator is consistent with the hypothesized theoretical framework (2010).

The third hypothesis predicted the effect of procedural justice on the relationships between inclusive talent management, distributive justice, and work effort. Specifically, the hypothesis stated that in the interaction model, the strength of the mediation by distributive justice depended on the strength of the moderation by procedural justice. Hypothesis two laid the groundwork by demonstrating the mediation of inclusive talent management practices and work effort by distributive justice. Hypothesis 3 builds on this finding by using the interaction model to demonstrate the effect of procedural justice on the mediation by distributive justice.

To support hypothesis three, a multi-step process was undertaken which utilized the interaction model. First, statistical significance was demonstrated by the interaction of distributive justice and procedural justice, which demonstrated that the effect of distributive justice on work effort varied across the range of procedural justice. Second, this variation is probed by considering the coefficients’ variance across alternate values of the moderator, one standard deviation above and one standard deviation below the mean.

When perceptions of procedural justice were low, then distributive justice had a higher mediating effect on the relationship between inclusive talent management and work effort. The mediation effect was found to have a statistically significant difference at low (one standard deviation below the mean) and high (one standard deviation above
the mean) values of procedural justice ($\beta = -0.133, p \leq .05$). Finally, the effect was stronger at low values of procedural justice ($\beta = -0.146, p \leq .05$).

**Chapter Summary**

This chapter provided the results and analysis of the study. The data collection and data cleaning processes were detailed followed by support for the sample representativeness. Next, the measurement model results and the descriptive statistics were provided. Finally, results of the statistical assumptions were provided, and the chapter ended with a summary.
Chapter 5—Discussion

Introduction

This chapter contains five sections. In the first section, the results from Chapter 4 are discussed within the context of the relevant literature. In the second section, the implications for research, human resource development practitioners, and managers are addressed. The third section includes a discussion of the limitations of the study. The fourth section is comprised of suggestions for future research. The fifth and final section provides a summary of the chapter.

Summary of Study and Discussion of Results

The purpose of this study was to assess a theoretical model that perceptions of distributive justice mediate the relationship between inclusive talent management practices and work effort, and that the relationships between distributive justice and work effort is moderated by procedural justice. The model was developed in alignment with social exchange theory (Festing & Schäfer, 2014) and the human resource architecture theory (Lepak & Snell, 1999). The results of this analysis, and each of the three hypotheses, are discussed in this section within the context of the relevant literature. Both similarities and differences to the literature are identified along with notable impacts to the literature. This section is divided into three parts which correspond to the study’s three hypotheses:
Hypothesis 1: Employees of organizations that are perceived to have more inclusive talent management practices will report higher perceptions of distributive justice (positive association).

Hypothesis 2: Distributive justice will mediate the relationship between inclusive talent management practices and work effort controlling for the direct effects of inclusive talent management on work effort and for procedural justice on work effort.

Hypothesis 3: The strength of the mediation by distributive justice will vary based on the strength of procedural justice. When perceptions of procedural justice are low, perceptions of distributive justice will have a greater mediating effect on the indirect relationship between inclusive talent management practices and work effort.

To test the research hypotheses, a three-wave survey was conducted with a sample of the target population using MTurk® and Qualtrics®. The total, useable sample size was 317.

Hypothesis 1

Hypothesis 1 postulated a direct, positive relationship between inclusive talent management practices and perceptions of distributive justice. The relationship was analyzed with latent moderated structural equation modeling and statistical significance was determined at $p \leq .05$ (Huck, 2012). The test results indicated a positive, direct correlation ($\beta = .622, p < .001$), supporting Hypothesis 1. This was the first study to assess a specific outcome of talent management practices. Social exchange theory proposes that distributive justice exists when the reward aligns with the investment and is
obtained when the profits (reward minus cost) of two individuals are equal (Cook & Rice, 2003). Thus, this study supports social exchange theory by demonstrating that the use of more inclusive talent management practices results in increased perceptions of distributive justice. This finding aligns with a similar study by Gelens et al. (2014) that identification as a high potential employee (inclusion in talent management) is positively related to increased perceptions of distributive justice. This finding contributes to the literature on talent management by showing the effect of inclusive talent management practices on perceptions of distributive justice.

**Hypothesis 2**

Hypothesis 2 predicted that distributive justice mediated the relationship between inclusive talent management and work effort when controlling for the direct effects of inclusive talent management on work effort and for procedural justice on work effort. This hypothesis was evaluated based on guidance by Zhao et al. (2010) and involved an analysis of relations between inclusive talent management, distributive justice, and work effort. The existence of some type of mediation was demonstrated by a statistically significant path from inclusive talent management to work effort through distributive justice ($\beta = -.100, p = 0.028$). This mediation was further analyzed by examining the direct path from inclusive talent management to work effort ($\beta = .206, p = 0.022$). Finally, the product of these paths was negative ($\beta = -.021$), indicating the mediation is competitive (Zhao et al., 2010). This finding supports a similar finding by Gelens et al. (2014) which found that distributive justice mediated the relationship between identification as a high potential (inclusive talent management) and work effort.
**Hypothesis 3**

The third hypothesis predicted a moderated mediation model (Baron & Kenny, 1986) where perceptions of procedural justice would moderate the relationship between distributive justice and work effort. More specifically, when perceptions of procedural justice are low, it was expected that distributive justice would have a greater mediating effect on work effort.

Testing for this moderated mediation hypothesis required a multi-step process. First, latent moderated structural equation modeling was used to identify the fit indices and coefficients for the baseline and interaction models. The statistically significant ($p < .05$) coefficient for the interaction effect of distributive justice and procedural justice on work effort ($\beta = .126$) revealed that procedural justice did, in fact, moderate the relationship. Second, the relationship was analyzed at two different levels of the moderator. The high and low levels of procedural justice were set at one standard deviation above the mean and one standard deviation below the mean, respectively, in concert with previous practice (Gelens et al., 2014).

Third, the simple effects of the moderation were analyzed. The moderation was proposed in the second stage, the path between distributive justice and work effort. The difference between the low and high values of procedural justice ($\beta = -.133, p \leq .05$) indicated that there was a statistically significant difference in the effect of the moderation. The moderation by procedural justice when perceptions were high (one standard deviation above the mean) were not statistically significant ($\beta = -.013, p > .05$). The moderation by procedural justice when perceptions were low ($\beta = -.146, p \leq .05$) was statistically significant.
Combined with the statistically significant difference between the high and low values, support was found for conditional moderation by procedural justice of the mediation by distributive justice. More simply, the results suggest that when perceptions of procedural justice are low, distributive justice has a greater mediating impact on work effort. These findings support similar findings by Gelens et al. (2014) who found that “the effect of perceived distributive justice depends on the level of perceived procedural justice” (p. 169). Further analysis by Gelens et al. (2014) revealed that the relationship between distributive justice and work effort is negative when perceptions of procedural justice are low (.74 below the standard deviation), in alignment with the findings of this study.

Implications

The implications of this study are discussed in the following sections. A number of implications are presented, organized into two categories: implications for research and implications for practice.

Implications for Research

This study has implications for human resource development (HRD), talent management, and organizational justice research. The design of this study contributes to the field of HRD by partially answering the call for more rigorous research methodology (Collings, 2014; Nimon & Astakhova, 2014). There is limited research in HRD that utilizes moderated mediation models. Further, most of the studies that investigate moderated mediation use simple multiple regression analyses. A more rigorous approach is the use of latent moderated structural equation modeling as demonstrated in this study.
Lastly, this study has multiple implications for talent management literature. This study, which uses robust empirical methods in a multi-wave design and in alignment with appropriate theoretical frameworks, partially addresses a call for further research in the field of talent management (De Boeck et al., 2018; Gallardo-Gallardo et al., 2015). The findings of this study advance the relatively youthful field of talent management (Gallardo-Gallardo et al., 2015) by empirically assessing a theoretical model. After the growth stage is the mature stage, which is characterized by further research into the nuance of the phenomenon and predictable results from replication studies (von Krogh et al., 2012). Previous research by Gelens et al., which considered outcomes of work effort and job satisfaction based on identification as high potential talent (2014), are extended and validated by the findings from this study.

The ongoing debate over the inclusive or exclusive approach to talent management is partially addressed by this study. To date, most of the literature on this issue has focused on the benefits realized by the organization and gained through the exclusive approach to talent management. This overlooks the impact of exclusive talent management on those not selected for inclusion. In addition to considering broader impacts of talent management practices by employees both selected and not selected, this study considers the degree of inclusivity, rather than the singular choice of inclusive or exclusive. This is the first study to measure perceptions of inclusive talent management practices outside of an academic setting. This partially addresses a call by Festing and Schäfer (2014) for studies into the employee-level perspective of talent management.

The present study provides advancements for organizational justice research. First, the study validates previous findings that procedural justice moderates the
relationship between distributive justice and outcome variables. Second, the present study provides additional insight into the antecedents of distributive justice, a sparsely researched area of organizational justice. Third, the present study partially addresses a call by Graso et al. (2020) to conduct robust empirical study of the antecedents and outcomes of organizational justice. This particular view of organizational justice is more holistic as it traces both the cause and effect of organizational justice at the individual employee level.

**Implications for Practice**

Talent management is a popular topic for both academics and practitioners. However, without a broadly accepted definition of talent management and limited empirical study, practitioners lack the foundation of robust and rigorous research on which to base their talent management decisions. This study contributes to filling that gap and provides four specific implications to problems faced by human resource development practitioners. First, this study supports practitioners in attempting to quantify the return on investment of talent management initiatives. Second, practitioners will recognize that implications of specific talent management practices have consequences. Third, this study emphasizes the need for practitioners to be mindful of employee perceptions of organizational justice. Fourth, this study contributes to the debate over the use of inclusive or exclusive talent management practices.

One of the most significant debates, both in terms of quantity of research and impact to organizations and employees, is the use of inclusive or exclusive talent management (Gallardo-Gallardo et al., 2013). Rather than basing this decision on financial factors or corporate culture, practitioners can use empirical evidence of the
outcomes of inclusive talent management practices to inform their talent management initiatives. This study contributes to the understanding of employee-level outcomes from the selection and use of inclusive talent management practices. This study supports the use of inclusive talent management practices since they have been shown to lead to higher perceptions of distributive justice and increased work effort by employees.

Talent management research and practice has focused largely on the exclusive approach, which results in a disproportionate investment in a small percentage of an organization’s workforce. This practice has been defended by pointing to the disproportionate impact selected employees have on the organization’s success (Collings & Mellahi, 2009). However, very little research has investigated the effects of exclusive talent management practices on those not chosen for inclusion. This study begins to address that gap by identifying the benefits of more inclusive talent management practices. The results of this study indicate that human resource development practitioners should strive for more inclusive talent management practices to promote perceptions of organizational justice, and ultimately, work effort. It is important to note that this does not suggest practitioners should abandon an exclusive approach to talent management. However, the results of this study suggest that the criteria and selection process used to identify the select employees will have a direct link to the perceptions of distributive and procedural justice, which will affect work effort.

This study focused on the use of inclusive talent management practices. However, the role of organizational justice should not be understated. Gelens et al. (2014) recognized that encouraging perceptions of organizational justice by providing justification for specific employee selection and utilizing explicit criteria could have the
double benefit of increased work effort by those selected, as well as increased perceptions of justice among those not selected. For talent management practitioners, it is important to recognize the significant role which organizational justice plays in individual-level outcomes, including work effort.

Most of the research on talent management practices has focused on the outcomes of individuals selected for exclusive talent management initiatives. While this type of research is helpful in understanding one approach to talent management, it overlooks the potential negative effects on those individuals not selected for inclusion, the majority of employees. This study contributes to the literature gap by analyzing the perceptions of employees related to the inclusiveness of talent management. This study provides additional context to the inclusive/exclusive debate by considering an alternate perspective and provides practitioners with empirical support for the outcomes of inclusive talent management practices. Specifically, this study found that more inclusive talent management practices result in increased perceptions of distributive justice and ultimately, higher work effort. By evaluating the results of inclusive talent management practices, managers and organizations can make more informed decisions by understanding the potential outcomes of workforce differentiation and talent management decisions.

**Limitations**

There were four limitations associated with this study. First, this study utilized subjective, self-reported responses. These responses may not objectively reflect the use of inclusive talent management practices. However, the study was crafted to utilize perceptions of talent management practices and organizational justice. While these
perceptions may not reflect objective existence of inclusive talent management practices or organizational justice, the findings and implications are presented in the context of perceptions by employees.

Second, the work effort scale was prone to social desirability (Podsakoff et al., 2003). Individuals who respond in a socially desirable way may contaminate the actual relationship between variables by altering the relationship between the predictor and criterion variables (Podsakoff et al., 2003). To mitigate the potential for social desirability bias, several procedural accommodations were made to the survey design as described in Chapter 3.

The third limitation is the potential for the sample to not be entirely representative of the desired population. As a mitigation, the survey was designed to collect responses from a sample pool that was statistically and practically significantly similar to the identified population. Comparison and evaluation of the demographic variables to the population and the population sample provided evidence of the sample’s representativeness.

Fourth, this study was narrowly focused and may not be generalizable to employees in different countries or who work less than full-time or in non-knowledge worker roles. Employees in the U.S. have a specific view of the relationship between employer and employee. Employees in countries with a more collective (rather than individualistic) culture may have an alternate perception or expectation of organizational justice. Further, the nature of the employment relationship (part-time, seasonal, contract, etc.) may alter the perception or expectations of justice in the workplace. Finally, this study focused on knowledge workers. The results may not be generalizable to individuals
employed in other industries where apprenticeship or union membership may alter the perception or expectation of talent management and organizational justice.

**Suggestions for Future Research**

This study generated four recommendations for future research. Work effort was selected as the outcome variable for this study because it is representative of the return on investment of talent management initiatives. The study of additional outcomes would provide a more complete picture for practitioners to understand the full ramifications of specific talent management practices. These outcomes could be organized at the employee and organization levels which would provide a more nuanced understanding of the multi-level outcomes of talent management practices and organizational justice. Specifically, research to test additional outcomes at the employee level such as commitment, turnover, and organizational citizenship behaviors would further inform talent management practices and human resource development. Such research would additionally contribute to a more complete understanding of the outcomes of perceptions of organizational justice.

This study was based on measuring employee perceptions of talent management practices, organizational justice, and their own work effort. Future research could utilize objective, archival data such as employee high-potential status and quantifiable, objective measurements of talent management practices. Such research could provide interesting insights into the difference between objective talent management inclusivity and employee perception of such. This more objective, rather than perceptual-based research would contribute to a better understanding of the cause and effect of organizational justice and potentially inform measures of organizational fairness.
The inclusive talent management practices scale used for this study was adapted from its original use in measuring inclusivity of talent management practices in a university setting and was narrow in scope. The development of a more comprehensive and broadly applicable scale to measure the inclusivity of talent management practices would be beneficial to future talent management researchers. Moreover, development of a scale with component elements identifying areas of specific talent management practices (e.g. identification of high potential employees, retention of high performing employees, fast-track promotion opportunities) would be beneficial to researchers in conducting targeted research on specific elements of talent management.

For the purposes of this study, a narrowly defined population of Millennial employees in the U.S. in knowledge-worker positions was targeted. Future researchers should explore how these findings might compare to alternative populations including other generational cohorts, alternative industries. Cultural differences in countries with varying degrees of individualism/collectivism may also be an avenue of exploration for further research. Such studies would provide more context to the literature and contribute to the generalizability of talent management practices.

**Chapter Summary**

This chapter contained five sections. The first section discussed the results of the study along with relationships to relevant literature. The second section provided a summary of implications for theory, research, and practice. Next, the third section discussed the limitations of the study and was followed by recommendations for future research. The chapter concluded with a summary.
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132


Muthén & Muthén.


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Appendix A: Pilot Study

A pilot study was conducted to accomplish three objectives (a) analyze the construct validity and statistical assumptions of the proposed theoretical model (See Figure A1), (b) collect data to estimate the sample size required for the main study, and (c) investigate five hypotheses as detailed below.

Figure A1. Initial Theoretical Model. IN = inclusive talent management practices. DJ = distributive justice. PJ = procedural justice. WE = work effort. TI = turnover intention.

Hypothesis 1: Employees of organizations with more inclusive talent management practices will report higher perceptions of distributive justice (positive association).

Hypothesis 2: Distributive justice will mediate the relationship between inclusive talent management practices and work effort controlling for the direct effects of inclusive talent management practices on work effort and for procedural justice on work effort.

Hypothesis 3: The strength of the mediation by distributive justice will vary based on the strength of procedural justice. When perceptions of procedural justice are high, perceptions of distributive justice will have a greater mediating effect on the
Appendix A: Continued

Indirect relationship between inclusive talent management practices and work effort.

Hypothesis 4: Distributive justice will mediate the relationship between inclusive talent management practices and turnover intention.

Hypothesis 5: The strength of the mediation by distributive justice will vary based on the strength of procedural justice. When perceptions of procedural justice are high, perceptions of distributive justice will have a greater mediating effect on the indirect relationship between inclusive talent management practices and turnover intention.

Population and Sample

The population of interest for this pilot study was the same as for the main study.

Measurement Instruments

The measurement instruments for this pilot study were the same as for the main study with two differences. First, the pilot study incorporated an additional outcome variable over the proposed main study, turnover intention. Second, the pilot study used 12 items to measure inclusive talent management practices and only six of these items are proposed for use in the main study.

Turnover Intention

Turnover intention was measured with three-items from the turnover intention subscale of the Michigan Organizational Assessment Questionnaire (MOAQ) (Cammann et al., 1983). Items were rated on a 5-point Likert-type scale where 1 = strongly disagree and 5 = strongly agree. A sample item is, “I often think about quitting” (Cammann, et al.,
Appendix A: Continued

1983). The first-order factor structure was documented by Biswakarma (2014) with factor loadings ranging from 0.78 to 0.92 along with adequate reliability and a Cronbach’s alpha value of (0.894). Data collected from the Turnover Intention scale have demonstrated convergent validity with affective commitment ($r = -0.51$), and discriminant validity with a measure of job stress ($r = 0.19$) (Crom et al., 2018).

**Inclusive Talent Management Practices**

Inclusive talent management practices were assessed using the 12-item talent management scale (Mousa & Ayoubi, 2019). The scale used six items to measure inclusive practices and an additional six items to measure exclusive practices. The six exclusive practice items will not be used in the main study. This scale was originally used to assess talent management practices in a higher-education setting. The item wording was altered slightly from ‘school’ to ‘employer’, and from ‘academics’ to ‘employees’. This instrument uses a five-point Likert-type scale to measure respondents’ perceptions of inclusive and exclusive talent management practices. Responses range from $1 = To a very small extent$ and $5 = To a very large extent$. A sample item is ‘My employer categorizes us as talents and non-talents’ (Mousa & Ayoubi, 2019). The first-order factor structure of the Talent Management scale was analyzed during the pilot study and factor loadings ranged from 0.682 to 0.852. Mousa and Ayoubi (2019) reported a coefficient alpha value of .852 for the talent management scale. Data collected from the talent management scale has demonstrated convergent validity with a measure of workplace happiness ($r = 0.362$), and discriminant validity with a measure of gender diversity ($r = 0.152$) (Mousa, 2020).
Appendix A: Continued

Survey Design

The pilot survey was conducted as a quantitative, multi-wave survey design which utilized the Qualtrics® survey platform to collect responses from Amazon® MTurk® workers. Several design elements were common to all of the surveys. The surveys were kept as short as possible to increase the likelihood of survey completion. In accordance with guidance by Fan and Yan (2010), the survey was sponsored by an academic institution and included The University of Texas at Tyler branding on the survey instruments. The potential for missing data was mitigated by requiring and accepting only one possible answer for each question (Wolf et al., 2013). To ensure participants were in the U.S., the MTurk® location requirement was set to the United States.

Each survey instruction block informed participants that there were no right or wrong answers in an effort to minimize evaluation apprehension (Podsakoff et al., 2003). The Qualtrics® survey prohibited backtracking during the survey which prevented respondents from changing answers once submitted (Podsakoff et al., 2003). Each survey began with an informed consent which recorded the participant’s consent to participating in the survey, confirmed that they were at least 18 years of age, communicated their rights, assured them of privacy of responses, and explained that they may leave the survey at any time. All three surveys were developed with forced responses to all survey items to avoid issues of missing data (Wolf et al., 2013), and only one answer was possible for each question.

The Amazon® MTurk® platform allows users to customize the hypertext markup language (HTML) code associated with a HIT. For this pilot study, an addition was made
Appendix A: Continued

to the HTML code which allowed Qualtrics® to automatically capture the MTurk® Worker ID without any action by the MTurk® worker. This code linked Qualtrics® survey data with individual MTurk® worker IDs and permitted the targeted invitation to complete subsequent surveys. Once a respondent completed Survey 1, a qualification was added to their worker ID indicating their completion of Survey 1 and, if they met the survey qualifications, their qualification for Survey 2. Respondents who successfully completed Survey 2 were awarded an additional qualification enabling them to access and complete Survey 3.

Respondents who successfully completed a survey were presented with an end-of-survey message which thanked them for their time and provided a unique redemption code to be entered in MTurk® for payment. Respondents who did not consent or who responded to screening questions in a way that does not match the listed qualifications were presented with an end-of-survey message that thanked them for their time and informed them that they do not currently meet the qualifications for the survey. Elements specific to each of the surveys is detailed in the following sections.

Survey 1

One of the primary goals of Survey 1 was to identify potential respondents that matched the target population. To minimize the financial expense associated with conducting surveys on MTurk®, Survey 1 was utilized partially as a screening tool prior to the deployment of Surveys 2 and 3. A location requirement was set in MTurk® for Survey 1 which required participants to be located in the United States. Survey 1 included six blocks. Block 1 was the informed consent. Capturing the informed consent
first prevented participants from providing additional survey data without their consent to participate. Block 2 contained an image captcha designed to identify and eliminate responses from bots (Rouse, 2015).

In alignment with the goals of Survey 1, Blocks 3 and 4 collected demographic information used to identify participants who met the target population criteria. Placing demographic questions early in the survey reduced the number of participants who would complete the full survey only to be removed from further study for failure to meet the target population criteria. Block 3 contained two screening questions including average hours worked each week and respondent’s age. These qualifications are detailed in the HIT, so respondents who indicated they work less than 35 hours per week or are less than 20 or greater than 39 years of age were excluded from further survey questions. Block 4 contained the remaining demographic questions of gender, race/ethnicity, level of education, employer size, management status, occupational category, tenure, and years of work experience.

Block 5 contained the five distributive justice items. At the recommendation of Feldman and Lynch (1988), the control variables were assessed towards the beginning of the survey while the self-rated criterion measure (inclusive talent management practices) was placed at the end of the first survey to reduce self-generated validity. Accordingly, block 6 contained the 12-item inclusive talent management practices scale. Participants who completed the survey were presented with a message thanking the participant for his or her time and a unique code, generated by Qualtrics®, that could be entered into Amazon® MTurk® for compensation.
Appendix A: Continued

Survey 2

Survey 2 was made available to potential participants seven days after they completed Survey 1. Survey 2 included two blocks. The first block included the informed consent. The second block contained the procedural justice scale. The collection of distributive justice and procedural justice in different surveys helped to control common method bias that may have been present (Podsakoff et al., 2012). Participants who completed the survey were presented with a message thanking the participant for his or her time and a unique code, generated by Qualtrics®, that could be entered into Amazon® MTurk® for compensation.

Survey 3

The third and final survey collected the remaining variables of work effort and turnover intention. Survey 3 was made available to respondents seven days after they completed Survey 2. Survey 3 included three blocks. The first block was the informed consent. The second block contained the work effort scale. The third block contained the turnover intention scale. Participants who completed the survey were presented with a message thanking the participant for his or her time and a unique code, generated by Qualtrics®, that could be entered into Amazon® MTurk® for compensation.

Data Collection

Prior to the collection of survey data, approval was obtained from the University of Texas at Tyler Institutional Review Board. Data were collected using the Qualtrics® online survey platform. Participants were recruited via the Amazon® MTurk® platform and invited to complete an anonymous survey of their opinions. Surveys deployed in
MTurk® are advertised using Human Intelligence Tasks (HITs) and include a title, short survey description, and keywords. A worker requirement was set which mandated a location in the U.S. and only workers whose MTurk® profile met this requirement were permitted to accept the HITs associated with this research.

A web link to the Qualtrics® survey was included in the HIT (see Appendix B) along with the survey topic (organizational justice), the time requirements (two minutes for Survey 1, one minute for Survey 2, and two minutes for Survey 3), and instructions for submitting the Qualtrics® code for compensation. Participants who completed Survey 1 were compensated $0.26, $0.13 for Survey 2, and $0.26 for Survey 3. These rates are based on the time to complete the survey as estimated by Qualtrics® and correspond to the U.S. Federal minimum wage of $7.25 per hour.

The pilot study HITs for Survey 1 were published October 26, 2020 and data collection for Survey 3 ended on November 10, 2020. While the HIT limited participation to U.S. residents who work full-time, the survey included a question on employment status to confirm participants met the study participation requirements. MTurk® requires workers to be at least 18 years of age to join the platform and the informed consent at the beginning of each survey required participants to affirm they were at least 18 years of age. The informed consent collected the participant’s consent to participate in the study and informed them of the study’s purpose, their rights as participants, and an assurance of their privacy in addition to the requirements to participate. Participants were required to agree to the informed consent to access the survey. A captcha-style bot-check was used to screen out computer bots from accessing
Appendix A: Continued

the survey (Rouse, 2015). The survey data were downloaded from Qualtrics® as a comma separated values (csv) file.

The survey HIT included HTML code (see Appendix C) that automatically collected the respondent’s MTurk® Worker ID as part of the Qualtrics® survey data. Upon completing one of the surveys, respondents who qualified for the subsequent survey were assigned an MTurk® qualification, enabling them to access and complete the next survey once released. Once the respondent completed the survey, the qualification was removed from their MTurk® profile to prevent the respondent from taking the survey multiple times. The MTurk® worker ID was also used to communicate with MTurk® workers. When a respondent qualified for a subsequent survey, an email invitation to complete that survey was sent via MTurk® using an R script (see Appendix C).

Data Cleaning

Data cleaning for the Qualtrics® responses (Survey 1: $n = 848$, Survey 2: $n = 273$, Survey 3: $n = 197$) was conducted with Microsoft® Excel® on a continual basis during the survey period. For Survey 1, the first step was to remove duplicate responses ($n = 109$). One response was removed for declining the informed consent. Next, 204 incomplete responses were removed. Incomplete responses included those surveys that were discontinued due to respondents indicating they were not 20-39 years old or employed at least 35 hours per week. The target population included individuals with at least some college education, necessitating the removal of 51 respondents who indicated they had no college education. A total of 35 responses were removed for indicating their occupation was other than management, professional, and related occupations; service occupations;
Appendix A: Continued

or sales and office occupations. Finally, seven responses were removed for straight-lined responses throughout the survey. After cleaning the data, Survey 1 had 441 respondents eligible for Survey 2, representing a retention rate of approximately 52%.

Of the 441 candidates qualified to complete Survey 2, a total 273 individuals completed the survey representing a completion rate of 62%. All respondents in Survey 2 agreed to the informed consent. Two responses were removed as duplicate submissions based on identical MTurk® Worker IDs. Five responses were removed due to incomplete survey data. Straight lining was not used as a data removal criterion for Survey 2 because the survey measured only one variable, procedural justice, and did not include any reverse coded items. A total of 28 respondents eligible for Survey 2 were found to be inactive users. After cleaning the data and factoring in the inactive respondents, Survey 2 had 238 respondents eligible for Survey 3, a retention rate of approximately 97%.

Of the 238 candidates qualified to complete Survey 3, a total of 197 individuals completed the survey representing a completion rate of 83%. For Survey 3, all respondents agreed to the informed consent. One response was removed due to incomplete survey data. A total of 11 surveys were removed due to straight lined responses. Survey completion time was reviewed after the completion of Survey 3. Any survey response completed outside of 1.2 standard deviations above or below the average was eliminated. Thirty-four responses were removed due to completion time. A total of 18 duplicate surveys were removed. After cleaning the data, Survey 3 had 133 useable responses and a retention rate of approximately 68%. 

154
Appendix A: Continued

At the completion of the data cleaning process for all three surveys, the final sample size was 133. The cleaned data file was saved as a comma separated values (csv) file for subsequent analysis. Table A1 illustrates the demographic and work characteristics of the total sample.

**Data Analysis**

After cleaning the data and prior to testing the theoretical model, the data were fit to a measurement model (Schumacker & Lomax, 2016). The initial data fit was assessed with the 5-factor correlated measurement model and all factors were allowed to correlate (Schumacker & Lomax, 2016).

Typical fit indices are not reported by Mplus® when evaluating indirect effects because the latent moderated structural equation procedure (LMS) approach is not based on normal multivariate theory. Instead, a baseline model is assessed where only the moderator’s main (direct) effects are specified and the maximum likelihood estimation is used (Sardeshmukh & Vandenberg, 2013). Results of the interaction analysis can then be compared to the baseline results as illustrated in Table A3. The baseline model should demonstrate acceptable fit criteria for the interaction model to be considered (Sardeshmukh & Vandenberg, 2013).

Latent moderated structural equation procedures (LMS) were used to assess the indirect effects hypothesized in the model (Edwards & Lambert, 2007; Sardeshmukh & Vandenberg, 2013). A Monte Carlo power analysis was conducted on the pilot study data to identify a sufficient sample size that would provide statistical and practical significance.
Appendix A: Continued

The measurement model’s goodness of fit was analyzed based on the following cut-off criteria: (a) the root mean squared error of approximation (RMSEA) ≤ .08, (b) the standardized root mean square residuals (SRMRs) ≤ .08, (c) Tucker-Lewis Index (TLI) ≥ .90, (d) the comparative fit index (CFI) ≥ .90, and (e) the smallest value of the Akaike information criterion (AIC) (Kline, 2016; Shumacker & Lomax, 2016). Pattern and structure coefficients were assessed to determine whether the construct variable correlated most highly with its corresponding factor, indicated by the structure coefficients (Graham et al., 2003). Convergent validity was analyzed with factor loadings above a minimum threshold of .5 and less than .95 (Bagozzi & Yi, 1988; Kline, 2016). Items that fall below the threshold of 0.5 were considered for removal (Bagozzi & Yi, 1988; Kline, 2016).

Results

The clean data sample was first analyzed for demographic variables and compared to the target population through a series of Pearson’s chi-square analyses, the results of which are detailed in Table A1. The statistical and practical significance of demographic differences between the sample and the target population were determined at $p \leq .001$ and Cramér’s $V \geq .30$, respectively (Huck, 2012). Analysis of gender demographics revealed a $\chi^2$ value of 0.73 with one degree of freedom, a $p$ value of .392, and a Cramér’s $V$ of .07, indicating the difference between the target population and the sample is neither statistically nor practically significant different. Analysis of race/ethnicity revealed a $\chi^2$ value of 34.39 with three degrees of freedom, a $p$ value of <.001, and a Cramér’s $V$ of .52, indicating a statistically and practically significant
Appendix A: Continued

difference between the target population and the sample. The chi-square residuals suggest individuals reported their race/ethnicity as Asian or Pacific Islander (4.55) at a greater rate and Hispanic (-3.79) at a lower rate in the sample relative to the population. Analysis of highest level of education revealed a $\chi^2$ value of 43.24 with three degrees of freedom, a $p$ value of <.001, and a Cramér’s $V$ of .57, indicating a statistically and practically significant difference between the target population and the sample. Consideration of the chi-square residuals suggests respondents reported the category of some college (-4.49) at a lower rate than the population, indicating the sample was more educated than the population. Analysis of occupational category revealed a $\chi^2$ value of 3.89 with two degrees of freedom, a $p$ value of .143, and a Cramér’s $V$ of .17, indicating the difference between the target population and the sample is neither statistically nor practically significant different.

Except for turnover intention, the standardized regression weights suggested an acceptable measurement model (see Figure A2). The results for turnover intention revealed a likely Heywood case with factor loadings ranging from 0.283 to 1.022. The turnover intention variable was removed, and the revised theoretical model is depicted in Figure A3.
Table A1

Results of Chi-Square Analysis of Pilot Study Sample & Target Population (n = 133)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sample</th>
<th>Population</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
<th>V</th>
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<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>Residual</td>
<td>n</td>
<td>%</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Male</td>
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<td>0.86</td>
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<td>39%</td>
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<td>43%</td>
<td></td>
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<td></td>
<td></td>
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<td>African American or Black</td>
<td>9</td>
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<td>-1.53</td>
<td>9,467</td>
<td>11%</td>
<td>34.39</td>
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<td>1%</td>
<td>NA</td>
<td>NA</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>21</td>
<td>16%</td>
<td>4.55</td>
<td>5,427</td>
<td>7%</td>
<td></td>
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<td>Caucasian or White</td>
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<td>NA</td>
<td>0%</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
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<td>Some college</td>
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<td>4-year degree</td>
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<tr>
<td>Advanced degree</td>
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<td>Sales &amp; office occupations</td>
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<td>-1.28</td>
<td>28,300</td>
<td>25%</td>
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</tr>
</tbody>
</table>

Note. Population n values are reported in thousands. Residuals are standardized.
Appendix A: Continued

In addition to removal of turnover intention variable, the six exclusive talent management practice items were removed from the talent management scale. To support model parsimony and clarify the measurement of inclusive talent management practices, only the six inclusive talent management items were retained in the talent management scale.
Appendix A: Continued

\textit{Figure A3.} Revised Theoretical, Baseline, and Interaction Models. IN = inclusive talent management practices. DJ = distributive justice. PJ = procedural justice. WE = work effort.

The revised measurement model was analyzed following the removal of the turnover intention variable and the six exclusive talent management indicators. The revised and final measurement model is depicted in Figure A4.
Appendix A: Continued

Figure A4. Final Measurement Model. IN = inclusive talent management practices. DJ = distributive justice. WE = work effort. PJ = procedural justice.

With the removal of turnover intention, the standardized regression weights indicated an acceptable measurement model. All of the factor loadings were found to be above the minimum threshold of 0.5, with most above the more stringent threshold of 0.7, and all were below the upper limit of 0.95 (Bagozzi & Yi, 1988; Kline, 2016).
Appendix A: Continued

Consideration of the structure coefficients revealed that each variable correlated most highly with its respective factor. The range of composite reliability (CR; 0.874 to .920) and average variance extracted (AVE; 0.502 to 0.697) provided evidence of adequate reliability and convergent validity (Bagozzi & Yi, 1988; see Table A2). Evidence of discriminant validity was demonstrated with correlations between factors lower than the square root of the AVE for the individual factors (Bagozzi & Yi, 1988).

Table A2

<table>
<thead>
<tr>
<th>Implied Correlations, Average Variance Extracted (AVE), and Composite Reliability (CR)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distributive Justice</td>
<td>.835</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>3. Work Effort</td>
<td>-.092</td>
<td>.133</td>
<td>.822</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>.920</td>
<td>.874</td>
<td>.954</td>
<td>.889</td>
</tr>
<tr>
<td>AVE</td>
<td>.697</td>
<td>.502</td>
<td>.675</td>
<td>.573</td>
</tr>
</tbody>
</table>

*Note.* Square root of AVE along the diagonal

Results of the goodness of fit analysis (see Table A3) for the measurement model revealed a $\chi^2$ of 3,001.347 with 378 degrees of freedom, a root mean square error of approximation (RMSEA) of .063, a standardized root mean square residual (SRMR) of 0.076, a Tucker Lewis index (TLI) of .924, and a comparative fit index (CFI) of .930. The baseline model AIC was 8,500.084, while the interaction model revealed a better fit with an AIC at 8,497.842. This suggests that the model is improved by the inclusion of mediation (Sardeshmukh & Vandenberg, 2013).
Appendix A: Continued

Table A3

*Fit Indices and Standardized Coefficients*

<table>
<thead>
<tr>
<th>Index</th>
<th>Baseline</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>3,001.347</td>
<td></td>
</tr>
<tr>
<td>$df$</td>
<td>378</td>
<td></td>
</tr>
<tr>
<td>$p$</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-4,161.042</td>
<td>-4,157.921</td>
</tr>
<tr>
<td>Estimated paths</td>
<td>89</td>
<td>91</td>
</tr>
<tr>
<td>Comparative Fit Index</td>
<td>0.930</td>
<td></td>
</tr>
<tr>
<td>Tucker-Lewis Index</td>
<td>0.924</td>
<td></td>
</tr>
<tr>
<td>Root mean square error of approximation</td>
<td>0.063</td>
<td></td>
</tr>
<tr>
<td>Standardized root mean square residual</td>
<td>0.076</td>
<td></td>
</tr>
<tr>
<td>Akaike Information Criterion</td>
<td>8,500.084</td>
<td>8,497.842</td>
</tr>
<tr>
<td>Bayesian Information Criterion</td>
<td>8,757.325</td>
<td>8,760.864</td>
</tr>
<tr>
<td><strong>IN $\rightarrow$ DJ</strong></td>
<td>.598*</td>
<td>.599*</td>
</tr>
<tr>
<td><strong>IN $\rightarrow$ WE</strong></td>
<td>.360*</td>
<td>.404*</td>
</tr>
<tr>
<td><strong>DJ $\rightarrow$ WE</strong></td>
<td>-.387*</td>
<td>-.347*</td>
</tr>
<tr>
<td><strong>PJ $\rightarrow$ WE</strong></td>
<td>0.149</td>
<td>0.148</td>
</tr>
<tr>
<td><strong>DJPJ $\rightarrow$ WE</strong></td>
<td>.188*</td>
<td></td>
</tr>
</tbody>
</table>

*Note. $N = 133$. All the coefficients are standardized. Bold indicates a hypothesized path. $*p < .05$. IN=inclusive talent management practices; DJ=distributive justice; WE=work effort; PJ=procedural justice.*

The negative weight of distributive justice and the positive implied correlation between distributive justice and work effort indicated a potential suppression. As described by Falk and Miller, “when the sign of the path coefficient and of the correlation coefficient are not the same, i.e., both positive or negative, there is a suppressor effect operating in the model” (1992, p. 75).

The statistical analyses were conducted based on guidance by Edwards and Lambert (2007) and Sardeshmukh and Vandenberg (2013). Interpretation of moderated mediation requires consideration of both the interaction terms and the statistical significance of the different values for the moderated, indirect, and total effects (see
Appendix A: Continued

Table A4. The indirect effect is the product of the first and second stage effects. The total effect is equal to the sum of the direct and indirect effects.

To further probe the moderation, simple effects are calculated for each of the dependent variables. Effects analyzed include first stage, where the path from the independent variable to the mediator is moderated, second stage, where the path from the moderator to the dependent variable is moderated, direct, indirect, and total (Edwards & Lambert, 2007). These paths are analyzed at high and low values of the moderator, one standard deviation above and below the mean, respectively. Finally, the difference between the high and low values is calculated. The coefficient estimates in Table A4 show that procedural justice moderated the (second) path from distributive justice to work effort (.414, p < .05). This contributed to a much stronger indirect effect for procedural justice on work effort (.236, p ≤ .05).

Table A4

<table>
<thead>
<tr>
<th>Moderator Variable</th>
<th>Stage</th>
<th>Effect</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First</td>
<td>Second</td>
<td>Direct</td>
<td>Indirect</td>
<td>Total</td>
</tr>
<tr>
<td>Low Procedural Justice</td>
<td>.570</td>
<td>-.414</td>
<td>.286</td>
<td>-.236</td>
<td>.050</td>
</tr>
<tr>
<td>High Procedural Justice</td>
<td>.570</td>
<td>-.135</td>
<td>.286</td>
<td>-.077</td>
<td>.208</td>
</tr>
<tr>
<td>Differences</td>
<td>.000</td>
<td>-.279</td>
<td>.000</td>
<td>-.159</td>
<td>-.159</td>
</tr>
</tbody>
</table>

*Note. N = 133. All the coefficients are unstandardized. Bold indicates p ≤ .05.*

Differences in the effects for low and high procedural justice (.279, p ≤ .05) show that the indirect effect was stronger for low procedural justice (.414, p ≤ .05) than
for high procedural justice (-.135, p ≤ .05). The results listed in Table A4 are depicted graphically in Figure A5.

**Figure A5.** Mediated models showing simple effects for low and high procedural justice. IN = inclusive talent management practices, DJ = distributive justice; WE = work effort. Bold indicates coefficients were statistically significantly different (p ≤ .05) across levels of the moderator variable. * = p ≤ .05.

Appendix A: Continued

Hypothesis 1 was supported as the correlation between inclusive talent management practices and distributive justice was found to be 0.599 with p < .001. Support for hypothesis 2 was found as procedural justice moderated the relationship between distributive justice and work effort as evidenced by the statistically significant coefficients in Table A4. Hypothesis 3 was partially supported. While procedural justice did moderate the relationship between distributive justice and work effort differently at different levels, it acted opposite of what was hypothesized. When perceptions of procedural justice were low (one standard deviation below the mean), the strength of the relationship between distributive justice and work effort was stronger than when perceptions of procedural justice were high (one standard deviation above the mean). This may indicate that as the fairness of the process increases, the importance of the distribution (or outcome) of justice is less important. In other words, the individual may
Appendix A: Continued

be more accepting of the outcome because the process used to arrive at that outcome was perceived to be fair. Similar research was conducted by Gelens et al. (2013) who examined the effects of high potential identification on work effort through the lens of organizational justice. They found that the mediating effect of distributive justice on work effort was moderated by procedural justice. Further, they found that as perceptions of procedural justice increased, the mediating effect of distributive justice increased. Hypotheses 4 and 5 were eliminated when the dependent variable, turnover intention, was removed from further study.
Appendix B: Pilot Study Survey

Survey One


<table>
<thead>
<tr>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a short, multiple choice survey about your workplace and demographics. The quality of the data we receive is very important to us, so please respond truthfully and honestly. The survey includes multiple-choice questions only and is expected to take 2 minutes to complete.</td>
</tr>
<tr>
<td>Eligibility: You must be a U.S. resident, age 20-39 years, and employed full time (at least 35 hours per week) to participate.</td>
</tr>
<tr>
<td>If you meet these criteria and would like to participate, please click the link below to access the survey. Once you complete the survey, you will be given a code to enter into the box below to receive payment. Make sure you leave this window open until you have completed the survey and entered your code in the box below.</td>
</tr>
<tr>
<td>YOU MUST ANSWER ALL QUESTIONS TO RECEIVE PAYMENT. YOU MUST MEET THE ELIGIBILITY REQUIREMENTS LISTED ABOVE TO RECEIVE PAYMENT.</td>
</tr>
<tr>
<td>Make sure to leave this window open as you complete the survey. When you are finished, you will return to this page to paste the code into the box.</td>
</tr>
</tbody>
</table>

| Template note for Requesters: To verify that Workers actually complete your survey, require each Worker to enter a unique survey completion code to your HIT. Consult with your survey service provider on how to generate this code at the end of your survey. |

<table>
<thead>
<tr>
<th>Survey link:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The link will appear here only if you accept this HIT.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provide the survey code here:</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. 123456</td>
</tr>
</tbody>
</table>

Submit
You have been invited to participate in this study about organizational perceptions. The purpose of this study is to measure your opinion about different aspects of your workplace. Your participation is completely voluntary, and if you begin participation and choose to not complete it, you are free to not continue without any adverse consequences.

If you agree to be in this study, we will ask you to do the following things:

- Confirm that you are at least 18 years of age.
- Confirm that you voluntarily agree to complete an online multiple-choice survey.
- Be willing to take approximately 1 minute to answer all questions honestly, as there are no right or wrong answers.
- Select the button that best corresponds to your response after reading each question or statement.
- Scroll down the page to answer all the questions if needed and select NEXT to continue after each page.
- Complete the survey in one sitting.

We know of no known risks to this study, other than becoming a little tired of answering the questions, or you may even become a little stressed or distressed when answering some of the questions. If this happens, you can discontinue participation without any problems. Potential benefits to this study are include contributing to the research on organizational justice and talent management practices.

Your responses to the questions are anonymous. Research results from this study may be shared with other researchers for future research but any identifying information will be removed by the principal researcher of this study before information is shared. If you need to ask questions about this study, you can contact the principle researcher, Thomas Kramer via email at tkramer@patriots.uttyler.edu. If you have any questions about your rights as a research participant, you can contact Dr. David Pearson, Chair of the UT Tyler Institutional Review Board at dpearson@uttyler.edu, or 903-565-5858.

I have read and understood what has been explained to me. If I choose to participate in this study, I will click “Yes” in the box below and proceed to the survey. If I choose to not participate, I will click “No” in the box.

- Yes, I choose to participate in this study.
- No, I choose not to participate in this study.
Appendix B: Continued

Please answer the following general questions about yourself. Remember, this information will not be tied to your identity and there are no right or wrong answers. Please respond truthfully.

On average, how many hours do you work each week?
- Less than 35 hours per week
- 35 or more hours per week

What is your age?
- 18-19 years
- 20-39 years
- 40-54 years
- 55 or more years
Appendix B: Continued

<table>
<thead>
<tr>
<th>What is your gender?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Which best describes your race/ethnicity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American or Black</td>
</tr>
<tr>
<td>American Indian/Other Native American</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
</tr>
<tr>
<td>Caucasian or White (other than Hispanic)</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the highest level of education you have completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
</tr>
<tr>
<td>High school graduate</td>
</tr>
<tr>
<td>Some college</td>
</tr>
<tr>
<td>2-year degree</td>
</tr>
<tr>
<td>4-year degree</td>
</tr>
<tr>
<td>Advanced degree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the size of your current employer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-499 employees</td>
</tr>
<tr>
<td>500 or more employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you manage or supervise other employees?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Choose one of the following occupational categories that most accurately describes the type of work you do. Please read through all of the choices carefully.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, professional, and related occupations</td>
</tr>
<tr>
<td>Service occupations</td>
</tr>
<tr>
<td>Sales and office occupations</td>
</tr>
<tr>
<td>Natural resources, construction, and maintenance occupations</td>
</tr>
<tr>
<td>Production, transportation, and material moving occupations</td>
</tr>
</tbody>
</table>
Appendix B: Continued

In total, how many years have you worked for your current employer?

<table>
<thead>
<tr>
<th>0</th>
<th>3</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
<th>18</th>
<th>21</th>
<th>24</th>
<th>27</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Less than 1 year

In total, how many years of professional work experience do you have?

<table>
<thead>
<tr>
<th>0</th>
<th>3</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
<th>18</th>
<th>21</th>
<th>24</th>
<th>27</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Less than 1 year

To what extent are you fairly rewarded...

<table>
<thead>
<tr>
<th></th>
<th>To a very large extent</th>
<th>To a large extent</th>
<th>To some extent</th>
<th>To a small extent</th>
<th>To a very small extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>considering the</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>responsibilities that</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>you have?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in view of the amount of</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>experience that you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for the amount of effort</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>that you put forth?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for the work that you</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>have done well?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for the stresses and</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>strains of your job?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© 1991 American Psychological Association
Please select to what extent you agree with the following statements about your employer.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My employer appreciates all employees regardless of their differences.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My employer respects the uniqueness of employees.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My employer treats all employees as insiders.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I do not feel any discrimination while working at my employer.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My employer recruits and develops all employees based on their qualifications.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Equality, tolerance and sameness are the main features of my employer.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My employer includes only a few of its employees (identified as talents) in training.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My employer categorizes us as talents and non-talents.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Appendix B: Continued

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My employer offers its financial and non-financial benefits only to those recognized as talented employees.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My employer supports only those who are identified as talented employees.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My employer seeks to retain only those who are recognized as talented employees.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My employer does not secure equality to all of its employees.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

© 2019 Emerald Publishing

Your response has been recorded. Thank you for your time and participation. Please copy and paste the following code into the MTurk HIT to receive payment R_3memDo0E7Wzd8tDZ
Appendix B: Continued

Survey Two

Preview link: http://bit.ly/36ekvSt
Appendix B: Continued

THE UNIVERSITY OF TEXAS AT TYLER
Informed Consent (Online, Anonymous) to Participate in Research
Institutional Review Board No. IRB-FY2020-54
Approval Date: March 26, 2020

You have been invited to participate in this study about organizational perceptions. The purpose of this study is to measure your opinion about different aspects of your workplace. Your participation is completely voluntary, and if you begin participation and choose to not complete it, you are free to not continue without any adverse consequences.

If you agree to be in this study, we will ask you to do the following things:

- Confirm that you are at least 18 years of age.
- Confirm that you voluntarily agree to complete an online multiple-choice survey.
- Be willing to take approximately 1 minute to answer all questions honestly, as there are no right or wrong answers.
- Select the button that best corresponds to your response after reading each question or statement.
- Scroll down the page to answer all the questions if needed and select NEXT to continue after each page.
- Complete the survey in one sitting.

We know of no known risks to this study, other than becoming a little tired of answering the questions, or you may even become a little stressed or distressed when answering some of the questions. If this happens, you can discontinue participation without any problems. Potential benefits to this study are include contributing to the research on organizational justice and talent management practices.

Your responses to the questions are anonymous. Research results from this study may be shared with other researchers for future research but any identifying information will be removed by the principal researcher of this study before information is shared. If you need to ask questions about this study, you can contact the principle researcher, Thomas Kramer via email at tkramer@patriots.uttyler.edu. If you have any questions about your rights as a research participant, you can contact Dr. David Pearson, Chair of the UT Tyler Institutional Review Board at dpearson@uttyler.edu, or 903-565-5858.

I have read and understood what has been explained to me. If I choose to participate in this study, I will click “Yes” in the box below and proceed to the survey. If I choose to not participate, I will click “No” in the box.

☐ Yes. I choose to participate in this study.
☐ No. I choose not to participate in this study.
Appendix B: Continued

<table>
<thead>
<tr>
<th>To what extent has your employer</th>
<th>To a very large extent</th>
<th>To a large extent</th>
<th>To some extent</th>
<th>To a small extent</th>
<th>To a very small extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>developed procedures designed to collect accurate information necessary for making decisions?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>provided opportunities to appeal or challenge a decision?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>had all sides affected by the decision represented?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>generated standards so that decisions could be made with consistency?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>heard the concerns of all those affected by the decision?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>provided useful feedback regarding the decision and its implementation?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>allowed for requests for clarification or additional information about the decision?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

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Appendix B: Continued

Please select to what extend you agree with the following statements about your employer (organization).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When someone criticizes my organization, it feels like a personal insult</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am very interested in what others think about my organization</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>When I talk about this organization, I usually say ‘we’ rather than ‘they’</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>This organization’s successes are my successes</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>When someone praises this organization it feels like a personal compliment</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>If a story in the media criticized this organization, I would feel embarrassed</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

© 2004 Wiley InterScience

Your response has been recorded. Thank you for your time and participation. Please copy and paste the following code into the MTurk HIT to receive payment: R_3memDo0EiWzdIlDZ

177
Appendix B: Continued

Survey Three

THE UNIVERSITY OF TEXAS AT TYLER
Informed Consent (Online, Anonymous) to Participate in Research
Institutional Review Board No. IRB-FY2020-54
Approval Date: March 26, 2020

You have been invited to participate in this study about organizational perceptions. The purpose of this study is to measure your opinion about different aspects of your workplace. Your participation is completely voluntary, and if you begin participation and choose to not complete it, you are free to not continue without any adverse consequences.

If you agree to be in this study, we will ask you to do the following things:

- Confirm that you are at least 18 years of age.
- Confirm that you voluntarily agree to complete an online multiple-choice survey.
- Be willing to take approximately 1 minute to answer all questions honestly, as there are no right or wrong answers.
- Select the button that best corresponds to your response after reading each question or statement.
- Scroll down the page to answer all the questions if needed and select NEXT to continue after each page.
- Complete the survey in one sitting.

We know of no known risks to this study, other than becoming a little tired of answering the questions, or you may even become a little stressed or distressed when answering some of the questions. If this happens, you can discontinue participation without any problems. Potential benefits to this study are include contributing to the research on organizational justice and talent management practices.

Your responses to the questions are anonymous. Research results from this study may be shared with other researchers for future research but any identifying information will be removed by the principal researcher of this study before information is shared. If you need to ask questions about this study, you can contact the principle researcher, Thomas Kramer via email at tkramer@patriots.uttyler.edu. If you have any questions about your rights as a research participant, you can contact Dr. David Pearson, Chair of the UT Tyler Institutional Review Board at dpearson@uttyler.edu, or 903-565-5858.

I have read and understood what has been explained to me. If I choose to participate in this study, I will click “Yes” in the box below and proceed to the survey. If I choose to not participate, I will click “No” in the box.

☐ Yes. I choose to participate in this study.
☐ No. I choose not to participate in this study.
Appendix B: Continued

For each statement, please rate your level of agreement. Please be honest in your responses as there are no right or wrong answers. The best response is likely the first response that comes to your mind.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not give up quickly when something does not work well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really do my best to get my work done, regardless of potential difficulties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I start an assignment I pursue it to the end.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do my best to do what is expected of me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am trustworthy in the execution of the tasks that are assigned to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really do my best to achieve the objectives of the organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think of myself as a hard worker.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really do my best in my job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I put a lot of energy into the tasks that I commence.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always exert equally hard during the execution of my job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Appendix B: Continued

How often do you seriously consider quitting your job?

- Never
- Very rarely
- Rarely
- Occasionally
- Frequently
- Very frequently

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Your response has been recorded. Thank you for your time and participation. Please copy and paste the following code into the MTurk HIT to receive payment:
F1_TDMxg5Gg5xGwUM1Y
Appendix C: Pilot Study Syntax

Mplus® Confirmatory Factor Analysis Syntax

TITLE: PILOT STUDY THREE CONFIRMATORY FACTOR ANALYSIS;

DATA: FILE IS DATA.CSV;

VARIABLE: NAMES ARE DG01-DG10 DJ01-DJ05 IN01-IN06 EX01-EX06
       PJ01-PJ07 DN01-DN06 WE01-WE10 TI01-TI03;
       USEVARIABLES DJ01-DJ05 IN01-IN06 PJ01-PJ07 WE01-WE10;

MODEL: DJ BY DJ01-DJ05;
       IN BY IN01-IN06;
       PJ BY PJ01-PJ07;
       WE BY WE01-WE10;

OUTPUT: STDYX;

Mplus® Baseline Model Syntax

TITLE: BASELINE MODEL PILOT STUDY THREE;

DATA: FILE IS DATA.CSV;

VARIABLE: NAMES ARE DG01-DG10 DJ01-DJ05 IN01-IN06 EX01-EX06
       PJ01-PJ07 DN01-DN06 WE01-WE10 TI01-TI03;
       USEVARIABLES DJ01-DJ05 IN01-IN06 PJ01-PJ07 WE01-WE10;

DEFINE: CENTER WE01-WE10 DJ01-DJ04 PJ01-PJ07 (GRANDMEAN);

MODEL: IN BY IN01-IN06;
       DJ by DJ01-DJ05;
       WE by WE01-WE10;
       PJ by PJ01-PJ07;
       DJ ON IN;
       WE ON IN;
       WE ON DJ;
       WE ON PJ;
TITLE: FULL MODEL INTERACTION PILOT STUDY THREE

DATA: FILE IS DATA.CSV;

VARIABLE: NAMES ARE DG01-DG10 DJ01-DJ05 IN01-IN06 EX01-EX06 PJ01-PJ07 DN01-DN06 WE01-WE10 TI01-TI03;
USEVARIABLES IN01-IN06 DJ01-DJ05 PJ01-PJ07 WE01-WE10;

DEFINE: CENTER WE01-WE10 DJ01-DJ05 PJ01-PJ07 (GRANDMEAN);

ANALYSIS: TYPE = RANDOM;
ALGORITHM = INTEGRATION;
MITERATIONS = 500;

MODEL: IN BY IN01-IN06; !X
DJ BY DJ01-DJ05; !M
WE BY WE01-WE10; !Y
PJ BY PJ01-PJ07; !W

DJ ON IN (ax5);
WE ON IN (bx20);
WE ON DJ (bm20);
WE ON PJ (bv20);

DJCPJC | DJ XWITH PJ;
WE ON DJCPJC (bmv20);

WE (ey20);
DJ (em5);
[PJ] (vmean);
PJ (varv);

MODEL CONSTRAINT:
NEW (Lov HIV vsd a05 b020 d020
wloslope wlofirst wlosecond wlodirect wloindir wlototal wloerror
whislope whifirst whisecond whidirect whiindir whitotal whierror
wFirstDiff wSeconDiff wDirDiff wIndDiff wTotDiff wSlopeDiff);

vsd = SQRT(varv); !ADD MULTIPLIER BEFORE SQR
Lov = vmean-vsd;
HiV = vmean+vsd;
a05=0;
b020=0;
d020=0;

wloslope = (bx20)+ ax5*(bm20 + (bmv20*Lov));
wloFirst = (ax5);
wloSecond = (bm20) + (bmv20*Lov);
wlodirect = bx20;
wloIndir = wlofirst*wlosecond;
wlototal = wlodirect + wloindir;
wloerror = ey20+(bm20*em5);

whislope = (bx20)+ ax5*(bm20 + (bmv20*HiV));
whiFirst = (ax5);
whiSecond = (bm20) + (bmv20*HiV);
whidirect = bx20;
whiIndir = whifirst*whisecond;
whitotal = whidirect + whiindir
whierror = ey20+(bm20*em5);

wFirstDiff = wlofirst - whifirst;
wSeconDiff = wlosecond - whisecond;
wDirDiff = wlodirect - whidirect;
wIndDiff = wloindir - whiindir;
wTotDiff = wlototal - whitotal;
wSlopeDiff = wLoslope - whislope;

New (wlointer wlo2ndInt whinter whi2ndint);

wLo2ndInt = (b020)+(a05*bm20);
wHi2ndInt = (b020)+(a05*bm20);
wlointer = (b020)+ (bv20*Lov)+(a05*(bm20+(bmv20*Lov)));
whiinter = (b020)+ (bv20*HiV)+(a05*(bm20+(bmv20*Hiv)));
Appendix C: Continued

INzero = 1;
INone = 5;
DJone = 1;
DJfive = 5;

wLTprimL = wLoInter + (wLoSlope*INzero);
wLTprimH = wLoInter + (wLoSlope*INone);
wHTprimL = wHiInter + (wHiSlope*INzero);
wHTprimH = wHiInter + (wHiSlope*INone);

wLSprimL = wlo2ndInt + (wLoSecond*DJone);
wLSprimH = wlo2ndInt + (wLoSecond*DJfive);
wHSprimL = wHi2ndInt + (wHiSecond*DJone);
wHSprimH = wHi2ndInt + (wHiSecond*DJfive);

wLInPrimL = wLoInter + (wloIndir *INzero);
wLInPrimH = wLoInter + (wloIndir *INone);
wHInPrimL = wHiInter + (wHiIndir *INzero);
wHInPrimH = wHiInter + (wHiIndir *INone);

OUTPUT: STDYX sampstat tech1 tech8;
Appendix D: Main Study Surveys

Survey 1

Preview link: https://bit.ly/3cor3lt
Appendix D: Continued

The University of Texas at Tyler

Please complete the captcha below.

☐ I'm not a robot

The University of Texas at Tyler

Please answer the following general questions about yourself. Remember, this information will not be tied to your identity and there are no right or wrong answers. Please respond truthfully.

On average, how many hours do you work each week?
☐ Less than 35 hours per week
☐ 35 or more hours per week

What is your age?
☐ 18-19 years
☐ 20-39 years
☐ 40-54 years
☐ 55 or more years
Appendix D: Continued

<table>
<thead>
<tr>
<th>What is your gender?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Male</td>
</tr>
<tr>
<td>☐ Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Which best describes your race/ethnicity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ African American or Black</td>
</tr>
<tr>
<td>☐ American Indian/Other Native American</td>
</tr>
<tr>
<td>☐ Asian or Pacific Islander</td>
</tr>
<tr>
<td>☐ Caucasian or White (other than Hispanic)</td>
</tr>
<tr>
<td>☐ Hispanic</td>
</tr>
<tr>
<td>☐ Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the highest level of education you have completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Less than high school</td>
</tr>
<tr>
<td>☐ High school graduate</td>
</tr>
<tr>
<td>☐ Some college</td>
</tr>
<tr>
<td>☐ 2-year degree</td>
</tr>
<tr>
<td>☐ 4-year degree</td>
</tr>
<tr>
<td>☐ Advanced degree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the size of your current employer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1–499 employees</td>
</tr>
<tr>
<td>☐ 500 or more employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you manage or supervise other employees?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes</td>
</tr>
<tr>
<td>☐ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Choose one of the following occupational categories that most accurately describes the type of work you do. Please read through all of the choices carefully.</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Management, professional, and related occupations</td>
</tr>
<tr>
<td>☐ Service occupations</td>
</tr>
<tr>
<td>☐ Sales and office occupations</td>
</tr>
<tr>
<td>☐ Natural resources, construction, and maintenance occupations</td>
</tr>
<tr>
<td>☐ Production, transportation, and material moving occupations</td>
</tr>
</tbody>
</table>
Appendix D: Continued

In total, how many years have you worked for your current employer?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>3</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
<th>18</th>
<th>21</th>
<th>24</th>
<th>27</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In total, how many years of professional work experience do you have?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>3</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
<th>18</th>
<th>21</th>
<th>24</th>
<th>27</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For each statement, please rate your level of agreement. Please be honest in your responses as there are no right or wrong answers. The best response is likely the first response that comes to your mind.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>You fairly rewarded considering the responsibilities that you have?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You fairly rewarded in view of the amount of experience that you have?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You fairly rewarded for the amount of effort that you put forth?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You fairly rewarded for the work that you have done well?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You fairly rewarded for the stresses and strains of your job?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Appendix D: Continued

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My employer appreciates all employees regardless of their differences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employer respects the uniqueness of employees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employer treats all employees as insiders.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not feel any discrimination while working at my employer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employer recruits and develops all employees based on their qualifications.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equality, tolerance, and sameness are the main features of my employer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Appendix D: Continued

Your response has been recorded. Thank you for your time and participation. Please copy and paste the following code into the MTurk HIT to receive payment:
R_20MuMpfuRmZAnZ
Appendix D: Continued

Survey 2

Preview link: http://bit.ly/2MalrRi
For each statement, please rate your level of agreement. Please be honest in your responses as there are no right or wrong answers. The best response is likely the first response that comes to your mind.

Think about decisions that affected other employees in general or yourself in particular.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job decisions are made by the manager in an unbiased manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The manager makes sure that all employee concerns are heard before job decisions are made.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To make job decisions, the manager collects accurate and complete information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D: Continued

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The manager clarifies decisions and</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>provides additional information when</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>requested by employees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All job decisions are applied consistently</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>across all affected employees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are allowed to challenge or</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>appeal job decisions made by the manager.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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The University of Texas at Tyler

Your response has been recorded. Thank you for your time and participation. Please copy and paste the following code into the MTurk HIT to receive payment.
R_2hnBEG06xjR0EWR
Appendix D: Continued

Survey 3

Preview link: http://bit.ly/36rfDJV
For each statement, please rate your level of agreement. Please be honest in your responses as there are no right or wrong answers. The best response is likely the first response that comes to your mind.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not give up quickly when something does not work well.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I really do my best to get my work done, regardless of potential difficulties.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I start an assignment, I pursue it to the end.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I do my best to do what is expected of me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am trustworthy in the execution of the tasks that are assigned to me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I really do my best to achieve the objectives of the organization.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I think of myself as a hard worker.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I really do my best in my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I put a lot of energy into the tasks that I commence.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I always exert equally during the execution of my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

© 2009 Hogrefe
Appendix D: Continued

Your response has been recorded. Thank you for your time and participation. Please copy and paste the following code into the MTurk HIT to receive payment:
R_xsgkocXygeY7GCd
Appendix E: Main Study Syntax

Mplus® Confirmatory Factor Analysis Syntax

TITLE: CONFIRMATORY FACTOR ANALYSIS;

DATA: FILE IS DATA.CSV;

VARIABLE: NAMES ARE DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;
      USEVARIABLES DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;

MODEL: DJ BY DJ01-DJ05;
      IN BY IN01-IN06;
      PJ BY PJ01-PJ06;
      WE BY WE01-WE10;

OUTPUT: STDYX;

Mplus® Baseline Analysis Syntax

TITLE: BASELINE MODEL;

DATA: FILE IS DATA.CSV;

VARIABLE: NAMES ARE DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;
      USEVARIABLES DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;

DEFINE: CENTER WE01-WE10 DJ01-DJ05 PJ01-PJ06 (GRANDMEAN);

MODEL: IN BY IN01-IN06;
      DJ by DJ01-DJ05;
      WE by WE01-WE10;
      PJ by PJ01-PJ06;

      DJ ON IN;
WE ON IN;
WE ON DJ;
WE ON PJ;

OUTPUT: SAMP TECH1 TECH4 TECH3 STDYX;

Appendix E: Continued

Mplus® Interaction Analysis Syntax

TITLE: FULL MODEL INTERACTION;

DATA: FILE IS DATA.CSV;

VARIABLE: NAMES ARE DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;
USEVARIABLES DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;

DEFINE: CENTER IN01-IN06 WE01-WE10 DJ01-DJ05 PJ01-PJ06 (GRANDMEAN);

ANALYSIS: TYPE = RANDOM;
   ALGORITHM = INTEGRATION;

MODEL: IN BY IN01-IN06; !X
   DJ BY DJ01-DJ05; !M
   WE BY WE01-WE10; !Y
   PJ BY PJ01-PJ06; !W
MODEL CONSTRAINT:
NEW (Lov HiV vsd a05 b020 d020
wloslope wlofirst wlosecond wlodirect wloindir wlototal wloerror
whislope whifirst whisecond whidirect whiindir whitotal whierror
wFirstDiff wSeconDiff wDirDiff wIndDiff wTotDiff wSlopeDiff);

vsd = SQRT(varv); !ADD MULTIPLIER BEFORE SQRT
Lov = vmean-vsd;
HiV = vmean+vsd;
a05=0;
b020=0;
d020=0;

wloslope = (bx20)+ ax5*(bm20 + (bmv20*Lov));
wloFirst = (ax5);
wloSecond = (bm20) + (bmv20*Lov);
wlodirect = bx20;
wloIndir = wlofirst*wlosecond;
wlototal = wlodirect + wloindir;
wloerror = ey20+(bm20*em5);

whislope = (bx20)+ ax5*(bm20 + (bmv20*HiV));
whiFirst = (ax5);
whiSecond = (bm20) + (bmv20*HiV);
whidirect = bx20;

whilndir = whifirst*whisecond;
whitotal = whidirect + whilndir;
whierror = ey20+(bm20*em5);

wFirstDiff = wlofirst - whifirst;
wSeconDiff = wlosecond - whisecond;
wDirDiff = wlodirect - whidirect;
wIndDiff = wloindir - whiindir;
wTotDiff = wlototal - whitotal;
wSlopeDiff = wLoslope - whislope;

New (wlointer  wlo2ndInt  whiinter  whi2ndInt);

wLo2ndInt = (b020)+(a05*bm20);
wHi2ndInt = (b020)+(a05*bm20);
wlointer = (b020)+(bv20*Lov)+(a05*(bm20+(bmv20*Lov)));
whiinter = (b020)+(bv20*Hiv)+(a05*(bm20+(bmv20*Hiv)));

New (INzero  INone  DJone  DJfive
wLSprimL  wLSprimH  wHSprimL  wHSprimH
wLINprimL  wLINprimH  wHINprimL  wHINprimH
wLTprimL  wLTprimH  wHTprimL  wHTprimH );

INzero = 1;
INone = 5;
DJone = 1;
DJfive = 5;

wLTprimL = wLoInter + (wLoSlope*INzero);
wLTprimH = wLoInter + (wLoSlope*INone);
wHTprimL = wHiInter + (wHiSlope*INzero);
wHTprimH = wHiInter + (wHiSlope*INone);
\begin{verbatim}
TITLE: PATH ANALYSIS;

DATA: FILE IS DATA.CSV;

VARIABLE: NAMES ARE DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;
USEVARIABLES DJ01-DJ05 IN01-IN06 PJ01-PJ06 WE01-WE10;

DEFINE: CENTER WE01-WE10 DJ01-DJ05 PJ01-PJ06 (GRANDMEAN);

MODEL: IN BY IN01-IN06;
DJ by DJ01-DJ05;
WE by WE01-WE10;
PJ by PJ01-PJ06;
\end{verbatim}

Appendix E: Continued

Mplus® Path Analysis
DJ ON IN;
WE ON DJ IN;
WE ON PJ;

MODEL INDIRECT: WE IND IN;

OUTPUT: STDYX;

R Chi-square Analysis Syntax

Table <- matrix(c(2, 3, 4), nrow=2)
row.names(Table) <- c("Male","Female")
colnames(Table) <- c("Sample","Population")
Table
chisq.test(Table)
firstchi <- chisq.test(Table)
str(firstchi)
firstchi$stdres
Appendix F: Permission to Use Surveys

From: Margo Duncan MDuncan@uttyler.edu
Subject: RE: Copyright Clearance Center
Date: March 29, 2019 at 9:40 PM
To: Thomas Kramer TKramer@pablics.uttyler.edu

Thomas,

Based on your answers and my reading of the licenses, I believe you may use the portions of the articles you listed for your survey.

The Yücel article is published under a Creative Commons Attribution license. Details of the terms of use are here: https://creativecommons.org/licenses/by/4.0/.

As I mentioned previously, be sure to include a disclaimer at the beginning of the survey that says something like "sections of this survey include instruments (or selections) from articles written in [Journal] by [authors]. These instruments are being utilized in this survey for educational and academic coursework in preparation for my doctoral degree." Be sure to include the full citation of each article somewhere on the site, as well.

Please keep in mind, I am not a lawyer and this is not legal advice.

If you need anything else, please do not hesitate to contact me.

Thank you,
Margo

From: Thomas Kramer
Sent: Wednesday, March 20, 2019 11:55 AM
To: Margo Duncan <MDuncan@uttyler.edu>
Subject: Re: Copyright Clearance Center

Margo,

For Colquitt, only the distributive and procedural justice items. For Yücel, only the turnover intention items, and all of the items for De Cooman et al.

On Mar 20, 2019, at 12:43 PM, Margo Duncan <MDuncan@uttyler.edu> wrote:

Thomas,

For each of the articles, will you be using all of the items from the tables? Because some of the items are written by authors other than the article author, I'll need to look at the copyright for those items.

Thank you,
Margo
From: Thomas Kramer
Sent: Wednesday, March 20, 2019 10:23 AM
To: Margo Duncan <MDuncan@utyrler.edu>
Subject: Re: Copyright Clearance Center

Ms. Duncan,

Thank you so much for your quick reply. I appreciate you taking the time to help me out. I was able to create an account and locate records for the three articles. However, I don't see how to obtain clearance to use the instruments outside of the institution.

1. See below for full citations. (Colquitt, 2001, p. 389; Yücel, 2012, p. 50; DeCooman et al., 2009, p. 268)

2. A pilot study conducted by the end of April and a full study sometime this summer.

3. Qualtrics owns the website that will “host” the survey instruments.

4. URL to be determined but will be at qualtrics.com

Instruments:


Thanks again,
Thomas
On Tue, Nov 19, 2019 at 7:58 AM Thomas Kramer <TKramer@patriots.uttyler.edu> wrote:

To whom it may concern,

I am writing to respectfully request permission and copyright clearance to utilize a portion of the Michigan Organizational Assessment Questionnaire (citation below). Specifically, I would like to use the three items related to turnover intention in my dissertation research. I plan to survey between 200 and 500 participants as part of my study on talent management, organizational justice, and turnover intentions. This research will be used to partially fulfill the requirements of a PhD in Human Resource Development at The University of Texas at Tyler and will be reviewed and approved by the university’s Institutional Review Board. I have copied my dissertation committee chair, Kim Kilmus, on this email. Should you have any questions or need additional information, I can be reached by email at tkramer@patriots.uttyler.edu.


Thank you for your consideration,
Thomas Kramer
Appendix F: Continued

Thomas,

Generally, if a journal allows for digital sharing and photocopy sharing (which this one does), you may use the content in your work—as long as your work includes proper citation and a disclaimer that your use is for academic and/or educational use.

With that in mind, be sure to put a disclaimer at the beginning of the survey that says something like "Sections of this survey include instruments (or selections) from articles written in [Journal] by [authors]. These instruments are being utilized in this survey for educational and academic coursework in preparation for my doctoral degree." Be sure to include the full citation of each article somewhere on the site, as well.

Please keep in mind, I am not a lawyer and this is not legal advice. If you need any other assistance, please do not hesitate to contact me.

Regards,
Margo

From: Thomas Kramer <TKramer@patriots.utyler.edu>
Sent: Friday, August 28, 2020 3:37 PM
To: Margo Duncan <mduncan@utyler.edu>
Subject: Re: Copyright Clearance Assistance

Margo,

Approximately 300 respondents. The survey will be distributed via Qualtrics to Amazon MTurk workers.

Thomas

On Aug 28, 2020, at 4:36 PM, Margo Duncan <mduncan@utyler.edu> wrote:

Hi Thomas,

How many people (approximately) will you be sharing the questionnaire with?
How will you distribute the questionnaire (listserv, SurveyMonkey, etc.)?

Margo

Margo Duncan, MLS
Electronic Resources & Collection Development Librarian
Robert R. Muntz Library | The University of Texas at Tyler
903.566.7174 | mduncan@utyler.edu
From: Thomas Kramer <TKramer@patriots.uttler.edu>
Sent: Friday, August 28, 2020 2:25 PM
To: Margo Duncan <mduncan@uttler.edu>
Subject: Copyright Clearance Assistance

Ms. Duncan,

Could you please assist me in obtaining a copyright clearance to use the five Affective Commitment items from the Organizational Commitment questionnaire in my dissertation research? The article citation is:


Thank you,
Thomas Kramer
Appendix G: IRB Approvals

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<tr>
<td>Creation Date</td>
<td>3-17-2020</td>
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<tr>
<td>End Date</td>
<td></td>
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<tr>
<td>Status</td>
<td>Approved</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Thomas Kramer</td>
</tr>
<tr>
<td>Review Board</td>
<td>UT Tyler Board - FY21</td>
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<td>Sponsor</td>
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**Study History**

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<td></td>
<td>Review Type</td>
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<td>Decision</td>
<td>Approved</td>
</tr>
</tbody>
</table>

**Key Study Contacts**

<table>
<thead>
<tr>
<th>Member</th>
<th>Role</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim Nimon</td>
<td>Co-Principal Investigator</td>
<td><a href="mailto:knimon@uttyler.edu">knimon@uttyler.edu</a></td>
</tr>
<tr>
<td>Thomas Kramer</td>
<td>Principal Investigator</td>
<td><a href="mailto:tkramer@patriots.uttyler.edu">tkramer@patriots.uttyler.edu</a></td>
</tr>
<tr>
<td>Thomas Kramer</td>
<td>Primary Contact</td>
<td><a href="mailto:tkramer@patriots.uttyler.edu">tkramer@patriots.uttyler.edu</a></td>
</tr>
</tbody>
</table>