THE ROLE OF ATTRIBUTION AND FAIRNESS IN UNDERSTANDING JOB APPLICANT REACTIONS TO SELECTION PROCEDURES AND DECISIONS

.

DOCTOR OF PHILOSOP	HY (2008) McMaster University
(Business Administration)	Hamilton, Ontario
TITLE:	The Role of Attribution and Fairness in Understanding Job Applicant Reactions to Selection Procedures and Decisions
AUTHOR	Khaldoun Ismail Ababneh, B.A. (Yarmouk University) M.P.A., M.B.A. (Tennessee State University)
SUPERVISOR	Dr. Rick D. Hackett
NUMBER OF PAGES:	xiv, 183

THE ROLE OF ATTRIBUTION AND FAIRNESS IN UNDERSTANDING JOB APPLICANT REACTIONS TO SELECTION PROCEDURES AND DECISIONS

By

KHALDOUN ISMAIL ABABNEH, B.A., M.P.A., M.B.A.

A Dissertation

Submitted to the School of Graduate Studies

In Partial Fulfillment of the Requirements

For the Degree

Doctor of Philosophy

McMaster University

© Copyright by Khaldoun Ismail Ababneh, December 2008

ABSTRACT

Drawing upon Applicant-Attribution-Reaction Theory (AART) and research in the area of job applicant reactions, this study clarifies and underscores the influence of attributions on job applicant perceptions and behavioural reactions to staffing procedures and decisions. Overall, applicant attributions were influenced by: (a) experiencing a staffing process that satisfies/violates procedural justice rules; (b) receiving a favourable (selected) or unfavourable (rejected) selection outcome; and (c) receiving an explanation for a selection decision. Results further suggest that applicant attributions, influence applicant perceptions and behaviours. Consistent with AART's predictions, process fairness perceptions mediated relationships between applicant attributions and each of organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions. Theoretical and practical implications for these findings are discussed.

ACKNOWLEDGEMENTS

This dissertation was supported by a number of people to whom I would like to express my genuine gratitude. First and foremost, I would like to express my sincere gratitude and appreciation to my supervisor, Dr. Rick Hackett, for all of his guidance, insight, support, and feedback throughout my doctoral studies. I was very fortunate to have him as my supervisor. I would also like to express my gratefulness to Dr. Aaron Schat for his extraordinary help, comments, and advice especially on the methodology section of my thesis. I am also grateful to Dr. Naresh Agarwal for his support and feedback during my years as a doctoral student.

Sincere thanks are also due to Dr. Robert Ployhart for serving as the External Examiner, Dr. C. McKey for serving as the Internal External, and Dr. J. Rosenfeld for serving as Chair of the Exanimation Committee. I would also like to express my thanks to all the faculty members and colleagues at the DeGroote school of business, in particular, Anthony Celani and Nita Chhinzer. I would also like to thank Carolyn Colwell for her administrative assistance during the course of my studies.

Finally, I would like to thank all my family members and friends for their encouragement and support.

Thanks to all of those I have mentioned and anyone whom I have inadvertently forgotten!

DEDICATION

This dissertation is dedicated to my parents, my wife Ula, my son Ismail, and my daughter Jude for their love, support, and patience during the course of my studies.

This thesis is also dedicated to the memory of my father, Ismail Mousa Ababneh, my nephew, Ghaith Shawkat Ababneh, and a dearest boy, Adam Masadeh. Three of them passed away shortly before the completion of this thesis.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION
1.1. Statement of the Research Problem 1
1.2. Research Objectives
1.3. Significance of the Research
1.4. Organization of the Thesis
CHAPTER 2: REVIEW OF THE LITERATURE
2.1. Overview of the Literature on "Explanations" 10
2.1.1. Conceptual Background on Explanations 10
2.1.2. The Effects of Explanations in a Selection and Nonselection Context
2.1.3. Empirical Research on Why Explanations Influence Applicant Reactions 14
2.2. Overview of Job Applicant Reactions Research
2.2.1. Overview of Gilliland's Model of Applicant Reactions
2.3. Overview of Attributions Research within Staffing Context
2.3.1. Overview of Applicant Reactions Attribution Theory (AART)
CHAPTER 3: RESEARCH MODEL & HYPOTHESES
3.1. Proposed Research Model and Variables
3.2. Research Hypotheses
3.2.1. The Influence of Procedural Justice Rules on Applicant Attributions
3.2.2. The Influence of the Selection Decision on Applicant Attributions
3.2.3. The Influence of Explanations on Applicant Attributions
3.2.4. The Interactive Effect of Explanations and Perceived Satisfaction/Violation of
Justice Rules on Overall Process Fairness Perceptions
3.2.5. The Impact of Explanations and Selection Decisions on Self-Perceptions 44
3.2.6. The Influence of Explanations on Applicant Attitudes and Behavioural
Intentions
3.2.7. The Influence of Procedural Justice Rules and Attributions on Overall Process
Fairness Perceptions

3.2.8. The Influence of Overall Process Fairness Perceptions and Attributions on
Applicant Attitudes and Behavioural Intentions
3.2.9. The Impact of Procedural Fairness, Selection Decision, and Attributions on
Self-Perceptions
CHAPTER 4: METHODOLOGY & RESULTS 58
4.1. Participants
4.2. Design
4.3. Procedures
4.4. Measures
4.5. Results
4.5.1. Preliminary Data Analysis Results
4.5.2. Manipulation Checks
4.5.3. Results of Hypotheses Testing
4.5.3.1. The Influence of Procedural Justice Rules on Applicant Attributions . 70
4.5.3.2. The Influence of the Selection Decision on Applicant Attributions 71
4.5.3.3. The Influence of Explanations on Applicant Attributions
4.5.3.4. The Interactive Effect of Explanations and Perceived Satisfaction/
Violation of Justice Rules on Overall Process Fairness Perceptions 73
4.5.3.5. The Impact of Explanations and Selection Decisions on Self-
Perceptions75
4.5.3.6. The Influence of Explanations on Applicant Attitudes and Behavioural
Intentions76
4.5.3.7. The Influence of Procedural Justice Rules and Attributions on Overall
Process Fairness Perceptions
4.5.3.8. The Influence of Process Fairness Perceptions and Attributions on
Applicant Attitudes and Behavioural Intentions
4.5.3.9. The Interactive Effect of Procedural Fairness and Selection Decision on
Self-Perceptions

4.5.3.10. The Interactive Effect of Selection Decision and Attributions on Self-
Perceptions
4.5.3.11. The Role of Attributions in Mediating the Interactive Effect of
Selection Decision and Procedural Fairness on Self-Perceptions 88
CHAPTER 5: DISCUSSION
5.1. Key Findings
5.1.1. The Influence of Procedural Justice Rules, Outcome Favourability, and
Explanations on Attributions
5.1.2. The Relationship between Procedural Justice Rules, Attributions, and Overall
Process Fairness Perceptions
5.1.3. The Role of Attributions in Mediating the Interactive Effect of Selection
Decision and Procedural Fairness on Self-Perceptions
5.1.4. The Direct and Indirect Effects of Attributions on Applicant Perceptions and
Behavioural Intentions
5.1.5 The Interaction Effect of Explanations and Procedural Justice Rules on Overall
Process Fairness Perceptions
5.1.6 The Interactive Effect of Outcome Favourability by Types of Explanations on
Self-Perceptions
5.2. Implications for Theory
5.3. Implications for Practice
5.4. Limitations
5.5. Future Research Directions
5.6. Conclusion 113
References

LIST OF TABLES

Table 4.1: Means, Standard Deviations, Alpha Reliabilities, and Correlations for the
Major Variables
Table 4.2: Means and Standard Deviations for Attribution Dimensions by Perceived
Satisfaction/Violation of Justice Rules
Table 4.3: Means and Standard Deviations for Attribution Dimensions by Selection
Decision
Table 4.4: Means and Standard Deviations for Attribution Dimensions by Types of
Explanations129
Table 4.5: Means and Standard Deviations for Organizational Perceptions,
Recommendation Intentions, Reapplication Intentions, Job Acceptance
Intentions, and Litigation Intentions by Explanations Types 130
Table 4.6: Results of Mediation Regression Analyses for Testing the Mediating Role
of Attributions in the Relationship between Perceived
Satisfaction/Violation of Justice Rules and Process Fairness (Hypotheses
14a-14d)131
Table 4.7: Results of Mediation Regression Analyses for Testing the Mediating Role
of Process Fairness in the Relationship between Locus Attribution and
Organizational Perceptions, Recommendation Intentions, Litigation
Intentions, Job Acceptance Intentions, and Reapplication Intentions
(Hypotheses 19a-19e)
Table 4.8: Results of Mediation Regression Analyses for Testing the Mediating Role
of Process Fairness in the Relationship between Personal Control
Attribution and Organizational Perceptions, Recommendation Intentions,
Litigation Intentions, Job Acceptance Intentions, and Reapplication
Intentions (Hypotheses 20a-20e)
Table 4.9: Results of Mediation Regression Analyses for Testing the Mediating Role
of Process Fairness in the Relationship between Stability Attribution and

Organizational Perceptions, Recommendation Intentions, Litigation
Intentions, Job Acceptance Intentions, and Reapplication Intentions
(Hypotheses 21a-21e)
Table 4.10: Results of Mediation Regression Analyses for Testing the Mediating Role
of Process Fairness in the Relationship between External Control
Attribution and Organizational Perceptions, Recommendation Intentions,
Litigation Intentions, Job Acceptance Intentions, and Reapplication
Intentions (Hypotheses 22a-22e)
Table 4.11: The Effect of Selection Decision and Interview Fairness on Self-
Perceptions137
Table 4.12: Results of Regression Analysis Testing for Interaction between Selection
Decision and Locus Attribution on Self-Perceptions (Hypothesis 24a). 137
Table 4.13: Results of Regression Analysis Testing for Interaction between Selection
Decision and Personal Control Attribution on Self-Perceptions
(Hypothesis 24b)
Table 4.14: Results of Regression Analysis Testing for Interaction between Selection
Decision and Stability Attribution on Self-Perceptions (Hypothesis 24c)
Table 4.15: Results of Regression Analysis Testing for Interaction between Selection
Decision and External Control Attribution on Self-Perceptions
(Hypothesis 24d)140
Table 4.16: The Role of the Interactive Effect of Selection Decision and Locus
Attribution in Mediating the Interactive Effect of the Selection Decision
and Procedural Fariness on Self-Perceptions
Table 4.17: The Role of the Interactive Effect of Selection Decision and Personal
Control Attribution in Mediating the Interactive Effect of the Selection
Decision and Procedural Fariness on Self-Perceptions

Table 4.18: The Role of the Interactive Effect of Selection Decision and Stability
Attribution in Mediating the Interactive Effect of the Selection Decision
and Procedural Fariness on Self-Perceptions
Table 4.19: The Role of the Interactive Effect of Selection Decision and External
Control Attribution in Mediating the Interactive Effect of the Selection
Decision and Procedural Fariness on Self-Perceptions
Table 4.20: Analysis of Simple Effects for Hypothesis 25a with Locus as the
Moderator145
Table 4.21: Analysis of Simple Effects for Hypothesis 25b with Personal Control as
the Moderator146
Table 4.22: Summarized Results of Hypotheses 147

LIST OF FIGURES

Figure 3.1: Applicant Attribution Reaction Theory 153
Figure 3.2: The Role of Attribution and Justice in Understanding Applicant Reactions
Figure 3.3: The Interactive Effect of Explanations and Perceived Satisfaction/
Violation of Justice Rules on Overall Process Fairness Perceptions (H7a –
H8b)
Figure 3.4: The Interactive Effect of Explanations and Selection Decision on Self-
Perceptions (H9 – H10)
Figure 3.5: The Influence of Procedural Justice Rules and Attributions on Overall
Process Fairness Perceptions (H14a – H14d) 157
Figure 3.6: The Influence of Attributions and Overall Process Fairness perceptions on
Attitudes and Behavioural Intentions (H19a – H22e)
Figure 3.7: The Impact of Procedural Fairness and Selection Decision on Self-
Perceptions (H23a – H23b)
Figure 3.8: The Interactive Effect of Selection Decision and Attributions on Self-
Perceptions (H24a – H24d) 160
Figure 4.1: Perceived Satisfaction/Violation of Justice Rules by Explanation Type
Interaction on Overall Process Fairness Perceptions
Figure 4.2: Selection Decision by Explanation Types Interaction on Self-Perceptions
Figure 4.3: Selection Decision by Interview Procedural Fairness Interaction on Self-
Perceptions163
Figure 4.4: Locus Attribution by Selection Decision Interaction on Self-Perceptions
Figure 4.5: Personal Control Attribution by Selection Decision Interaction on Self-
Perceptions 165
Figure 4.6: Example of a Basic Mediated Model

LIST OF FIGURES

Appendix A: Conditions of the Study	167
Appendix B: Types of Interview Procedures	168
Appendix C: Types of Explanation Letters.	170
Appendix D: Scale Items	178
Appendix E: Demographic and Other Related Questions	182

CHAPTER 1: INTRODUCTION

1.1. Statement of the Research Problem

Prior to 1990, most of the research in the personnel selection realm focused on understanding the staffing process (i.e., recruitment and selection) from the perspective of the organization. Specifically, this research examined mostly psychometric characteristics of selection methods (e.g., reliability and validity), utility of different selection methods, predictors of job applicant attraction, and the adverse impact of selection procedures/tools on designated minority group members such as women and African Americans (see Breaugh & Starke, 2000; Ployhart & Holtz, 2008; Ryan & Tippins, 2004; Salgado, Viswesvaran, & Ones, 2003; Schmidt & Hunter, 1998). However, over the last two decades, there has been a growing body of research focusing on *applicant reactions*, which examines the cognitions, attitudes, affect, intentions, and behaviours of applicants toward the staffing process (Anderson, Born, & Cunningham-Snell, 2001; Gilliland, 1993; Hausknecht, Day, & Thomas, 2004; Ryan & Ployhart, 2000).

Several considerations have contributed to the increasing body of research on applicant reactions (Gilliland, 1993; Hausknecht et al., 2004; Macan, Avedon, Paese, & Smith, 1994; Ryan & Ployhart, 2000). First, applicant reactions to the staffing process have been theoretically suggested (Gilliland, 1993) and empirically demonstrated (Hausknecht et al. 2004; Ryan & Ployhart, 2000) to influence the ability of an organization to attract job applicants. Second, selection procedures and outcomes that are perceived negatively by applicants are more likely to influence applicant job pursuit and

acceptance decisions, which affect the utility of the selection process. Third, applicant perceptions of selection procedures and outcomes can influence applicant decisions to reapply to other jobs with an organization and to recommend the organization to other potential applicants. Fourth, negative applicant perceptions of selection procedures and outcomes may influence applicant intentions and behaviours to file complaints and to pursue litigation against employers (Cascio, 1991; Gilliland, 1993). Fifth, applicant perceptions of selection procedures and outcomes influence self-perceptions such as self-esteem and self-efficacy, which in turn may influence applicant behaviours such as job search activities (Gilliland, 1993; Hausknecht et al., 2004; Ryan & Ployhart, 2000).

Because of the importance of studying job applicant reactions, several models have been put forward to understand this emerging research area (e.g., Arvey, Strickland, Drauden, & Martin, 1990; Gilliland, 1993; Ployhart & Harold, 2004). However, most of the empirical research conducted in this area has used Gilliland's (1993) organizational justice model (e.g., Bauer et al., 2001; Hausknecht et al., 2004; Ryan & Ployhart, 2000). To develop his model, Gilliland (1993) drew on the organizational justice literature (e.g., Bies & Moag, 1986; Greenberg, 1986; Leventhal, 1980). The main premise of Gilliland's (1993) model is that the perceived fairness of selection procedures and perceived fairness of selection outcomes (e.g., selected or rejected from a job) determine applicant perceptions, attitudes, and behaviours. More discussion of Gilliland's (1993) model is presented in Chapter 2.

Though researchers suggest that applicant attributions are likely to influence and explain applicant perceptions and behavioural reactions, applicant attributions in a job

selection context are not well understood (Anderson et al., 2001; Brockner et al., 2003; Hausknecht et al., 2004; Ployhart and Harold, 2004; Ployhart & Ryan, 1997; Schroth & Shah, 2000). To stimulate more research on applicant attributions, Ployhart and Harold (2004) have recently proposed a new theory called the Applicant Attribution-Reaction Theory (AART). They argue that although prior conceptualizations of applicant reactions (e.g., Arvey et al., 1990; Gilliland, 1993) "have been invaluable for enhancing our understanding of the consequences of applicant perceptions and reactions *they* are insufficient for providing a strong psychological explanation of how applicant perceptions are formed, and why they produce various affective, behavioural, and cognitive consequences" (Ployhart & Harold, 2004, p. 84). Furthermore, these researchers contend that having an answer for the "why question" is what will lead to a "deeper understanding of the nature and consequences of applicant reactions" and contribute to advancing theory and practice (Ployhart & Harold, 2004, p. 84). Therefore, in this research, I draw upon AART to shed more light on a number of issues in the area of applicant reactions.

An important area of research that has received attention within applicant reactions research is the influence of providing explanations to job applicants. Research in this area has demonstrated that providing job applicants an explanation of why a selection procedure is being used or why a particular hiring decision is being made can influence their perceptions, attitudes, and behaviours (e.g., Gilliland, 1994; Horvath, Ryan, & Stierwalt, 2000; LaHuis, Perreault, & Ferguson, 2003; Ployhart, Ryan, & Bennett, 1999; Truxillo, Bauer, Campion, & Paronto, 2002). Moreover, a number of

studies have shown that providing explanations for selection procedures and decisions can simultaneously enhance some applicant perceptions such as process fairness (i.e., perceived fairness of the selection procedures) and reduce some other applicant perceptions such as self-perceptions (e.g., self-esteem; self-efficacy) depending on the selection outcome and type of explanations provided (Gilliland, 1994; Ployhart et al., 1999; Schroth & Shah, 2000).

Although research on the influence of providing applicants with explanations for selection procedures and outcomes has increased our understanding of applicant attitudinal, perceptual and behavioural reactions to such information, this research is limited in some respects. Firstly, few studies have examined and explained *why* different types of explanations have different effects on applicant reactions (e.g., Gilliland et al., 2001; LaHuis et al., 2003; Ployhart, Ehrhart, & Hayes, 2005). Secondly, although research has examined how and why different explanations influence certain applicant reactions (e.g., process fairness), it has yet to examine this influence on other applicant reactions, such as intentions to litigate or to accept a job offer (Truxillo et al., 2002).

Thirdly, a common limitation of the research on applicant reactions and the research on providing explanations is the paucity of studies that have applied attribution theory principles. This paucity is surprising given the fact that research from selection and nonselection contexts has suggested the importance of attributions in determining and explaining people's attitudes and behaviours (Brockner, 2002; Forsterling, 2001; Martinko, Douglas, & Harvey, 2006; Ployhart & Ryan, 1997; Schroth & Shah, 2000; Weiner, 1985, 1986). For example, prior research uncovered an interaction effect

between procedural fairness and outcome favorability on self-perceptions such that when individuals experience fair selection procedures and receive a negative outcome (e.g., a job rejection) they report lower self-perceptions than individuals who experience unfair selection procedures and receive a negative outcome (Holmvall & Bobocel, 2008; Schroth & Shah, 2000). Research also shows that when individuals experience unfair procedures and receive a positive outcome (e.g., a job offer), they report lower selfperceptions than individuals who experience fair procedures and receive a positive outcome (Brockner et al., 2003; Gilliland, 1994; Ployhart et al., 1999; Schroth & Shah, 2000). A considerable amount of this research suggests that applicant attributions account for this interaction effect (Brockner, 2002; Brockner et al., 2003; Gilliland, 1993; Ployhart & Harold, 2004; Van den Bos et al., 1999); however, the role of attribution in explaining the above interaction has not been fully understood in a job selection context. Hence, further research investigating the role of attribution in predicting and explaining job applicant reactions such as the interaction effect discussed above is needed.

1.2. Research Objectives

This research has two main objectives. The first is to draw upon AART propositions to examine the role of attributions in forming applicant perceptions (e.g., procedural fairness), attitudes (e.g., organizational attractiveness) and behavioural consequences (e.g., job acceptance). In contrast to the organizational justice framework (e.g., Gilliland, 1993; Schmitt & Gilliland, 1992) wherein fairness perceptions are considered as the primary determinants of applicant reactions, AART proposes that applicant perceptions, (including fairness perceptions) and behavioural consequences are

directly influenced by applicant attributions. Stated plainly, AART (Ployhart & Harold, 2004) substitutes perceptions of fairness as the main determinants of applicant perceptions and behaviours with applicant attributions. AART also posits that fairness perceptions and self-perceptions partially mediate the relationship between attribution dimensions and behavioural reactions. Ployhart and Harold (2004, p. 85) furthermore argue that the key constructs proposed in applicant reactions research such as fairness perceptions (e.g., Gilliland, 1993) "carry little explanatory power" of how applicant perceptions are formed and why they generate varied affective, behavioural, and cognitive consequences.

The second main objective of the current research is to enhance understanding of how and why explanations provided to job applicants have varied effects on applicant perceptions and behaviours. Building on AART propositions and findings of research on applicant reactions, this thesis examines when and why three types of explanations provided to justify a particular hiring decision have different effects on applicant perceptions, attitudes, and behaviours. These three types of explanations are "procedural", "personal" and "diversity".¹ Ployhart et al. (1999) noted that these three types of explanations are information-based. That is, they differ among each other based on the type of information provided. Brief definitions of these three types of explanations are provided in the following paragraph.

¹ These types of explanations are almost the same as those suggested by other researchers (Bies, 1997; Gilliland et al, 2001), but with different labels.

Procedural explanations provide applicants with information about the reliability, validity and/or fairness of selection procedures used to reach a selection decision. In a selection context, an example of a procedural explanation is an organization informing applicants that the selection methods (e.g., work sample test, or interview) used to arrive at a selection decision are "proven" indicators of an applicant's future job performance. *Personal explanations* provide applicants with *personal reasons* for a selection decision. An example is an organization informing a job applicant that his/her qualifications and/or performance on the selection tests are higher (lower) than those of the rejected (selected) applicants. Finally, *diversity explanations* provide applicants with information to justify a particular selection decision in terms of workforce diversity (Ployhart et al., 1999). An example of this type of explanation is an organization informing job applicants that it is striving to increase diversity in its workforce based on gender, race, or nationality to ensure that its workforce is more reflective of its population (Bobocel & Farrell, 1996; Ployhart et al., 1999).

1.3. Significance of the Research

Investigating the role of attributions in understanding job applicant reactions is essential from both theoretical and practical perspectives. Theoretically, a considerable amount of research suggests that applicant attributions are fundamental to the formation of fairness perceptions, self-perceptions, and behavioural consequences (e.g., Brockner, 2002; Cropanzano, Byrne, Bobocel, & Rupp, 2001; Gilliland, 1994; Ployhart & Ryan, 1997; Ployhart et al., 1999; Schroth & Shah, 2000). However, few studies have directly examined this in a job selection context. Thus, this research seeks to provide further

insights into the role of attributions as a psychological mechanism connecting the perceptions of violating (satisfying) the selection justice rules (e.g., consistency of administration) with subsequent applicant perceptions (e.g., fairness perceptions) and behavioural reactions (e.g., job acceptance). For instance, explicit investigation of the role of attributions during a staffing process is likely to enhance our understanding of how and why explanations provided to job applicants generate varied effects on applicant perceptions and behaviours. In addition, this thesis seeks to simultaneously test propositions from AART (Ployhart & Harold, 2004) and Gilliland's (1993) organizational justice model. Doing so will provide a better basis for evaluating the role of each framework in understanding applicant reactions.

Practically, using attributions and justice principles to investigate the consequences of selection procedures and decisions on applicant reactions is likely to enhance an organization's ability to generate perceptions and behaviours among applicants that are favourable to themselves and the recruiting organization. For example, if the current research finds that AART can help explain the effects of justice procedures and why explanations have different effects on applicant reactions, then organizations could use this framework to enhance applicant experiences with the selection process, thereby potentially increasing job acceptance rates and reducing litigation.

1.4. Organization of the Thesis

This thesis consists of five chapters. The first chapter introduces the problem statement and explicates the significance and objectives of this research. Chapter 2 reviews the literature and the theoretical frameworks pertinent to this research, while

Chapter 3 presents the research model and the hypotheses. The fourth chapter presents the research methodology, data analysis, and the results from the data analysis. Finally, Chapter 5 offers the discussion, contributions, limitations, and future research directions.

CHAPTER 2: REVIEW OF THE LITERATURE

In this chapter, three streams of literature pertinent to the current research are reviewed. The first is the literature on explanations; the second is the literature on job applicant reactions; and the third is the literature on attributions in a staffing context. Two important points should be noted about this chapter. First, this review is not intended to provide thorough coverage of the literature on explanations, applicant reactions, and attributions, but rather an overview of the studies that will provide the basis for the proposed model and hypotheses. Second, although I review these streams of literature independently, it is important to recognize that they are closely related.

2.1. Overview of the Literature on "Explanations"

This overview is divided into two parts. In the first, a brief conceptual background on explanations is outlined. Then, empirical findings on the impact of explanations in selection and nonselection contexts are reviewed. In the second part, empirical research aimed at explaining why explanations influence applicant perceptions and behaviours are reviewed.

2.1.1. Conceptual Background on Explanations

Shaw, Wild, and Colquitt (2003) indicate that the academic research on explanations was most likely prompted by Scott and Lyman's (1968) work in sociology and rejuvenated by the work of Bies and Moag (1987; 1986) in an organizational context. Scott and Lyman (1968, p. 46) defined an explanation (also referred to as an "account") as "a statement made by a social actor to explain unanticipated or untoward behavior". In their typology, Scott and Lyman (1968) proposed two types of accounts. The first of which is an *excuse* (referred to as "causal" account by Bies, 1987). An example of this in a selection setting would be an interviewer denying responsibility for a negative event such as asking a biased question (e.g., I am following an interview protocol imposed by management) but acknowledging that the event was inappropriate and should not have occurred. The second type of account is referred to as a *justification*. Here, the employer admits responsibility but refutes that an event that is perceived by a job applicant as "negative" is inappropriate (e.g., affirmative action hiring).

Adapting Snyder, Higgins, and Stucky's (1983) framework, Bies (1987) refined Scott and Lyman's typology and offered four main types of explanations (accounts) that can be used within an organizational context, including employee selection. The four types of explanations are: (1) *ideological*, which reframes the action or the outcome in a way that legitimizes the action or makes it less likely to conflict with the recipient's values or goals; (2) *referential*, which compares one's treatment or outcome to those of others; (3) *causal*, which provides an explanation for the action aimed at reducing the perceived responsibility of the agent of the action/decision; and (4) *penitential*, which offers an apology intended to persuade the recipient that the perceived unjust action is atypical of the decision maker.

Gilliland's (1993) model divides explanations into two categories based on their timing: (a) explanations provided before a hiring decision is made and (b) explanations provided after a hiring decision is made (Gilliland, 1993). The first category of Gilliland's classifications focuses mainly on the provision of information regarding the

reliability, validity, fairness of selection procedures/methods, and/or how and why specific selection procedures/methods are used in the selection process (Gilliland, 1994; Horvath et al., 2000). The second category focuses on the provision of explanations that aim to justify or explain why a selection decision has been made (Gilliland et al., 2001; Ployhart et al., 1999). Although explanations can be categorized in several ways as outlined above, these categorizations are not mutually exclusive.

2.1.2. The Effects of Explanations in a Selection and Nonselection Context

A considerable number of studies from different contexts have demonstrated that providing explanations regarding decision outcomes and/or processes generally mitigates negative reactions to unfavourable outcomes (e.g., Bies & Shapiro, 1988; Greenberg, 1993), improves perceptions of fairness (e.g., Bies & Shapiro, 1988; Gilliland & Beckstein, 1996; Shapiro, 1991) and positively influences individual behaviours (e.g., Bies, 1987; Sitkin & Bies, 1993). These results have been established with respect to employee discipline (Cole, 2008) organizational change (e.g., Rousseau & Tijoriwala, 1999), smoking bans (e.g., Greenberg, 1994), journal editorial decisions (e.g.,Gilliland & Beckstein, 1996), sex-based promotion (e.g., Bobocel & Farrell, 1996), layoff decisions (e.g., Brockner, Dewitt, Grover, & Reed, 1990), and underpayment (e.g., Greenberg, 1990a).

However, research has demonstrated that the influence of explanations is much more complex than the frequently positive effects reported by most early research (Bies, Shapiro, & Cummings, 1988; Brockner, 2002; Gilliland et al., 2001; Horvath et al., 2000; Ployhart et al., 1999; Shapiro, 1991). For example, Bies et al. (1988) noted that providing

explanations alone is not sufficient for producing favourable reactions or for minimizing negative perceptions. Specifically, they showed that the adequacy and sensitivity of explanations are vital to an explanation's effectiveness. *Adequacy* refers to the degree to which an explanation is accurate, sufficient, logical, clear, and/or objective. *Sensitivity* reflects the way in which an explanation is conveyed (e.g., high or low respect/sympathy) (Greenberg, 1990b; Ployhart et al., 1999; Shapiro, Buttner, & Barry, 1994).

Research from the applicant reactions literature (e.g., Horvath et al., 2000; Ployhart et al., 1999; Truxillo et al., 2002) has also found that providing explanations may simultaneously produce different effects (i.e., positive, negative, or no effect) depending on the type/content of the explanation (e.g., procedural, personal, justification), outcome favorability (e.g., rejected, accepted), and the dependent variables examined (e.g., process fairness, self-efficacy, organizational attractiveness). For example, research on applicant reactions has shown that although providing explanations that highlight the fairness of selection procedures can improve perceptions of process fairness for rejected applicants (e.g., Ployhart et al., 1999; Schroth & Shah, 2000), it also can damage their self-perceptions such as self-efficacy and self-esteem (e.g., Gilliland, 1994; Ployhart et al., 1999). Furthermore, Ployhart et al. (1999) report that participants who received a diversity explanation held the lowest process fairness perceptions relative to participants who received a personal explanation, procedural explanation, or no explanation. The reasons for these differential effects of explanations are not well understood. Below, I review empirical studies that attempted to explain why explanations influence applicant reactions.

2.1.3. Empirical Research on Why Explanations Influence Applicant Reactions

Only recently has research examined *why* explanations influence a variety of applicant perceptions and behaviours (Gilliland et al., 2001; Ployhart et al., 2005). This recent research has used concepts of fairness theory (FT, Folger & Cropanzano, 1998) and Kelley's (1967, 1972) covariation model of attribution.

"Fairness theory" (hereafter referred to as simply "FT"; Folger & Cropanzano, 1998) is an extension of referent cognitions theory (Folger, 1986). It proposes that negative events (e.g., receiving a job rejection) prompt individuals to spontaneously engage in "counterfactual" reasoning in order to understand and evaluate the negative events (Roese, 1997). Through this counterfactual reasoning, individuals compare what actually took place to what might have been by forming three types of counterfactuals, referred to within FT (Folger & Cropanzano, 1998) *as "Would", "Could", and "Should"*.

"Would counterfactuals" refer to alternative situations against which the perceived negative event, such as a job rejection, is compared. For example, in a selection context a rejected applicant might imagine another situation in which he/she *would* have perhaps received a job offer. *"Could counterfactuals"* contrast what the decision maker did to what the decision maker *could* have done. Stated differently *"Could counterfactuals"* deal with the degree to which a decision maker has control over the negative events. *"Should counterfactuals"* contrast what the decision maker did to what *should* have been done in accordance with moral codes and acceptable selection standards (e.g., used unfair instead of fair procedures).

FT (Folger & Cropanzano, 1998) suggests that individuals will react negatively to an unfavourable outcome if they are able to: (a) imagine an alternative with a more positive or less negative outcome; (b) identify a violation of ethical or professional standards responsible for the negative outcome; and/or (c) hold the decision maker accountable for the outcome. Furthermore, FT posits that people will react most negatively to unfavourable events if they are able to generate "*Would counterfactuals*" and at the same time are able to generate "*Could counterfactuals*" and/or "*Should counterfactuals*".

Using propositions from FT, Gilliland et al. (2001, Study 1 & 3) developed explanation scenarios and communicated them through job rejection letters to examine whether reductions in generating counterfactuals could enhance applicant perceptions of fairness and organizational attractiveness. These scenarios were labelled: "*Would reducing explanations*" intended to reduce the likelihood of rejected applicants generating "*Would counterfactuals*" (e.g. by providing information about the superior qualifications of applicants receiving job offers); "*Should reducing explanations*" intended to reduce the likelihood of rejected applicants generating "*Should counterfactuals*" (e.g. by highlighting the appropriateness of selection procedures); and "*Could* reducing explanations" intended to reduce the likelihood of rejected applicants generating "*Could counterfactuals*" (e.g. by offering external conditions, such as budgetary cutbacks, as influencing selection decisions).

Gilliland et al.'s (2001) research provided valuable support for the predictions of FT. For example, "*Would reducing explanations*" and "*Could reducing explanations*"

lowered applicant perceptions of unfairness and increased their intentions to recommend the organization to others. This research also found that combining the "*Would*" and "*Should*" reducing explanations was more effective in improving perceptions of fairness and increasing the likelihood of applicants recommending the employer to others as compared to when no explanation or only one explanation was offered. Combining all three types of explanations did not provide results different from those obtained when only two explanations (e.g., "*Would*" and "*Should*") were used in combination. In their field study, Gilliland et al. (2001, Study 2) also demonstrated that providing rejected applicants with a "*Could reducing explanation*" increased applicant actual recommendations and reapplication behaviours.

However, Ployhart et al. (2005) noted that although FT (Folger & Cropanzano, 1998) is helpful in understanding individual perceptions of, and reactions to, *negative* events, it is less useful in understanding perceptions and reactions resulting from *positive* outcomes. This limitation is an important one since prior research on applicant reactions (e.g., Horvath et al., 2000; Ployhart et al., 1999) has shown that explanations may simultaneously lead to a positive influence on some perceptions and a negative influence on others depending on the selection outcome (i.e., selected/rejected) and type of explanations provided. That is one of the reasons why Ployhart et al. (2005) recommended and applied Kelley's (1967,1972) covariation model of attribution as an aid to better understanding the effects of explanations on applicants' reactions.

Kelley's covariation model (1967, 1972) proposes that *consensus*, *distinctiveness*, and consistency cues (pieces of information) influence whether the cause of an event

(e.g., job rejection) is perceived to result from causes that are internal (e.g., ability) or external to individuals (e.g., biased selection procedures, low selection ratio). A *consensus* cue indicates the degree to which an individual's behaviour or outcome is similar to that for other individuals. A *distinctiveness* cue indicates whether the outcome or treatment that an individual receives is unique to a specific situation. Finally, a *consistency* cue reflects how one's behaviour, treatment, or outcome is consistent over time. Kelley's model suggests that when information cues regarding an event (such as a job offer/rejection) convey low consensus, low distinctiveness, and high consistency, individuals are more likely to make internal (dispositional) attributions. On the other hand, they are more likely to make external (situational) attributions when the perceptions of consensus, distinctiveness and consistency are high.

Ployhart et al. (2005) adapted Kelley's (1967,1972) covariation model of attribution to understand the effects of explanations on students applying to secure admission to a university program. Specifically, they examined the effect of the information cues conveyed in the explanation letters on applicant locus of causality attributions, self-perceptions, fairness perceptions, and organizational attractiveness. To facilitate the presentation of Ployhart et al.'s (2005) findings, the following paragraph illustrates how they operationalized the three informational elements (i.e., consensus, distinctiveness and consistency) of Kelley's covariation model in their research.

For a selected or a rejected applicant, *consensus* refers to the extent to which other applicants receive the same outcome. For a *rejected* (selected) applicant, high consensus means most of the other applicants were rejected (selected) and low consensus means

most of the other applicants were selected (rejected). Clearly, the same information can result in perceptions of either high or low consensus depending on the applicant's outcome (i.e., selected or rejected). *Distinctiveness* refers to the extent to which the selection procedures used by an organization are similar to or distinct from those used by other organizations. High distinctiveness refers to a situation in which an organization is using selection procedures that are distinct from other organizations. In contrast, low distinctiveness refers to a situation in which an organization procedures that are similar to other organizations. *Consistency* refers to the extent to which the same selection procedures are used by an organization from year to year. High consistency refers to a situation in which an organization procedures from one year to the next. In contrast, low consistency refers to a situation in which an organization uses *different* selection procedures from one year to the next.

In line with Kelley's model, Ployhart et al. (2005) found that when both selected and rejected applicants received explanations that conveyed low consensus, low distinctiveness, and high consistency information, internal attributions were made for the selection decision. However, in contrast to what Kelley's model would predict, explanations that conveyed high consensus, high distinctiveness, and high consistency information did not result in external attributions for the hiring decision for either selected or rejected applicants. Ployhart et al. (2005) suggested that the participant's past experience and self-efficacy may account for these unexpected findings. With respect to process fairness perceptions, these researchers also found that individuals who received information that conveyed high consensus, high consistency, and low distinctiveness cues

produced higher process fairness perceptions than those who received the other combinations of covariation information. Moreover, Ployhart et al. (2005) showed that providing rejected applicants with high consensus information can enhance perceptions of the self and the organization. Yet, the same information reduces self-perceptions for selected applicants. Selected applicants who received low consensus information reported higher perceptions of self and of the organization than did rejected applicants who received the same information. Both distinctiveness and consistency cues accentuate the pattern of the relationships stated above (i.e., the impact of the high/low consensus information on the perceptions of self and of the organization).

Although these studies (Gilliland et al., 2001; Ployhart et al., 2005) and the theory on which they are founded (Folger & Cropanzano, 1998; Kelley, 1967; Kelley, 1972) have advanced our understanding of how and why explanations affect applicant perceptions and behaviours, AART offers an alternative and more comprehensive approach to examining and understanding the influence of explanations on applicant reactions (Ployhart & Harold, 2004).

2.2. Overview of Job Applicant Reactions Research

Reviewing the research on applicant reactions, Ryan and Ployhart (2000) identified two prevailing streams of research emerging from this literature. The first explored how test perceptions relate to test performance, prompted by Arvey et al.'s (1990) demonstration that applicant motivations, attitudes, and perceptions of employment tests (e.g., job relatedness, face validity) are associated with applicant test performance. Arvey et al. (1990) also uncovered that the differences in performance

between racial groups on cognitive ability tests were due partly to differences in test perceptions and motivations. Likewise, Chan (1997) showed that African Americans, as compared to their white Caucasian counterparts, perceived cognitive ability tests to have lower predictive validity while no such differences were observed for personality inventories. Furthermore, Chan, Schmitt, DeShon, Clause, and Delbridge (1997) found that applicants perceiving a test to have low face validity were less motivated to do well in the test, thereby resulting in lower test performance compared to those perceiving the test to have high face validity. Other researchers have also conducted studies related to this stream and demonstrated the importance of paying attention to the impact of individual differences on applicant perceptions and test performance. To enhance research in this area, researchers have developed multidimensional and theory-driven measures of test motivations and perceptions (McCarthy & Goffin, 2004; Sackett & Lievens, 2008, Sanchez, Truxillo, & Bauer, 2000).

The second of the two prevailing streams of research on applicant reactions employs the organizational justice framework (e.g., Gilliland, 1993; Schmitt & Gilliland, 1992) and focuses primarily on understanding the antecedents and consequences of applicant perceptions of the fairness of selection systems. Since Gilliland's (1993) organizational justice model is the most widely accepted and subscribed model in applicant reactions research (e.g., Bauer et al., 2001; Hausknecht et al., 2004; Ryan & Ployhart, 2000), the next section introduces an overview of this model.

2.2.1. Overview of Gilliland's Model of Applicant Reactions

Gilliland's (1993) model of applicant reactions is developed based on the organizational justice literature (e.g., Bies & Moag, 1986; Greenberg, 1986; Leventhal, 1980). The model consists of four key parts: (a) situational and personal conditions, (b) procedural and distributive justice rules, (c) overall fairness perceptions, and (d) organizational and individual outcomes. Situational and personal conditions such as test type, human resource policy, and behaviours of human resource personnel influence the degree to which rules of procedural and distributive justice consist of three categories: (a) the formal features of selection method rules (job relatedness, opportunity to perform, consistency of administration), (b) explanation rules (feedback, selection information, honesty) and (c) interpersonal treatment rules (propriety of questions, two-way communication, and interpersonal effectiveness). Distributive justice consists of three rules: equity, equality, and fulfillment of needs.

The model proposes that rules of procedural justice directly influence the overall perceived fairness of the selection process, while rules of distributive justice directly influence the overall perceived fairness of the selection decisions. The model also predicts that procedural justice rules moderate the effect of distributive justice rules on overall outcome fairness perceptions; while distributive justice rules moderate the effects of procedural justice rules on the overall process fairness perceptions.

Gilliland's (1993) model also proposes that overall fairness perceptions of selection processes and outcomes determine: (a) reactions during hiring (e.g., job-

application and job acceptance decisions); (b) reactions after hiring (e.g., job satisfaction); and (c) self-perceptions (e.g., self-esteem, self-efficacy). Overall, Gilliland's model proposes that the relationship between justice rules and applicant reactions is fully mediated by overall fairness perceptions.

Several studies offer findings in line with Gilliland's model predictions. For example, Ployhart and Ryan (1997) found that both rejected and selected applicants generally reported higher favourable process fairness perceptions when they viewed selection procedures as fair and that these perceptions increased when individuals also perceived the selection outcomes as fair. Researchers also found that job relatedness (Schleicher, Venkataramani, Morgeson, & Campion, 2006), opportunity to perform (Truxillo, Bauer, & Sanchez, 2001), and consistency of administration (Bauer, Maertz, Dolen, & Campion, 1998; Ployhart & Ryan, 1998) associated positively with perceptions of overall fairness.

Furthermore, Gilliland (1994) and Bauer et al. (2001) found that applicant perceptions of fairness are positively associated with intentions to recommend the organization to others. Other research has also generated findings along the lines of Gilliland's (1993) model predictions (e.g., Bauer et al., 2006; Gilliland & Beckstein, 1996; Macan et al., 1994). For more detailed discussion of the research that examined Gilliland's model, see Hausknecht et al.'s (2004) meta-analysis and Ryan and Ployhart's (2000) narrative review.

While previous conceptualizations of applicant reactions (e.g., Arvey et al., 1990; Gilliland, 1993) have contributed to our knowledge of the antecedents and consequences
of applicant perceptions and reactions, Ployhart and Harold (2004) argue that these conceptualizations lack a strong psychologically-based explanation of how applicant perceptions are formed and why they generate varied affective, cognitive, and behavioural reactions. To address this, Ployhart and Harold (2004) proposed AART, which integrates the applicant reactions framework from the selection literature with the attributions framework from the social psychological literature. Ployhart and Harold (2004) acknowledge that Gilliland (1993) made general references to applicant attributions, but did not explicitly incorporate them into his model. They also acknowledge that recent justice models (e.g., Folger & Cropanzano, 1998) have begun to pay more attention to understanding the justice judgment process and to explicitly illuminate the role of attribution in this process. A detailed discussion of AART elements, predictions, and significance will be offered following the next section, which reviews research on attributions within a staffing context.

2.3. Overview of Attributions Research within Staffing Context

Attribution is the process through which people assign causes or motives to the events that they encounter (Forsterling, 2001; Martinko et al., 2006; Wong & Weiner, 1981). Central to the general research on attribution theory is the proposition that individuals spontaneously engage in attributional analyses to determine the cause of their and other's events, especially those events that are negative, unexpected, or important (Wong & Weiner, 1981). Attribution researchers have also suggested and demonstrated that the attributions people assign for negative, unexpected, or important events influence

their expectations, affect, cognition and behaviour (Forsterling, 2001; Martinko et al., 2006; Weiner, 1986; Wong & Weiner, 1981).

In a selection context, the principles of attribution theory have been (e.g., Arvey & Campion, 1982; Herriot, 1981; Ployhart & Harold, 2004) applied to understand how applicant attributions influence employer impressions and ratings of job applicants (e.g., Chapman & Webster, 2001; Silvester, 1997; Silvester, Anderson-Gough, Anderson, & Mohamed, 2002; Struthers, Colwill, & Perry, 1992). For example, Silvester (1997) found that job applicants frequently assign causal attributions for events that have negatively impacted them (e.g., failing in a course) during job interview conversations. She also found that "successful" candidates, in contrast to those who were "unsuccessful", more frequently attributed past negative events to more stable and personal causes. These attributions created specific impressions on interviewers. The more applicants attributed past negative events to stable and personal causes, the more favourably they were rated by the interviewers (Silvester, 1997). Based on these findings, Silvester (1997) concludes that interviewers are more likely to select candidates who are less defensive and more willing to assume responsibility for the negative events in their lives.

The general principles of attribution theory have also been applied to understand applicant attributions (and the consequences of these attributions) on their reactions during and after the selection process (e.g., Kluger & Rothstein, 1993; Ployhart et al., 2005; Ployhart, McFarland, & Ryan, 2002; Ployhart & Ryan, 1997; Struthers et al., 1992). Using students playing the role of job applicants, Kluger et al. (1993) demonstrated that test type produces significant effects on applicant locus of failure (i.e.,

whether the cause of failure is perceived to be due to internal or external factors). Specifically, work sample tests received the highest score on the locus cause of failure (i.e., applicants attributed the cause of failure to be more internal) followed by trainability tests, cognitive ability tests, and biographical inventories. However, as noted by Ployhart and Ryan (1997), Kluger and Rothstein (1993) "did not use a comprehensive theoretical attribution framework" (p. 313). Encouragingly, over the last decade, researchers have begun to use more comprehensive attribution frameworks in understanding applicant reactions. For example, Ployhart et al. (2005) used Kelley's (1967,1972) model to understand the effects of explanations on applicants' locus of causality, perceptions of process fairness, and perceptions of the organization.

Weiner's attribution model (1985; 1986) has also attracted the attention of researchers from the staffing area (e.g., Ployhart et al., 2002; Ployhart & Ryan, 1997; Struthers et al., 1992). Weiner's (1985; 1986) model has two main features. The first is that people's causal attributions for any event can be classified into three major causal dimensions: locus, stability, and controllability. *Causal attributions* (also known as specific causes) refer to explanations that specify why an event occurred. Examples of causal attributions that applicants might provide for not receiving a job offer include lack of qualifications, an unfair selection process, a difficult selection process, bad luck, and so on (Martinko, 1995; Russell & McAuley, 1986). *Causal dimensions* (i.e., locus, stability, and controllability) represent the underlying cognitive structure of the causal attributions (Martinko, 1995; Russell & McAuley, 1986). *Locus* indicates whether the cause of an event or treatment is perceived to be due to factors internal (dispositional) or

external (situational) to the individual (e.g., Heider, 1958). *Stability* refers to the degree to which the cause is seen as stable or unstable (Weiner, 1986). *Controllability* refers to one's degree of influence or control over an event (Weiner, 1986). The second main feature of Weiner's model is that *causal attributions* concerning an event are less important than the *causal dimensions* (i.e., locus, stability, and controllability) in determining individual perceptions, intentions, and future behaviours (Kent & Martinko, 1995).

A considerable amount of research from a nonselection context provides results in support of Weiner's model (Forsterling, 2001; Martinko et al., 2006; Weiner, 1986; Wong & Weiner, 1981). For example, within a selection context, Ployhart et al. (2002) applied Weiner's (1985; 1986) model to identify the *causal attributions* (specific causes) that applicants frequently make for withdrawing from a selection process. They also examined the effect of the *causal dimensions* on applicant "reapplication expectancies" (reapplying for the same job with the same organization in the future) and on "general application expectancies" (applying for a similar job with other organizations). To conduct their study, Ployhart et al. (2002) contacted applicants who withdrew from a police officer selection process and asked them to specify the main cause for their withdrawals and then asked them to rate this cause in terms of the locus, stability, and controllability dimensions of attribution (Weiner, 1985, 1986). Participants reported a wide variety of reasons for their withdrawal. However, withdrawing as a result of notbeing able to leave work/school was the most frequent reason (15%); while withdrawing due to family considerations/relocation issues (4%) was the least frequent reason.

Ployhart et al. (2002) also found that minority (African Americans) and female applicants reported different reasons for withdrawing than did majority applicants (White) and male applicants. African American applicants said that they withdrew primarily as a result of changing their minds about the job (18%), while this reason was reported by relatively few White applicants (8%). Nineteen per cent of the women reported changing their minds about being a police officer as the main cause for their withdrawals. In comparison, this cause was reported only by 7% of males. These researchers also found that attributions in term of locus, stability, and controllability accounted for 35% of the variance in applicant specific reapplication expectancies. Applicants who rated the cause of their withdrawal to be high (versus low) on the stable and the controllable dimensions of attributions were significantly less likely to reapply for a police officer position with the same organization. Furthermore, Ployhart et al. (2002) demonstrated an interaction between controllability and race in predicting applicant specific reapplication expectancies. For minority applicants (African Americans), the relationship between controllability and reapplication was positive. However, for majority applicants (White), this relationship was negative. In other words, among those applicants who perceived the cause of their withdrawal as controllable, minority applicants (African Americans) were more likely to reapply than majority applicants (White). However, among those applicants who perceived the cause of their withdrawal as uncontrollable, minority applicants (African Americans) were less likely to reapply than majority applicants (White). Ployhart et al. (2002) suggested that differences in the causal attributions that

each group assigned to their withdrawal decisions may account for the interaction effect between controllability and race.

The above discussion and prior reviews suggest several models that can be drawn upon to understand applicant reactions (see Anderson et al., 2001; Forsterling, 2001; Martinko, 1995; Martinko et al., 2006). However, this thesis focuses mainly on the application of AART (Ployhart & Harold, 2004) because it comprehensively incorporates research and theory from the literature on applicant reactions (e.g., Gilliland, 1993) with research and theory from the social psychological literature on attributions (e.g., Kelley's model, 1967, 1972; Weiner's model, 1986,1985). Also, AART has been specifically advanced to illustrate the role of attributions in explaining and influencing applicant reactions. Finally, AART predictions can be compared with those rooted within an organizational justice framework (e.g. Gilliland's model, 1993). Having reviewed the related literature, I now present the main components and predictions of AART.²

2.3.1. Overview of Applicant Reactions Attribution Theory (AART)

As can be seen from Figure 3.1, AART (Ployhart & Harold, 2004) begins with an objective event, such as completing an employment test, employment interview, or receiving feedback on an interview or hiring decision. In line with previous research from the selection (Ployhart et al., 2005; Ployhart & Ryan, 1997) and nonselection (e.g., Wong and Weiner, 1981) literatures, AART suggests that when applicants experience a staffing

² There are other elements (e.g., individual and cultural differences) that the AART proposes that are not discussed here because they are not central to the current research proposal.

event that is negative, unexpected, and/or significant they are more likely to engage in attributional analysis to determine the cause of the event.

Second, AART differentiates between an objective event (i.e., actual staffing event) and a perceived event (applicant interpretations of the actual staffing event). AART emphasizes this distinction because applicants are more likely to have partial. selective, or poor perceptions of the objective reality of a staffing event (Gilbert & Malone, 1995; Trope, 1986). This occurs mainly because applicants tend to engage in attributional biases such as self-serving bias. Specifically, individuals are prone to engage in self-enhancing attributions under favourable events; and in self-protecting attributions under unfavourable events (Abramson, Seligman, & Teasdale, 1978; Chan, Schmitt, Jennings, Clause, & Delbridge, 1998a; Gilbert & Malone, 1995). Self-serving bias is an attributional "error" that occurs when people overstate responsibility for their favourable outcomes but understate liability for their unfavourable outcomes (Forsterling, 2001; Ployhart & Harold, 2004). For example, after a staffing process, applicants are more likely to engage in self-serving bias by attributing the cause of receiving a job rejection to unfair selection procedures, incompetent interviewers or other external causes, while attributing the cause of receiving a job offer to their own ability, qualifications, or other internal causes.

Third, AART proposes that applicants compare what they perceive from a staffing event to their expectations (i.e. what they consider acceptable selection standards). Here, AART proposes justice rules (Gilliland, 1993; Leventhal, 1980) such as consistency of administrations and job relatedness of the staffing procedures as the main standards that

applicants use to compare what they perceived during a staffing process to what they expected to happen or should have happened.

Fourth, AART predicts that violation/satisfaction of justice rules or applicant expectations during the selection process influence the degree to which the cause of an event is attributed to internal, stable, and controllable dimensions of attributions. Specifically, AART predicts that when the justice rules are satisfied, applicants are more likely to attribute the cause of their events to internal, stable, and controllable dimensions. However when justice rules are violated, individuals are less likely to attribute the cause of their events to internal, stable, and controllable dimensions.

Fifth, consistent with previous research (Russell & McAuley, 1986; Russell, McAuley, & Tarico, 1987; Weiner, 1985), AART proposes that locus, stability, and controllability are better predictors of individual perceptions and behaviours than are the specific causes that individuals might assign to their staffing events. One reason for this is that despite the large number of specific causes that can be attributed to an outcome or treatment by job applicants, the causes can be summarized and classified with respect to locus, stability, and controllability (Kent & Martinko, 1995; Ployhart & Ryan, 1997; Weiner, 1985, 1986).

Finally, while Gilliland's (1993) model suggests fairness perceptions as the main determinants of applicant self-perceptions and behavioural reactions, AART proposes that applicant attributions with respect to locus, stability, and controllability *directly* influence applicant perceptions, including *perceptions of fairness*. AART also proposes that both the attributions and perceptions of applicants influence subsequent behavioural

reactions. Alternatively stated, fairness perceptions and self-perceptions partially mediate relationships between applicant attributions and their behavioural consequences (e.g., withdrawal, job choice, and litigation).

Summary

This chapter presented overviews of three different streams of literature relevant to the current research. Within these overviews, two theoretical models, namely, AART (Ployhart & Harold 2004) and Gilliland's (1993) organizational justice model were presented. The following chapter presents the focal model and accompanying hypotheses for this thesis.

CHAPTER 3: RESEARCH MODEL & HYPOTHESES

3.1. Proposed Research Model and Variables.

The proposed research model shown in Figure 3.2 has been derived mainly from AART (Ployhart & Harold, 2004) and Gilliland's (1993) organizational justice model. Based on the organizational justice framework and the applicant reactions literature (e.g., Gilliland, 1993; Hausknecht et al., 2004), this model begins with three procedural justice rules (box A). The first rule is *consistency of administration*, referring to the degree of uniformity in applying selection procedures across applicants. The second is *job relatedness*, referring to the extent to which job applicants perceive the content of the selection process as relevant to the job. The third is *opportunity to perform*, referring to the extent to which applicants perceive that they have had the opportunity to demonstrate their knowledge, skills, and abilities during the selection process (Gilliland, 1993; Gilliland, 1995).

The three procedural justice rules were incorporated into the proposed model because they have been theoretically posited to directly influence the overall perceived fairness of selection procedures (box E; Gilliland, 1993, 1995; Hausknecht et al., 2004; Leventhal, 1980). However, AART suggests that violation/satisfaction of these justice rules influence applicant attributions in terms of locus, stability, and controllability (box D), which in turn influence applicant perceptions of the overall fairness of the selection process (box E).

From the applicant reactions literature and AART (Ployhart & Harold, 2004), I included the selection decision outcome (box B; i.e., selected/rejected). AART predicts that when applicants receive a selection decision they engage in an attributional search to determine whether the cause of this outcome is due to internal, stable, and controllable factors. Furthermore, AART predicts that applicants are more likely to engage in self-serving bias. Specifically, selected applicants will attribute the cause of their selection to internal, stable, and controllable factors and that rejected applicants will attribute the He cause for their rejection to external, unstable, and uncontrollable factors (Ployhart and Harold, 2004; Weiner, 1985, 1986).

Based on the literature that has examined the impact of explanations on applicant perceptions and behavioural reactions in selection processes (e.g., Horvath et al., 2000; Ployhart et al., 1999), I have included three types of explanations for a selection outcome: procedural, personal, and diversity (box C). Ployhart et al. (1999) showed that these explanations have different types of effects on applicants perceptions (box E) and can simultaneously produce positive effects on some perceptions and negative effects on others depending on explanation content and outcome favorability (e.g., selected/ rejected).

Box "D" of this model presents the attribution dimensions, which are the vital elements of this model (Ployhart & Harold, 2004: Weiner 1986). AART (Ployhart & Harold, 2004) offers three dimensions of attribution: locus, stability, and controllability. However, the results of confirmatory factor analyses from four studies suggested splitting the controllability attribution dimension of attribution into two separate but related

dimensions: personal control and external control (McAuley, Duncan, & Russell, 1992; McFarland & Ross, 1982). *Personal control* reflects the degree to which the cause is seen as controllable by the attributor (e.g., job applicant). *External control* reflects the degree to which the cause is perceived to be controllable by others (e.g., recruiters and organizations).

McAuley et al. (1992) noted that although Weiner (1986) acknowledged the confusion that may result from treating controllability as one-dimensional rather than bidimensional (i.e., personal and external), most research has measured controllability as one-dimensional. Splitting controllability into the two dimensions as suggested by McAuley et al. (1992) may help in understanding job applicants' reactions because they may differentially influence these reactions.

To illustrate, suppose applicants state that they were rejected from a job because of their personality profile. The cause for this rejection is likely to be perceived outside the applicants' control, but within the control of the employer who has included personality assessment among selection tools. Accordingly, asking job applicants to rate the degree of overall controllability of a cause of a hiring decision (consistent with the one-dimensional view of controllability) could create confusion for applicants (or at least result in loss of information helpful to understanding and predicting applicant perceptual and behavioural reactions). Accordingly, I measure controllability as a bidimensional construct comprising personal and external control.

From the applicant reactions literature and AART, the proposed model includes two types of perceptions (box E): (a) overall process fairness perceptions (perceived

fairness of the selection procedures/methods used to determine the hiring decisions); and (b) self-perceptions (individual's perception/evaluation of worthiness and capabilities of self, consisting mainly of self-efficacy and self-esteem). Process fairness perceptions are included because they have been proposed by Gilliland (1993) to have a direct effect on applicant reactions (e.g., job application and job acceptance decisions). However, Ployhart and Harold (2004) have argued that applicant attribution dimensions *directly* influence perceptions (e.g., process fairness, self-perceptions) and behavioural consequences (e.g., withdrawal from the selection process, job choice). Accordingly, AART replaces perceptions of fairness as the primary determinants of applicant reactions with applicant attributions (Ployhart & Harold, 2004). AART also predicts that perceptions of process fairness and self (box E) partially mediate associations between attributions (box D) and behavioural consequences (box F).

Finally, organizational perceptions and four applicant behavioural reactions (box F) are incorporated into the proposed model because studies have highlighted their practical implications for organizations (Gilliland, 1993; Hausknecht et al., 2004). These variables also have been theoretically suggested as outcomes of fairness perceptions (e.g., Gilliland, 1993; Hausknecht et al., 2004) and attributions (e.g., Ployhart & Harold, 2004). The four behavioural reactions are: recommending the organization to others (e.g., Gilliland et al., 2001; Ployhart & Ryan, 1997, 1998), accepting a job offer (e.g., Macan et al., 1994; Truxillo et al., 2002), reapplying to the organization (e.g., Gilliland et al., 2001; Ployhart & Ryan, 1997), and pursuing legal action (Bauer et al., 2001; Gilliland, 1993;

Hausknecht et al., 2004). The rationale for the relationships depicted in the proposed model, accompanied by a formal presentation of hypotheses, follows.

3.2. Research Hypotheses

3.2.1. The Influence of Procedural Justice Rules on Applicant Attributions

According to AART (Ployhart & Harold, 2004), applicants have expectations and a specific set of standards (mainly, the justice rules of Gilliland's model) for how the selection process should be conducted. Violating or satisfying these standards and expectations influences the degree to which the cause of the selection outcome is perceived to be internal, stable, and controllable.

In particular, AART predicts that when applicants perceive what happens during the selection process to be in line with Gilliland's procedural justice rules (i.e. job relatedness, consistency of administration and opportunity to perform), they are more likely to rate the cause of the selection event as internal, stable, and controllable. However, under a selection process in which Gilliland's procedural justice rules are violated, AART predicts that applicants will be less likely to attribute the cause of the selection event as internal, stable, and controllable.

Research provides some indirect support for the above AART predictions (Brockner et al., 2003; Schleicher et al., 2006; Schroth & Shah, 2000). For example, Brockner et al. (2003) found that individuals used procedural rules in making selfattributions with respect to events affecting them. Specifically, people were more likely to consider themselves as responsible for selection outcomes (attributing them to ability and/or effort) when the selection process involved objective criteria, consistent evaluation

standards, and accurate information. However, individuals perceived themselves less responsible for selection outcomes when subjective criteria and inconsistent evaluation standards were used.

Similarly, in a study that examined subordinate reactions to negative feedback delivered by a supervisor, Leung, Su, and Morris (2001) showed that a supervisor delivering negative feedback using fair interpersonal treatment (being considerate and respectful to subordinates) reduced subordinate negative dispositional attributions about the supervisor. Specifically, subordinates were more likely to acknowledge responsibility for outcomes in situations where the feedback was communicated in a fair and interpersonally considerate manner (Bies & Moag, 1986; Gilliland, 1993) than where feedback was given in an unfair and interpersonally inconsiderate manner (i.e., the supervisor being rude and disrespectful to subordinates). Accordingly:

Hypothesis 1a-4d: Relative to applicants who experience a selection procedure that violates Gilliland's justice rules (i.e., job relatedness, opportunity to perform, consistency of administration; Box A, Figure 3.2), applicants experiencing a selection procedure that satisfies these rules will rate the cause of their selection outcome to be **higher** on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) **lower** on the external control (Box D, Figure 3.2) dimension of attribution.

3.2.2. The Influence of the Selection Decision on Applicant Attributions

As outlined previously, AART (Ployhart & Harold, 2004) and attribution research upon which it is based (e.g., Weiner, 1985, 1986) predict that when applicants receive a selection decision, they engage in an attributional search to determine whether the cause of the decision is due to internal, stable, and controllable factors. Furthermore, AART predicts that when applicants receive a selection decision, they are more inclined to engage in self-serving bias. In particular, selected applicants will attribute the cause of their selection to more internal, stable, and controllable dimensions of attributions; while rejected applicants will be less likely to attribute the cause of their rejection to internal, stable, and controllable dimensions of their rejection to internal, stable, and controllable dimensions of their rejection to internal, stable, and controllable dimensions of attributions; while rejected applicants will be less likely to attribute the cause of their rejection to internal, stable, and controllable dimensions of attributions (Ployhart and Harold, 2004; Weiner, 1985, 1986). AART suggests that this is likely to happen because applicants engage in self-enhancing attributions under favourable outcomes and self-protecting attributions under unfavourable outcomes (e.g., Abramson et al., 1978; Gilbert & Malone, 1995).

In line with the above theoretical propositions, previous empirical studies from nonselection contexts have demonstrated that individuals frequently engage in selfserving bias by attributing the cause of their favourable events (e.g., passing an educational test or winning a sport contest) to factors that are high on the internal, stable, and controllable dimensions of attributions such as ability, and attributing their unfavourable events (e.g., failing the test or winning the sport contest) to factors that are low on the internal, stable, and controllable dimensions of attributions such as bad luck and a biased selection process (Forsterling, 2001; Schaufeli, 1988; 1985; Weiner, 1986).

Using Weiner's (1986) model, Ployhart and Ryan (1997) examined the perceptions and reactions of individuals applying for admission into a university graduate program. They found that when individuals received an admission, they attributed their admission to factors that they considered internal, stable, and controllable; while those who were rejected attributed this decision outcome to more external, unstable and

uncontrollable influences. Accordingly, the following hypotheses are offered for purposes of assessing the generalizability of these findings to an employment context:

Hypotheses 2a- 2d: Relative to those who are rejected (Box B, Figure 3.2), individuals who are selected (Box B, Figure 3.2) will rate the cause of their selection outcome to be **higher** on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) **lower** on the external control (Box D, Figure 3. 2) dimension of attribution.

3.2.3. The Influence of Explanations on Applicant Attributions

Building on the findings and suggestions of prior research (e.g., Brockner et al., 2003; Gilliland, 1994; Ployhart et al., 1999; Van den Bos et al., 1999), Ployhart and Harold (2004) contend that different types of explanations influence the nature of attributions applicants make for an event (e.g., hiring or rejection decision). This occurs because explanations compel applicants to consider other relevant factors that they may have neglected in their attribution analyses resulting from their selective or incomplete perception of the staffing events. Ployhart et al. (2005) also suggest that explanations for selection decisions affect applicant reactions because they provide information that is likely to be used by applicants in their attributional analyses and in forming their fairness judgments regarding staffing events such as selection procedures used, or hiring decisions made. An illustration of the above reasoning is as follows.

Applicants who receive procedural explanations that illuminate the fairness and validity of the selection processes/tools or receive personal explanations that draw attention to related personal reasons (e.g., lack of education, skills, experience) for the selection decision are more likely to attribute such a decision to factors that are internal,

stable, and personally controllable. However, applicants who receive no explanations or receive diversity explanations (e.g., indicating that the organization is trying to increase workforce diversity) are less likely to infer controllability and stability for the selection decision. In other words, these applicants are more likely to attribute the causes of the selection decision to factors that are low on locus, personal control, and stability (e.g., an unfair selection procedure or preferential treatment; Ployhart et al., 1999).

According to Kelley's (1972) discounting principle and Schroth et al.'s (2000) findings, it is difficult for an individual to deny responsibility for a negative outcome (e.g., rejected) when specific and accurate internal reasons (e.g., lack of qualifications, efforts) are provided as the cause. In the same way, it is difficult for an individual to claim responsibility for a positive outcome if success can be readily attributable to external causes (e.g., preferential treatments, good luck). Accordingly:

Hypotheses 3a-3d: Individuals who receive a **procedural explanation** (Box C, Figure 3.2) for their selection outcome (selected or rejected) will rate the cause of their outcome to be **higher** on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) will rate the cause to be **lower** on the external control (Box D, Figure 3.2) dimension of attribution than will individuals who receive a **diversity explanation** (Box C, Figure 3.2).

Hypotheses 4a-4d: Individuals who receive a **procedural explanation** (Box C, Figure 3.2) for their selection outcome (selected or rejected) will rate the cause of their outcome to be **higher** on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) will rate the cause to be **lower** on the external control (Box D, Figure 3.2)

dimension of attribution than will individuals who receive **no explanation** (Box C, Figure 3.2).

Hypotheses 5a-5d: Individuals who receive a **personal explanation** (Box C, Figure 3.2) for their selection outcome (selected or rejected) will rate the cause of their outcome to be **higher** on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) will rate the cause to be **lower** on the external control (Box D, Figure 3.2) dimension of attribution than will individuals who receive a **diversity explanation** (Box C, Figure 3.2).

Hypotheses 6a-6d: Individuals who receive a **personal explanation** (Box C, Figure 3.2) for their selection outcome (selected or rejected) will rate the cause of their outcome to be **higher** on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) will rate the cause to be **lower** on the external control (Box D, Figure 3.2) dimension of attribution than will individuals who receive **no explanation** (Box C, Figure 3.2).

3.2.4. The Interactive Effect of Explanations and Perceived Satisfaction/Violation of Justice Rules on Overall Process Fairness Perceptions

A significant body of research from nonselection contexts demonstrates that explanations that provide information about why specific procedures are used, or why particular decisions are made, generally improve perceptions of fairness (e.g., Bies & Shapiro, 1988; Bobocel & Zdaniuk, 2005; Gilliland & Beckstein, 1996; Greenberg, 1990b, 1993). Research from selection contexts also shows that providing job applicants with explanations that offer personal explanations (providing applicants with personal factors such as their ability or qualifications as reasons for receiving a job offer or a rejection), or procedural explanations (providing applicants with information about the fairness, appropriateness and validity of the selection procedures/tools used to reach the selection decision) generally improve perceptions of process fairness relative to when no explanations are offered (Gilliland et al., 2001; LaHuis et al., 2003; Ployhart et al., 1999).

However, despite most studies report positive effects for explanations on process fairness, there are studies that have shown that some explanations can lower perceptions of process fairness (Greenberg, 1990b; Shapiro, 1991; Shaw et al., 2003). For example, Ployhart et al. (1999) found that applicants who received diversity explanations (indicating that the organization is seeking to select a diverse workforce) reported more negative process fairness perceptions than those who received no explanations (i.e., control condition), procedural explanations, and personal explanations. Ployhart et al. (1999) speculated that participant perceptions of "preferential treatment" could be the reason behind the negative effect generated by the diversity explanations. Similarly, Horvath et al. (2000) found that justifying the use of selection procedures/tools by providing applicant diversity explanations (labelled ideological) reduces applicant fairness perceptions relative to those who received no explanation.

Research that examined attitudes and beliefs about affirmative action – "actions taken to increase the number of underrepresented demographic groups in an organization" (Kravitz & Platania, 1993; p. 928) – has shown that majority group members opposed preferential treatment and quota hiring for designated minority group members (Harrison, Kravitz, Mayer, Leslie, & Lev-Arey, 2006; Ployhart & Holtz, 2008). These attitudes became more negative as demographic factors were given more weight

(Heilman, Kaplow, Amato, & Stathatos, 1993; Kravitz et al., 2000; Nacoste, 1993; Nacoste, 1987). Moreover, researchers demonstrated that unjustified diversity programs (preferential treatment) also lead to negative attitudes among women who were selected as result of implementing such programs (Heilman et al., 1993; Richard & Kirby, 1998).

Overall, the above research suggests that individuals who receive a procedural or a personal explanation are more likely to report higher process fairness perceptions than individuals who receive either a diversity explanation or no explanation. However, based on the research that examined explanation adequacy (the degree to which explanations are accurate, sufficient, and logical), I propose that perceived satisfaction/violation of justice rules will moderate the effects of explanations on process fairness, such that the influence of the explanations will take place only when applicants perceive satisfaction of justice rules. This interaction is expected because procedural and personal explanations are not likely to generate their positive effects if applicants perceive the information provided in their explanation letters as inaccurate and/or contradictory to what they actually experienced. Specifically, procedural and personal explanations provided to applicants who experience a selection process that violates expectations for job relatedness, opportunity to perform, and consistency of administration are more likely to be perceived as inadequate explanations (Greenberg, 1990b; Shapiro et al., 1994; Shaw et al., 2003). Hence, the positive effect of the procedural and personal explanations on process fairness will be diminished. Accordingly:

Hypotheses 7a & 7b: When participants experience a selection procedure that satisfies procedural justice rules, overall process fairness perceptions will be greater for participants in the procedural explanation condition (Box C, Figure 3.3) than for

participants in the (a) diversity and (b) no explanation conditions (Box C, Figure 3.3).

Hypotheses 7c & 7d: When participants experience a selection procedure that satisfies procedural justice rules, overall process fairness perceptions will be greater for participants in the personal explanation condition than for participants in the (a) diversity and (b) no explanation conditions (Box C, Figure 3.3).

Hypotheses 7e: When participants experience a selection procedure that satisfies procedural justice rules, overall process fairness perceptions will be greater for participants in the no explanation condition than for participants in the diversity condition (Box C, Figure 3.3).

Hypotheses 8: When participants experience a selection procedure that violates procedural justice rules, there will be no difference in process fairness perceptions across the four explanation conditions.

3.2.5. The Impact of Explanations and Selection Decisions on Self-Perceptions

Ployhart et al. (1999) have also reported that personal, procedural, and diversityjustification explanations interact with selection outcomes to influence self-perceptions. Specifically, they found that providing applicants with personal or procedural explanations enhanced self-perceptions for selected applicants but lowered the selfperceptions of rejected applicants. They further found that providing applicants with diversity justification explanations lowered self-perceptions of selected applicants while improving self-perceptions of rejected applicants. Similar results were reported by Heilman et al. (1993). Specifically, these researchers found that when women perceived that they received job offers because of their gender rather than their qualifications, their self-perceptions were negatively affected by diversity programs that were not adequately justified. Given the above research findings, I hypothesize that the type of explanations and selection decisions interact to influence self-perceptions such that:

Hypotheses 9: Individuals who are selected (Box B, Figure 3.4) and receive procedural or personal explanations (Box C, Figure 3.4) will report higher selfperceptions (Box E, Figure 3.4) than will selected individuals (Box B, Figure 3.4) who receive a diversity explanation (Box C, Figure 3.4).

Hypotheses 10: Individuals who are rejected (Box B, Figure 3.4) and receive procedural or personal explanations (Box C, Figure 3.4) will report lower selfperceptions (Box E, Figure 3.4) than will rejected individuals (Box B, Figure 3.4) who receive a diversity explanation (Box C, Figure 3.4).

3.2.6. The Influence of Explanations on Applicant Attitudes and Behavioural Intentions

Besides examining the impact of explanations on process fairness and selfperceptions, I also investigated the different effects of explanations on applicant attitudes and behavioural intentions. A number of studies have examined the relationship between explanations and applicant reactions such as organizational perceptions and recommendation intentions. However, a majority of these studies (e.g., Bies & Shapiro, 1988; Gilliland, 1994; Richard & Kirby, 1998; Truxillo et al., 2002) investigated the effect of providing only one type of explanation; they did not assess the differential effects of different types of explanations.

Exceptions to focusing on just one type of explanation are studies by Ployhart et al. (1999), Horvath et al. (2000) and Gilliland et al. (2001). For example, Ployhart et al.

(1999) examined the impact of providing procedural, personal, and diversity explanations on applicant organizational perceptions. They showed that while procedural and personal explanations enhance organizational perceptions, diversity explanations negatively impact these perceptions. Horvath et al. (2000) examined the effect of diversity (labelled ideological), causal, and referential explanations and found that more negative fairness perceptions and lower face validity perceptions were held by individuals receiving diversity explanations compared to those receiving "control" or causal explanations.

However, research in this area has yet to examine the differential effects of procedural, personal, and diversity explanations on other important applicant reactions such as litigation and job acceptance. Consistent with the above research and prior discussions of the influence of explanations on applicant reactions, it is logical to expect that personal and procedural explanations will generate more favourable reactions on job acceptance and litigation intentions (i.e., higher job acceptance intentions, less intention to litigate) than diversity explanations and *no explanations*. Accordingly:

Hypotheses 11a & 11e: Individuals who receive procedural or personal explanations (Box C, Figure 3.2) will report **higher**: a) organizational perceptions (Box F, Figure 3.2); b) recommendation intentions (Box F, Figure 3.2); c) reapplication intentions (Box F, Figure 3.2); and d) job acceptance intentions (Box F, Figure 3.2); and will report **lower** e) intentions to litigate (Box F, Figure 3.2) compared to individuals who receive a diversity explanation (Box C, Figure 3.2).

Hypotheses 12a & 12e: Individuals who receive procedural or personal explanations (Box C, Figure 3.2) will report **higher**: a) organizational perceptions (Box F, Figure 3.2); b) recommendation intentions (Box F, Figure 3.2); c) reapplication intentions

(Box F, Figure 3.2); and d) job acceptance intentions (Box F, Figure 3.2); and will report **lower** e) intentions to litigate compared to individuals receiving no explanation (Box C, Figure 3.2).

3.2.7. The Influence of Procedural Justice Rules and Attributions on Overall Process Fairness Perceptions

Gilliland's (1993) organizational justice model proposes that satisfaction/violation of consistency of administrations, opportunity to perform, and job relatedness influence the overall perceptions of process fairness which, in turn, influence applicant perceptions and behaviours such as job acceptance and litigation actions. In some support of Gilliland's (1993) model proposition, a meta-analytic review (Hausknecht et al., 2004), narrative reviews (Anderson et al., 2001; Ryan & Ployhart, 2000) and primary studies (e.g., Bauer et al., 1998; Bauer et al., 2001; Ployhart & Ryan, 1998) reported that perceptions of opportunity to perform, job relatedness, and consistency of administration rules are all positively related to applicant's overall perceptions of process fairness (e.g., Bauer et al., 1998; Bauer et al., 2001; Schleicher et al., 2006). In line with these findings and the predictions of Gilliland's model, the following hypothesis is advanced:

Hypothesis 13: Perceived satisfaction of justice rules (i.e., consistency of administration, job relatedness, and opportunity to perform; Box A, Figure 3.2) will have a direct positive influence on overall process fairness perceptions (Box E, Figure 3.2).

However, as outlined earlier, AART (Ployhart & Harold, 2004) holds that Gilliland's model is lacking a strong psychologically-based explanation of how applicant perceptions form. Specifically, AART would suggest that Gilliland's model overlooks the explicit role of attributions in mediating the relationship between perceptions of procedural justice and overall process fairness perceptions. Therefore, AART proposes that applicant perceptions of satisfaction/violation of justice rules during the selection process will influence applicant attributions, which in turn determine overall fairness perceptions. Stated plainly, AART suggests that applicant attributions will fully mediate the relationship between perceptions of the procedural justice rules and overall process fairness perceptions. Based on AART (Ployhart & Harold, 2004) predictions, the following hypotheses are offered:

Hypotheses 14a-14d: Applicant attributions in terms of a) locus (Box D, Figure 3.5); b) personal control (Box D, Figure 3.5); c) stability (Box D, Figure 3.5); and d) external control (Box D, Figure 3.5) will fully mediate the relationship between perceptions of procedural justice rules (i.e., job relatedness, opportunity to perform, and consistency of administration; Box A, Figure 3.5) and overall process fairness perceptions (Box E, Figure 3.5).

3.2.8. The Influence of Overall Process Fairness Perceptions and Attributions on Applicant Attitudes and Behavioural Intentions

A number of studies also demonstrated a positive relationship between perceptions of overall process fairness and organizational outcomes. For example, Gilliland (1994) and Bauer et al. (2001) showed that applicant perceptions of fairness are positively associated with intentions to recommend the organization and its jobs to others. Smither et al. (1993) and Truxillo and Bauer (1999) reported that organizational attractiveness is positively correlated with overall process fairness perceptions. Studies also found that when selected applicants perceive a selection process as unfair, they are more likely to decline a job offer (Macan et al., 1994; Singer, 1992). Similarly, Ployhart and Ryan (1998) found a positive relationship between overall fairness perceptions of selection outcomes and intentions to accept a job offer. Furthermore, perceptions of fairness were found to be negatively related to legal-claiming behaviour (Goldman, 2001, 2003; Lind, Greenberg, Scott, & Welchans, 2000). Thus, based on Gilliland's (1993) organizational justice model and the above research findings, the following hypotheses are put forward:

Hypotheses 15a-15e: Perceptions of overall process fairness (Box E, Figure 3.2) will be **positively** associated with a) organizational perceptions (Box F, Figure 3.2); b) recommendation intentions (Box F, Figure 3.2); c) reapplication intentions (Box F, Figure 3.2); d) job acceptance intentions (Box F, Figure 3.2); and e) **negatively** associated with litigation intentions.

However, another important aspect that distinguishes AART (Ployhart & Harold, 2004) from the organizational justice model is that applicant attributions in terms of locus, stability, and controllability directly and indirectly (through overall process fairness perceptions) influence their attitudes and behaviours (e.g., organizational perceptions and recommendation intentions). In other words, AART proposes that applicant perceptions (process fairness, test perceptions, and self-perceptions) partially mediate associations between attribution dimensions and behavioural consequences. Specifically, AART predicts that when applicants make internal, stable, controllable attributions for the cause of an event (e.g., receiving a selection decision), favourable reactions (e.g., high perception of fairness) will result, and when applicants rate the cause

of an event (e.g., receiving a job offer) as external, unstable, and uncontrollable, unfavourable reactions (e.g., low perception of fairness) will occur.

Using Weiner's (1985; 1986) model, Ployhart et al. (2002) demonstrated that applicants who rate the cause of their withdrawal from a selection process to be high (versus low) on the stable and controllable dimensions of attributions were less likely to reapply for such jobs in the future. In another application of Weiner's model (1985; 1986), Ployhart and Ryan (1997) found that locus of causality was related positively to intentions to recommend the organization to others and self-assessed performance perceptions. They also found that stability related positively to self-assessed performance perceptions. However, Ployhart and Ryan (1997) did not examine whether applicant perceptions mediated the association between attribution dimensions and job applicant intentions (e.g., to recommend the organization) as suggested by AART.

I am only aware of one study that examined the partial mediation suggested by AART. Consistent with AART predictions, Holtz, Ployhart, Lozzi, and Ferreter (2005) found that test-taker perceptions of the face validity of a test, job-relatedness, and predictive validity partially mediated the association between locus and organizational attractiveness and recommendation intentions. Also Holtz et al. (2005) found that testtaker perceptions partially mediated the association between controllability and recommendation intentions. Based on the propositions of AART and the above noted research findings, the following hypotheses are put forward:

Hypotheses 16a-16e: Attributions in terms of **locus** and **personal control** (Box D, Figure 3.2) will be **positively** related to: a) organizational perceptions (Box F,

Figure 3.2); b) recommendation intentions (Box F, Figure 3.2); c) job acceptance intentions (Box F, Figure 3.2); and d) reapplication intentions (Box F, Figure 3.2); and negatively related to e) litigation intentions (Box F, Figure 3.2).

Hypotheses 17a-17e: Attributions in terms of **stability** (Box D, Figure 3.2) will be **positively** related to: a) organizational perceptions (Box F, Figure 3.2); b) recommendation intentions (Box F, Figure 3.2); and c) job acceptance intentions (Box F, Figure 3.2); and **negatively** related to d) litigation intentions (Box F, Figure 3.2); and e) reapplication intentions (Box F, Figure 3.2).

Hypotheses 18a-18e: Attributions in terms of **external control** (Box D, Figure 3.2) will be **negatively** related to: a) organizational perceptions (Box F, Figure 3.2); b) recommendation intentions (Box F, Figure 3.2); c) job acceptance intentions (Box F, Figure 3.2); and d) reapplication intentions (Box F, Figure 3.2); and **positively** related to e) litigation intentions (Box F, Figure 3.2).

Hypotheses 19a-19e: Overall process fairness perceptions (Box E, Figure 3.6) will partially mediate the relationship between **locus** attribution (Box D, Figure 3.6) and: a) organizational perceptions; b) recommendation intentions; c) litigation intentions; d) job acceptance intentions; and e) reapplication intentions (all Box F, Figure 3.6).

Hypotheses 20a-20e: Overall process fairness perceptions (Box E, Figure 3.6) will partially mediate the relationship between **personal control attribution** (Box D, Figure 3.6) and: a) organizational perceptions; b) recommendation intentions; c) litigation intentions; d) job acceptance intentions; and e) reapplication intentions (all Box F, Figure 3.6).

Hypotheses 21a-21e: Overall process fairness perceptions (Box E, Figure 3.6) will partially mediate the relationship between **stability** attribution (Box D, Figure 3.6 and: a) organizational perceptions; b) recommendation intentions; c)

litigation intentions; d) job acceptance intentions; and e) reapplication intentions (all Box F, Figure 3.6).

Hypotheses 22a-22e: Overall process fairness perceptions (Box E, Figure 3.6) will partially mediate the relationship between **external control** attribution dimension (Box D, Figure 3.6) and: a) organizational perceptions; b) recommendation intentions; c) litigation intentions; d) job acceptance intentions; and e) reapplication intentions (all Box F, Figure 3.6).

3.2.9. The Impact of Procedural Fairness, Selection Decision, and Attributions on Self-Perceptions

Although research has shown that unfavourable outcomes (failing a selection test or receiving a job rejection) reduce applicant self-perceptions and that favourable outcomes enhance applicant self-perceptions, most of this research has also demonstrated that this relationship is moderated by the degree to which the selection procedures are fair (Gilliland, 1994; Ployhart et al., 1999; Schroth & Shah, 2000; Van den Bos, 1999). In particular, research has shown that when individuals experience fair selection procedures and receive a negative outcome (e.g., a job rejection), they reported lower selfperceptions than those who experience unfair selection procedures and receive a negative outcome (Holmvall & Bobocel, 2008; Schroth & Shah, 2000)³. Prior research also shows that when individuals experience unfair procedures and receive a positive outcome (e.g., a job offer), they reported lower self-perceptions than those who experience fair procedures and receive a positive outcome (e.g.,

³ Holmvall and Bobocel (2008) demonstrated that both the nature of self-identity (i.e., independent or interdependent) and situational cues influence how individuals interpret and react to procedural fairness perceptions upon receiving unfavourable outcomes. However, although Holmvall and Bobocel (2008) indicated that attributional process may underlie the negative effect of fair procedures on self-perceptions, they did not examine the role of attribution directly in their research.

procedures and receive a positive outcome (Gilliland, 1994; Ployhart & Ryan, 1997; Ployhart et al., 1999; Schroth & Shah, 2000).

Though a number of researchers have suggested that attributions account for (mediate) the interaction effect between procedural fairness and outcome favorability on self-perception (Brockner, 2002; Brockner et al., 2003; Gilliland, 1993; Ployhart & Harold, 2004; Van den Bos et al., 1999) the role of attribution in explaining this interaction effect has yet to be completely understood. Specifically, researchers (e.g., Ployhart et al., 1999; Schroth & Shah, 2000) who have found an interaction between procedural fairness and outcome favorability on self-perceptions only interpreted their findings in line with attribution theory predictions and findings (Kelley, 1972, Weiner, 1985) without actual examination of attributions. To overcome this limitation, Brockner et al. (2003, Study 2) explicitly examined the role of the attributions in explaining the interaction between procedural fairness and outcome favourability on self-perceptions. Interestingly, they found that it is not procedural fairness, but rather attributions for outcomes caused by process fairness perceptions that interact with outcome favourability to influence people's self-perceptions. In other words, the interactive effect of outcome favourability and procedural fairness on self-perceptions was fully mediated by the interaction effect of outcome favourability and self-attributions. In spite of their valuable contributions, Brockner et al. (2003, Study 2) examined only the effects of the specific causes (e.g., ability and effort) rather than the effects of the attribution dimensions underlying these specific causes. However, attribution researchers (Russell & McAuley, 1986; Russell et al., 1987; Weiner, 1985) contend that the specific causes (e.g., ability

and effort) that applicants assign as the reasons for their outcome (e.g., receiving a job offer or rejection) are less important than the *causal dimensions* (i.e., locus, stability, and controllability) of these specific attributions in predicting individual perceptions, intentions, and behaviours. The primary reason for this is that, although there are a wide variety of specific reasons that can be assigned to an event, there are a limited number of psychological dimensions along which the causes of events can differ (Ployhart & Ryan, 1997; Russell & McAuley, 1986; Russell et al., 1987; Weiner, 1985). As such, the current thesis specifically investigates the role of attribution dimensions in terms of locus, stability, personal control, and external control in explaining the above stated interaction effect. Below is the reasoning for why attributions in general and the attribution dimensions of locus, stability, personal control, and external control can in particular offer an explanation for the interaction between procedural fairness and selection outcome on self-perception.

In line with attribution theory propositions (Weiner, 1985, 1986), Gilliland (1993) noted in his organizational justice model that when the selection procedures or tools are perceived to be unfair, applicants are more likely to make external attributions for their outcomes and therefore the impact of the selection outcome on self-perceptions is more likely to be reduced (Gilliland, 1993). On the other hand, when the selection procedures are fair, applicants are more likely to make internal attributions, and therefore applicant self-perceptions will be strongly influenced by the selection outcome. Also as stated earlier, Kelley's (1972) discounting principle of attribution suggests that it is difficult for an individual to refute responsibility for a negative outcome when the procedures are fair.

PhD Thesis - K. I. Ababneh

By the same token, it is difficult for an individual to claim responsibility for a positive outcome if such an outcome can be readily attributable to external causes such as biased selection procedures. Hence under such circumstances, rejected and selected applicants are more likely to report lower self-perceptions (Schroth & Shah, 2000).

With respect to stability, when applicants perceive their selection outcome is reached through unfair selection procedures, they are more likely to perceive the outcome as unstable and less likely to occur in future selection events. Hence, their selfperceptions are less likely to be affected by the rejection. Alternatively, applicants who perceive their selection outcome is reached through fair selection procedures, they are more likely to see their selection outcome as stable and more likely to occur in other selection events. In turn, their self-perceptions are more likely to be affected by the selection outcome.

Drawing from the above research findings and theoretical considerations, hypotheses 23a and 23b are advanced to replicate prior research findings of the interaction between perceived procedural fairness of the interview and the selection decision with respect to their effects on self-perception. Hypotheses 24a through 24d are offered to assess the interaction between the selection decision and attribution dimensions with respect to their effect on self-perceptions. Furthermore, hypotheses 25a through 25d propose that the interaction between interview procedural fairness and the selection decision with respect to their effect on self perceptions (as proposed in hypotheses 23a and 23b) is fully mediated by the interaction between the selection decision and

attribution dimensions as proposed in hypotheses 24a through 24d (Brockner, 2002; Ployhart & Harold, 2004).

Hypothesis 23a: Individuals who are selected (Box B, Figure 3.7) and experience a fair selection procedure (Box A, Figure 3.7) will report higher self-perceptions than individuals who are selected (Box B, Figure 3.7) and experience an unfair selection procedure (Box A, Figure 3.7).

Hypothesis 23b: Individuals who are rejected (Box B, Figure 3.7) and experience an unfair selection (Box A, Figure 3.7) procedure will report higher self-perceptions than individuals who are rejected (Box B, Figure 3.7) and experience a fair selection procedure (Box A, Figure 3.7).

Hypothesis 24a: There will be an interaction between selection decision and **locus** attribution on self-perceptions such that the relationship between locus (Box D, Figure 3.8) and self-perceptions (Box E, Figure 3.8) will be positive for selected applicants and negative for rejected applicants.

Hypothesis 24b: There will be an interaction between selection decision and **personal control** attribution on self-perceptions such that the relationship between personal control (Box D, Figure 3.8) and self-perceptions (Box E, Figure 3.8) will be positive for selected applicants and negative for rejected applicants.

Hypothesis 24c: There will be an interaction between selection decision and **stability** attribution on self-perceptions such that the relationship between stability (Box D, Figure 3.8) and self-perceptions (Box E, Figure 3.8) will be positive for selected applicants and negative for rejected applicants.

Hypothesis 24d: There will be an interaction between selection decision and external control attribution on self-perceptions such that the relationship between external control (Box D, Figure 3.8) and self-perceptions (Box E, Figure 3.8) will be negative for selected applicants and positive for rejected applicants.

Hypothesis 25a-25d: The interaction effect hypothesized in H24a – H24d between selection decision and each of locus (25a), personal control (25b), stability (25c), and external control attributions (25d) on self-perceptions will fully mediate the interaction effect hypothesized in H23a and H23b between fair procedures and selection decision on self-perceptions.

CHAPTER 4: METHODOLOGY & RESULTS

4.1. Participants

Fourth and fifth⁴ year undergraduate students (N = 261) taking business and engineering classes at two large Canadian universities participated in this study. Due to incomplete data 14 participants had to be excluded from analyses, resulting in a final usable sample of 247 participants (see the preliminary analysis section for more detail). The final sample consisted of 60% males. Participants' mean age was 22.29 years (SD = 2.22). The racial makeup of the sample was 59% Caucasian, 17% Chinese, 11% South Asian, with the remaining reporting other races. Eighty-two percent of the sample consisted of individuals who were looking for a job at the time of completing the survey. Eight percent of individuals planned to look for a job within three months from completing the survey while the remaining individuals were planning to look for a job in more than three months.

4.2. Design

A 2 (perceived satisfaction versus perceived violation of the procedural justice rules) by 2 (selection decision: selected versus rejected from the job) by 4 (explanations provided: procedural, personal, diversity, no explanation) between subjects factorial design was used to test the majority of research hypotheses. Appendix A presents a pictorial view of this design.

⁴ The business programs are 4 years in duration, while the engineering programs are 5 years in duration.
4.3. Procedures

Individuals were recruited during their regular class time and completed all the parts of this research either at the beginning or at the end of their class session. First, oral presentations and a letter of information (consent form) were used to: (a) explain the general purpose and procedures of this research, (b) specify eligibility for participation, (c) assure confidentiality of participants, and (d) indicate the incentives for participation (four-dollar Tim Horton's Gift certificate). Individuals who indicated that they were looking for a job or were to start looking for a job in the near future and agreed to participate in this research randomly received a packet representing one of the research conditions (see Appendix A). The packet consisted of three main parts (a) the letter of information (consent form) (b) written scenarios, and (c) the study measures (detailed below).

After reading the letter of information, participants were instructed to imagine themselves as having applied for a desirable job with an organization referred to as XYZ, and to imagine themselves experiencing a specific job interview procedure with XYZ. Half of the participants read an interview procedure scenario that was manipulated to comply with three of Gilliland's procedural justice rules: (a) *consistency of administration* (the degree to which the organization/interviewer uses the same interview content and procedures across applicants); (b) *job relatedness* (the extent to which job applicants perceive the content of the interview to be relevant to the job); and (c) *opportunity to perform* (the extent to which an applicant has a chance to demonstrate or communicate his/her knowledge, skills, and abilities through the interview) (Gilliland,

1993, 1995). The other half of the participants read an interview procedure scenario that was manipulated to violate the above three rules of procedural justice (i.e., consistency of administration, job relatedness, and opportunity to perform). Appendix B provides the exact wording of the two interview scenarios. These interview scenarios were developed based on previous related research (Bies & Shapiro, 1988; (Gilliland, 1993; Gilliland et al., 2001; Ployhart et al., 2005; Ployhart et al., 1999).

Once participants completed reading the assigned interview scenario, they were instructed to rate the interview procedure in terms of consistency of administration, job relatedness, opportunity to perform, and interview procedural fairness. Following this, they received a letter and were asked to imagine it was a real letter informing them of the selection decisions for the job at XYZ. Appendix C presents the exact wording of the four explanation letters, which were developed based on explanations used in previous related research (Bobocel & Farrell, 1996; Gilliland et al., 2001; Ployhart et al., 2005; Ployhart et al., 1999).

Each letter greeted the applicant with ("Dear 'Your Name Here'"). For accepted applicants, the letter started by stating "This is to inform you that we are offering you a position in our organization". For rejected applicants, the letter started by stating "This is to inform you that we cannot offer you a position with our organization". The selection decision was followed immediately by the explanation information. In the *procedural explanation condition*, the scenario read "The decision was based on a thorough selection process. This process was developed by a leading research firm in the area of recruitment and selection and is similar to the process used by a number of Fortune 100

PhD Thesis - K. I. Ababneh

companies. This process has been demonstrated to be accurate and highly effective for identifying and selecting successful candidates" (Gilliland et al., 2001; Ployhart et al., 1999). In the *personal explanation condition*, the scenario read "This decision was based on the fact that your qualifications and performance on the selection tools were rated higher (lower) than those of the rejected (selected) applicants. Furthermore, your industry and job related experience were other important factors used in making our selection decision"(Gilliland et al., 2001; Ployhart et al., 1999). In the *diversity explanation* condition, the scenario read "We strive for diversity in our organization, and aim to select a workforce that is diverse (based on gender, race, and/or nationality background) in order to ensure that our workplaces are more reflective of our population"(Bobocel & Farrell, 1996; Ployhart et al., 1999). In the *control condition*, no explanation information was provided.

Each of the acceptance letters ended with "Your Name Here,' congratulations on your job offer from XYZ Organization. We will be contacting you very soon with more details about this job offer". Each of the rejection letters ended with "Your Name Here,' we are sorry that we could not offer you a position. Good luck in your job search". Every letter was signed by a fictional human resource director named "Mark James". After reading the explanation letters, the participants completed the rest of the survey measures which are presented in the next section. Demographic and work related information were collected on the last page of the survey.

4.4. Measures

All measures used came from related literature. Unless otherwise stated, measures were presented on 7-point Likert-type scales (1 = strongly disagree, 7 = strongly agree) and coded such that higher values indicate greater levels of the construct measured. A pilot study was conducted using graduate and undergraduate students to solicit suggestions and to ensure clarity of the scenarios and the measures used in this research. Relevant and applicable suggestions of the pilot study were incorporated in the final version of this research. The items comprising each measure are presented in Appendix D.

Procedural Justice Rules Manipulation. Participant perceived satisfaction or violation of the justice rules (consistency of administrations, opportunity to perform, and job relatedness) during the interview process were assessed by items adapted from Bauer et al. (2001). *Consistency of administration* was assessed with three items (e.g., the interview was administered to all applicants in the same way"). *Job relatedness* was measured with two items (e.g., "The content of this type of interview was clearly related to the job"). *Opportunity to perform* was assessed with four items (e.g., "I could really show my skills and abilities through this type of interview"). The internal consistency reliability estimates from prior research were: consistency of administration (α =.93), Job relatedness (α =.88), and opportunity to perform (α =.94) (Bauer et al., 2001).

Selection Decision Manipulation. The selection decision manipulation was assessed by asking participants to check their selection status (i.e., offered or not offered a job) based on the letter they received. This question was asked to ensure that

participants read and acknowledged the selection decision conveyed in the selection letter. Following prior research approaches (Gilliland 1994; Ployhart 1997), a three-item measure of outcome fairness (Gilliland 1994) was also used to confirm the manipulation check for the selection decision. An example of an item on this scale is "Overall, I feel the results of the selection process were fair". Gilliland (1994) reported a Cronbach alpha coefficient of .86 for this scale.

Explanation Letters Manipulations. The manipulation of the explanation letters were assessed with two items for each type of explanation. Each item begins with a stem asking: "The letter I received from XYZ clearly and explicitly mentioned that...." A sample item on the scale used for the procedural explanation is "...The selection process has been demonstrated to be accurate and highly effective for identifying and selecting successful candidates".

Interview Procedural Fairness Manipulation. Five items were used to assess participant perceptions of the procedural fairness of the interview. The items were adapted from previous research (Elkins & Phillips, 2000; Gilliland, 1994; Smither et al., 1993). An example of an item on this scale is "overall, I believe that the use of the interview instrument was fair". Elkins and Phillips (2000) reported a Cronbach alpha coefficient of .74 for this scale.

Attributions. The revised causal dimension scale (CDSII, McAuley et al., 1992; Russell, 1982) was used to measure job applicant attributions. As discussed earlier, the revised CDSII was used because it measures controllability as two distinct constructs (i.e., personal and external controllability). To complete this scale, participants started by

writing the main reason for being offered (or not being offered) the job, then expressed their impressions or opinions for the reasons along the causal dimensions of locus, stability, and controllability. Each of the attribution dimensions was assessed with three seven-point Likert items. A sample item on the *locus* scale is "Is the cause something that is: inside of you (7) – outside of you (1)." A sample item on the *stability* scale is "Is the cause something that is: permanent (7) – temporary (1)." A sample item on the *personal control* scale is "Is the cause something over which you have power (7) – over which you have no power (1);" A sample item on the *external control* scale is "Is the cause something that is: under the power of other people (7) – not under the power of other people" (1). McAuley et al. (1992) reported coefficient Cronbach alpha that range from .60 to .92 of this scale across four studies from different context.

Self-perceptions was measured with four semantic differential items (Ployhart et al., 1999). The measure begins with a stem asking: "If I received this letter, my opinion of myself would be..." (bad – good, unfavourable – favourable, disapproving – approving, negative – positive). Ployhart et al. (2005) reported internal consistency estimate of .95 for this scale.

Process fairness was assessed with a four-item measure adapted from Gilliland (1994). A sample item on this scale is "Whether or not I got the job, I feel the selection process was fair". Gilliland (1994) reported a Cronbach alpha coefficient of .85 for this scale.

Organizational Perceptions were measured with four semantic differential items (Ployhart et al., 1999). The measure begins with a stem asking "If I received this letter,

my attitude toward XYZ would be..." (bad – good, unfavourable – favourable, disapproving – approving, negative – positive). Ployhart et al. (2005) reported a Cronbach alpha coefficient of .94 for this scale.

Recommendation intentions were measured by three items adapted from Gilliland et al. (2001). A sample item on this scale is "I intend to recommend XYZ organization to others"). Gilliland et al. (2001) reported a Cronbach alpha coefficient of .90 for this scale.

Litigation intentions were measured by a four-item scale adapted from Seitz, Truxillo, & Bauer, (2001; "I would be more likely to sue an organization that provides a letter like this than one that provides no letter." Seitz et al. (2001) reported a Cronbach alpha coefficient of .92 for this scale.

Job acceptance intention was measured by one item ("I will accept the job offer from XYZ). This item was administered only for individuals who received a job offer.

Reapplication intention was measured by one item ("I intend to reapply for a new job with XYZ"). This item was administered only for individuals who received a job rejection.

4.5. Results

4.5.1. Preliminary Data Analysis Results

Prior to hypothesis testing, the data were screened for accuracy of entry, missing values, univariate outliers, multivariate outliers, normality, linearity and fulfillment of the assumptions⁵ underlying each analysis performed (e.g., ANOVA, MANOVA). Because most of the hypotheses involved testing differences between or among groups (conditions), data were also screened for outliers and normality within each group (Mertler & Vannatta, 2005; Tabachnick & Fidell, 2001). The preliminary analyses are described in more detail below, followed by a presentation of the hypotheses testing results.

An initial screening of the data revealed that 14 participants failed to complete one or more essential parts of the questionnaire. Further examination of these cases found that incomplete responses cut across the various conditions of this research design (i.e., missing cases appeared to be randomly spread). Hence, these 14 participants were excluded from subsequent analysis. The initial screening of the data also showed that some scales had missing values on their items, however these missing values were very few (no item has more than two missing values) and there was no pattern in these missing values. Accordingly, each missing value was replaced with the mean response on the remaining items for that case (McDonald, Thurston, & Nelson, 2000).

⁵ Some of these assumptions were tested within the actual hypothesis testing and therefore their results are presented in later sections of this chapter.

After having addressed the issue of missing values data were screened for univariate (single variable) outliers by generating and examining box plots, stem and leaf plots, and z-values for each variable. An analysis for multivariate outliers, when applicable, was also undertaken through calculation of Mahalanobis' distance values within the regression procedures, which were evaluated with Chi square (χ^2) criteria (Meyers et al., 2005; Tabachnick & Fidell, 2001). No univariate or multivariate outliers were found.

I also assessed each variable for departure from normality by inspecting histograms, normal Q-Q plots, skewness and kurtosis, and conducting the Kolmogorov-Smirnov test. Multivariate normality was also assessed, when applicable, by generating and reviewing matrix scatterplots for applicable variables.

Although some variables moderately violated the assumption of normality (primarily due to skewness), researchers (e.g., Mertler & Vannatta, 2005; Tabachnick & Fidell, 2001) have noted that MANOVA and ANOVA (the primary analyses used here) are robust tests especially when the violations of normality results from skewness. Researchers have also noted that equal size groups/conditions (Stevens, 1986) and group size approximating 20 participants in the smallest group/condition should be sufficient to ensure robustness to violations of univarite and multivariate normality (Mertler & Vannatta, 2005). In the current study, the numbers of participants in each group/condition were equal and sufficient (the smallest group/condition on which a hypothesis was tested was 30). Accordingly, the moderate deviation from the normality assumption was not considered a serious threat to the analyses conducted.

Assessment of univariate linearity was done by inspecting bivariate scatterplots and Pearson correlations. Multivariate linearity was assessed, when applicable, by generating and reviewing scatterplots of standardized predicted values by standardized residuals within regressions. These assessments revealed no serious threats to univarite and multivariate linearity. To examine for multicollinearity, tolerance and Variance Inflation Factor (VIF) values for each independent variable were calculated. The tolerance and VIF values were found to be acceptable, signifying no multicollinearity threat (Tabachnick & Fidell, 2001).

To ensure equivalence of the study conditions in terms of age, gender, ethnicity, and education, I conducted comparisons across the study conditions using ANOVA and Chi square (χ^2). The results demonstrated that there was no significant difference among participants across the conditions in terms of these variables. These results suggest that random assignment of participants into the various conditions of this research was successful (Druckman and Arai; 2004).

After conducting all of the above preliminary data analysis, the means, standard deviations, internal consistency reliabilities, and intercorrelations for the major variables of this research were computed. The results are presented in Table 4.1. As shown there, the internal consistency reliabilities for all measures exceeded the generally accepted reliability of .70 (except stability $\alpha = .67$) (Nunnally, 1978).

4.5.2. Manipulation Checks

Several separate analyses were conducted as manipulation checks. Results confirmed that the manipulations for (a) perceived satisfaction/violation of the procedural

justice rules, (b) selection outcomes, (c) explanation letters, (d) and interview procedural fairness perceptions were successful. Below is a presentation of the results of these manipulation checks.

Procedural Justice Rules Manipulation. An ANOVA demonstrated that participants experiencing selection procedures that satisfied procedural justice rules of consistency of administrations, opportunity to perform, and job relatedness reported a higher mean (M = 5.17) on these rules⁶ than did participants who experienced selection procedures that violated these rules (M = 2.10; $F_{(1,245)} = 582.24$, p < .001).

Selection Decision Manipulation. An initial examination of the selection outcome manipulation showed that all the participants who were assigned to the selected condition indicated that the letter that they received offered them a job, while all the participants who assigned to the rejected condition indicated that the letter that they received did not offer them a job. Following established procedures (e.g. Gilliland 1994; Ployhart et al., 1999) for checking the manipulation of selection decision, ANOVA also confirmed that participants who received a job offer perceived the selection outcome to be more fair (M = 3.78) than did participants who received a job rejection (M = 3.01; $F_{(1,245)} = 14.36, p < .001$).

Explanation Letters Manipulation. An ANOVA testing the effectiveness of the manipulation of the explanation letters confirmed that they worked as intended ($F_{(3, 243)} =$ 82.52, p < .001). Participants assigned to the procedural explanation condition reported

⁶ I aggregated the three variables pertaining to justice rules into one construct because they were highly correlated. The results with each justice rule and with the aggregate of the three rules were the same. To simplify the presentation of the results, I only reported results at the aggregate level.

that the letter they received conveyed the content of the procedural explanation more (M = 5.69) than did participants who were assigned to the personal (M = 3.14, p < .001), diversity (M = 2.37, p < .001), and control (M = 1.91, p < .001) conditions. Participants assigned to the personal explanation condition reported that the letter they received conveyed the content of the personal explanation more (M = 5.16) than did those who were assigned to the procedural (M = 3.26, p < .001), diversity (M = 2.69, p < .001), and control (M = 2.35, p < .001) conditions. Participants assigned to the diversity explanation condition reported that the letter they received control (M = 2.35, p < .001) conditions. Participants assigned to the diversity explanation condition reported that the letter that they received conveyed the content of the diversity explanation condition reported that the letter that they received conveyed the content of the diversity explanation condition more (M = 6.01) than did those who were assigned to the procedural (M = 2.39, p < .001), personal (M = 2.46, p < .001), and control (M = 2.13, p < .001) condition.

Interview Procedural Fairness Manipulation. An ANOVA demonstrated that participants assigned to a fair interview procedure reported a higher mean of perceived interview fairness (M = 5.26) than did individuals who were assigned to a low fair interview procedure (M = 2.01; $F_{(1,245)} = 457.05$, p < .001).

4.5.3. Results of Hypotheses Testing

4.5.3.1. The Influence of Procedural Justice Rules on Applicant Attributions

Hypotheses 1a through 1d predicted that applicants who experience a selection procedure that satisfies the three justice rules would rate the cause of their selection outcome to be higher on the a) internal, b) stable, and c) personal control dimensions of attributions and d) lower on the external control attribution dimension. To test these hypotheses, one-way MANOVA⁷ was conducted. The Box test for the homogeneity of variance-covariance assumption showed that this assumption was not violated ($F_{(10, 286929)} = 1.42, p = .163$)⁸; therefore, Wilks' Lambda was used to interpret the MANOVA results (Olson, 1976; Tabachnick & Fidell, 2001). The multivariate results revealed statistically significant effects for the perceived satisfaction/violation of justice rules (Wilks' $\lambda = .937$; $F_{(4,242)} = 4.09, \eta^2 = .063, p < .005$). The univariate analyses demonstrated that perceived satisfaction/violation of the justice rules had a significant effect on locus ($F_{(1,245)} = 13.12, \eta^2 = .045, p < .001$), personal control ($F_{(1,245)} = 9.80, \eta^2 = .038, p < .005$), and stability ($F_{(1,245)} = 5.57, \eta^2 = .022, p < .05$). The effect on external control was not significant ($F_{(1,245)} = 1.02, \eta^2 = .004, p = .313$). Table 4.2 shows that the mean for each of locus, personal control, and stability attributions is significantly higher (i.e. in the direction predicted) when the justice rules were satisfied than when they were violated. Hence, these results support H1a, H1b, and H1c, but not H1d.

4.5.3.2. The Influence of the Selection Decision on Applicant Attributions

Hypotheses 2a through 2d proposed that individuals who are selected would rate the cause of their selection outcome to be *higher* on internal, stable, and personal control dimensions of attributions and *lower* on the external control dimension of attribution. To examine these hypotheses, one-way MANOVA was conducted. The Box test for the

⁷ Two-way and three-way interactions were also conducted to examine the interaction effects between (among) satisfaction/violation of justice rules, selection decision, and explanations on attribution dimensions. No significant interaction was found. To simplify the presentation of the results, those analyses were not reported.

⁸ A non-significant value indicates that the homogeneity of variance assumption is met, while a significant value indicates that the homogeneity of variance assumption is violated. If the Box test result is not significant, Wilks' Lambda should be used for interpreting MANOVA results. However, if the Box test result is significant, Pillai's Trace should be used (Olson, 1976; Tabachnick & Fidell, 2001).

homogeneity of variance-covariance indicates that the homogeneity of variance assumption was met ($F_{(10, 286584)} = 1.47, p = .143$); hence, Wilks' Lambda was utilized as the MANOVA test statistic. The multivariate results showed significant effects for selection decision (Wilks' $\lambda = .936$; $F_{(4,242)} = 4.10, \eta^2 = .064, p < .001$). The univariate analyses demonstrated that the selection decision had a significant effect on locus ($F_{(1,245)}$ = 11.05, $\eta^2 = .043, p < .001$), personal control ($F_{(1,245)} = 7.18, \eta^2 = .028, p < .001$), stability ($F_{(1,245)} = 4.89, \eta^2 = .02, p < .05$), and external control ($F_{(1,245)} = 6.57, \eta^2 = .026, p < .01$). Table 4.3 shows that while the mean for each of locus, personal control, and stability attributions is significantly higher (i.e. in the direction predicted) when participants were selected than when they were rejected, the mean for external control is significantly higher (i.e. in the direction predicted) when participants were rejected than when they were selected. Hence, these results provide support for H2a through H2d.

4.5.3.3. The Influence of Explanations on Applicant Attributions

Hypotheses 3a through 6d predicted that the different types of explanation letters would have different effects on locus, stability, personal control, and external control dimension of attributions. To examine these hypotheses, one-way MANOVA was conducted.

The Box test showed that the homogeneity of variance-covariance assumption was not satisfied ($F_{(30, 161847)} = 2.74$, p = .00); therefore, Pillai's Trace which is a more conservative MANOVA test statistic than Wilks' Lambda was used to interpret the MANOVA results (Olson, 1976; Tabachnick & Fidell, 2001). The multivariate results using Pillai's Trace criteria revealed significant effect for explanations (V = .160; $F_{(12,726)}$

= 3.41, η^2 = .053, p < .001). Moreover, the univariate analyses showed that explanations had a significant effect on locus ($F_{(3,243)} = 2.84$, $\eta^2 = .034$, p < .05) and personal control ($F_{(3,245)} = 7.15$, $\eta^2 = .08$, p < .001). The effect of explanations on stability and external control was not significant.

To determine which types of explanations were significantly different in their effects on the locus and personal control dimensions, planned comparisons were conducted. These comparisons showed that participants who received a procedural explanation reported a significantly higher mean (M = 4.46) on internal locus than did participants who received a diversity explanation (M = 3.84, p < .01) and no explanation (M = 3.82, p < .01). In addition, individuals who received a procedural explanation (M = 3.92) or a personal explanation (M = 3.97) reported a higher mean on personal control attributions than did participants who received a diversity explanation (M = 2.87, ps < .001). Table 4.4 presents the means and standard deviations for attribution dimensions by explanations. The above findings provide support only for H3a, H3c, H4a, and H5c but not H3b, H3d, H4b-d, H5a, H5b, H5b, H5d, and H6a-d.

4.5.3.4. The Interactive Effect of Explanations and Perceived Satisfaction/Violation of Justice Rules on Overall Process Fairness Perceptions

Hypotheses 7a through 8 predicted an interaction between perceived satisfaction/violation of justice rules and explanation types such that a different effect for types of explanations on process fairness would be observed when procedural rules are satisfied rather than violated. More specifically, when justice rules are satisfied, participants who receive either a procedural or a personal explanation will report higher procedural fairness than will participants who receive a diversity explanation and no explanation. Additionally, when justice rules are satisfied, participants who receive no explanation will report higher procedural fairness than will participants who receive the diversity explanation.

To test these hypotheses, a two-way ANOVA was conducted. Results revealed a significant main effect for perceived satisfaction/violation of justice rules ($F_{(1,239)} = 201.37, p < .001, \eta^2 = .457$) and a significant main effect for explanation types ($F_{(3,239)} = 13.18, p < .001, \eta^2 = .142$). More importantly, the interaction of the two predictors was significant ($F_{(3,239)} = 11.59, p < .001, \eta^2 = .127$). Since the interaction is significant, the interpretation of this analysis should focus on this interaction (Pedhazur & Schmelkin, 1991; Tabachnick & Fidell, 2001; Timm, 2002). Figure 4.1 reflects the nature of this interaction.

Overall Figure 4.1 shows that, while there is a different effect for types of explanations on process fairness when participants perceive satisfaction of the justice rules, there is no different effect for explanations on process fairness perceptions when individuals perceive justice rules to have been violated. To understand this interaction, I formed a new variable with eight groups by crossing the perceived satisfaction/violation of the justice rule levels with explanation types. Then, I used this new variable to conduct planned comparisons. These comparisons showed that individuals who perceived satisfaction of the justice rules and received a diversity explanation reported significantly lower overall process fairness perceptions (M = 2.56) than did individuals who perceived satisfaction of the justice rules and received a personal explanation (M = 4.91, p < .001),

procedural explanation (M = 4.56, p < .001), or no explanation (M = 4.30, p < .001). In addition, the planned comparisons showed that individuals who perceived satisfaction of the justice rules and received a personal explanation reported significantly higher overall process fairness perceptions than did individuals who perceived satisfaction of the justice rules and received no explanation (p < .05). However, the procedural condition did not differ significantly from the control condition (i.e., no explanation). These results provide support for the predictions of hypotheses 7a, 7c, 7d, 7e, and 8, but not 7b.

4.5.3.5. The Impact of Explanations and Selection Decisions on Self-Perceptions

Hypotheses 9 and 10 predicted an interaction between selection decision and explanations on applicant self-perceptions. To test these hypotheses, a two-way ANOVA was conducted. The results demonstrated a significant main effect for selection decision $(F_{(1,239)} = 68.26, p < .001, \eta^2 = .22)$. The main effect for explanation was not significant $(F_{(3,239)} = .133, p = .94, \eta^2 = .002)$. The interaction effect was significant $(F_{(3,239)} = 10.70, p < .001, \eta^2 = .118)$. Figure 4.2 shows the nature of the interaction.

To further illustrate the nature of this interaction, I formed a new variable with eight groups by crossing the type of explanations with the selection decision levels. I then used this new variable to conducted planned comparisons which showed that individuals who were selected and received a diversity explanation reported significantly *lower* self-perceptions (M = 4.39) than did selected individuals who received a personal (M = 5.61, p < .001) procedural (M = 5.44, p < .001), or no explanation (M = 5.13, p < .05). On the other hand, planned comparisons showed that individuals who were rejected and received a diversity explanation (M = 4.60) than did

rejected individuals who received a personal (M = 3.38, p < .005) procedural (M = 3.43, p < .005), or no explanation (M = 3.60, p < .005). Accordingly, these results provide support for hypotheses 9 and 10.

4.5.3.6. The Influence of Explanations on Applicant Attitudes and Behavioural Intentions

One-way MANOVA⁹ was conducted to examine the effects of explanations on: a) organizational perceptions, b) recommendation intentions, c) reapplication intentions, d) job acceptance intentions, and e) litigation intentions (H11a - H12e). Below are the results of this examination.

The Box test for the homogeneity of variance-covariance indicates that an equal variance cannot be assumed ($F_{(45, 145726)} = 1.70, p = .002$). Accordingly, Pillai's Trace is used to interpret the MANOVA results (Olson, 1976; Tabachnick & Fidell, 2001). The multivariate analysis revealed a significant effect for explanations (Pillai's Trace V = .245; $F_{(15,723)} = 4.285, \eta^2 = .082, p < .001$). The univariate analyses demonstrated that explanations had a significant effect on organization perceptions ($F_{(3,243)} = 8.84, \eta^2 = .098, p < .001$), recommendation intentions ($F_{(3,243)} = 5.09, \eta^2 = .059, p < .005$), reapplication intentions ($F_{(3,118)} = 4.54, \eta^2 = .095, p < .01$), acceptance intentions ($F_{(3,121)} = 7.96, \eta^2 = .10, p < .01$) and litigation intentions ($F_{(3,243)} = 15.87, \eta^2 = .164, p < .001$).

To determine which types of explanations were significantly different in their effect on organizational perceptions, recommendation intentions, reapplication intentions,

⁹ I also conducted a two-way and three-way MANOVA to explore the possibility of interaction between explanation types, selection decision, and perceived satisfaction/violation of justice rules on the dependent variables of H11a - H12e, however, only main effects for these variables were found. Therefore, my presentation focused only on the results of the one-way MAVOVA.

PhD Thesis – K. I. Ababneh

job acceptance intentions, and litigation intentions, planned comparisons were conducted. Table 4.5 presents the means, standard deviations, and statistical significance for these conditions. As shown there, the comparisons revealed that individuals who received a procedural explanation or a personal explanation reported a significantly *higher* mean (i.e. in the expected direction) on organizational perceptions, recommendation intentions, reapplication intentions, and job acceptance intentions, and reported a significantly *lower* mean (i.e. in the expected direction) on litigation intentions than did participants who received the diversity explanation. These results provide support for hypotheses 11a through 11e.

The planned comparisons also demonstrated that individuals receiving a *procedural explanation* reported a significantly *higher* mean on the organizational perceptions and reapplication intentions than did participants receiving *no explanation* (see table 4.5). Furthermore, the planned comparisons revealed that the individuals who received a *personal explanation* reported a significantly *higher* mean on the organizational perception, recommendation intentions and reapplication intentions than their counterparts who received *no explanation*. Therefore, these findings provide full support for H12a and H12c and partial support for H12b. However, H12d and H12e were not supported.

4.5.3.7. The Influence of Procedural Justice Rules and Attributions on Overall Process Fairness Perceptions

In line with Gilliland's model, hypothesis 13 predicted that perceived satisfaction/ violation of justice rules (consistency of administration, job relatedness, and opportunity

PhD Thesis - K. I. Ababneh

McMaster - Business Administration

to perform) would have a direct positive influence on overall process fairness perceptions. However in line with AART, hypotheses 14a through 14d suggested that attributions in terms of locus, personal control, stability, and external control would *fully* mediate the relationship between perceived satisfaction/violation of the justice rules and overall process fairness perceptions. To examine these hypotheses (13 through 14d), the analysis recommended by Baron and Kenny (1986) and Sobel's test (Goodman, 1960) for establishing mediation were used.¹⁰ Sobel's test indicates whether the indirect effect of the independent variable on the dependent variable (as carried through the mediator) is significant (Goodman, 1960; Preacher & Hayes, 2004).

To establish mediation according to Baron and Kenny (1986), three regression equations should be assessed. In the first equation, the independent variable should predict the dependent variable.¹¹ In the second equation, the independent variable should predict the mediator. In the third equation where the dependent variable is regressed on both the mediator and the independent variable, the mediator should predict the dependent variable. If each of the above relationships is established and in the third equation we find that after controlling for the mediator effect, the effect of the independent variable on the dependent variable is reduced but still significant, we conclude the presence of partial mediation. However if the effect of the independent

¹⁰ I also conducted the mediation analyses using boot-strapping technique (Preacher & Hayes, 2004). However, the results from boot-strapping were similar to those reported here. For the sake of parsimony the boot-strapping results were not reported here.

¹¹ Other researchers (see Mackinnon, 2008) argue that this condition (step) is not necessary to establish the existence of mediation. However, I followed Baron and Kenny's (1986) approach for establishing mediation because I wanted to clearly show the nature (i.e., partial or full mediation) and magnitude of the tested mediations. Notably, none of the mediations tested in this thesis were rejected as a result of not establishing the first condition suggested by Baron and Kenny (1986).

variable on the dependent variable is reduced and becomes non-significant after controlling for the mediator effect, then full mediation can be concluded.

Table 4.6 presents the results of the several mediation regression analyses conducted to examine hypotheses 14a through 14d. The unstandardized coefficients (b)and their associated t and p statistics are reported here (Edwards & Lambert, 2007; Muller, Judd, & Yzerbyt, 2005; Preacher & Hayes, 2004). Since hypothesis 13 was examined within these mediation analyses, Table 4.6 also provides data to test this hypothesis. As shown in Table 4.6, the first equation for testing hypotheses 14a-14d showed that perceived satisfaction/violation of the justice rules significantly predicted overall process fairness perceptions (b = 2.11, p < .001). This satisfied the first condition of mediation. The second equation for testing hypotheses 14a-14d showed that perceived satisfaction/violation of justice rules significantly predicted locus (b = .60, p < .001), personal control (b = .61, p < .005), and stability (b = .38, P < .05) but did not predict external control (b = .19, p = .50). The third equation for testing hypothesis 14a (see Table 4.6) showed that after controlling for locus (mediator), the effect of perceived satisfaction/violation of the justice rules on overall process fairness perceptions reduced in magnitude (b = 1.98, p < .001), though was not completely reduced, suggesting partial mediation. A significant Sobel test supported this (z = 2.45, p < .05). Similarly, the third equation for testing hypothesis 14b (see Table 4.6) showed that after controlling for the effect of personal control (mediator), the effect of perceived satisfaction/violation of justice rules on overall process fairness perceptions reduced in magnitude (b = 1.87, p < 1.87.01), however was not completely reduced, suggesting partial mediation. A significant

PhD Thesis – K. I. Ababneh

Sobel test supported this (z = 2.90, p < .005). The third equation for testing hypothesis 14c (see Table 4.6) showed that after controlling for the effect of stability (mediator), the effect of perceived satisfaction/violation of justice rules on overall process fairness perceptions was not reduced (b = 2.13, p < .001), suggesting the absence of mediation. A non-significant Sobel test confirmed the absence of mediation (z = -.59, p = .55).

In sum, in line with Gilliland's model, the above analyses revealed a strong direct positive effect for perceived satisfaction of justice rules on overall process fairness perceptions, supporting hypothesis 13. In addition, the tests of mediation indicated that participant attribution of locus and personal control partially mediated the relationship between perceived satisfaction/violation of justice rules and overall process fairness perceptions. However, the mediated effects were very small in magnitude. Accordingly, the full mediation predicted in hypotheses 14a-d was not supported.

4.5.3.8. The Influence of Process Fairness Perceptions and Attributions on Applicant Attitudes and Behavioural Intentions

In line with AART propositions, hypotheses 16a through 18e predicted that attributions in terms of locus, personal control, stability, and external control would be related to applicant attitudes and behavioural intentions. Also in line with AART propositions, hypotheses 19a through 22e suggested that overall process fairness perceptions would partially mediate the relationship between each dimension of attributions and organizational perceptions, recommendation intentions, reapplication intentions, job acceptance intentions, and litigation intentions. To examine these hypotheses, the regression analysis recommended by Baron and Kenny (1986) and the

Sobel test (Goodman, 1960; Preacher & Hayes, 2004) for establishing mediation were used.

Table 4.7 through Table 4.10 presents the results of the several mediation regression analyses conducted to examine hypotheses 19a through 22e. As reflected in Table 4.7, the first equation for testing hypotheses 19a through 19e demonstrated that locus significantly predicted organizational perceptions (b = .43, p < .001), recommendation intentions (b = .40, p < .001), litigation intentions (b = -.21, p < .005), job acceptance intentions (b = .22, p < .05), and reapplication intentions (b = .33, p < .05) .01). These results fulfilled the first condition of mediation and provided support for H16a - H16e regarding the influence of locus attributions. In the second equation,¹² locus significantly predicted overall process fairness perceptions (b = .37, p < .01). The third equation for testing H19a showed that after controlling for the effect of overall process fairness perceptions (mediator), the relationship between locus and organizational perceptions decreased in magnitude (b = .23, p < .001) but remained significant, suggesting partial mediation. The Sobel test substantiated this (z = 4.51, p < .001). Similarly, the third equation for testing H19b showed that after controlling for the overall process fairness effect, the relationship between locus and recommendation intentions decreased in magnitude (b = .16, p < .001), yet remained significant, suggesting partial mediation. A significant Sobel test supported this (z = 4.79, p < .001). Accordingly, H19a and H19b were supported.

¹² Since equation 2 of the mediation analysis for H19a established that locus significantly influenced process fairness, this equation is only reported here with H19a and not reported with H19b-H19e.

The third equation for testing H19c (see Table 4.7) showed that after controlling for the effect of overall process fairness perceptions (mediator), the influence of locus on litigation intentions was fully mediated (b = -.09, p = .19; Sobel test z = -3.82, p < .001). The third equation for testing hypotheses 19d and 19e (see Table 4.7) also showed that overall process fairness perceptions fully mediated the relationship between locus and each of job acceptance intentions (b = .09, p = .33; Sobel test z = 2.27, p < .05) and reapplication intentions (b = .01, p = .90; Sobel test z = 3.90, p < .001).

I also tested whether overall process fairness perceptions mediated the relationship between the personal control dimension of attributions and each of organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions (H20a - H20e). The first equation for testing H20a - H20e (see Table 4.8) revealed that personal control significantly affected organizational perceptions (b = .52, p < .001), recommendation intentions (b = .51, p < .001) .001), litigation intentions (b = -.30, p < .001), job acceptance intentions (b = .35, p < .001) .001), and reapplication intentions (b = .49, p < .001). These results fulfilled the first condition of mediation and provided support for H16a - H16e regarding the influence of personal control attributions. The second equation showed that personal control explained significant variance in overall process fairness perceptions (b = .51, p < .001). The third equation for testing hypotheses 20a-20c demonstrated that after controlling for the effect of overall process fairness perceptions (the mediator), the magnitude of the effects of personal control on organizational perceptions (b = .28, p < .001; Sobel test z = 5.91, p < .001.001), recommendation intentions (b = .20, p < .001; Sobel test z = 7.06, p < .001),

litigation intentions (b = -.14, p < .05; Sobel test z = -4.17, p < .001) were reduced, however the effects were not eliminated. Thus, consistent with AART (Ployhart and Harold, 2004), hypotheses 20a through 20c were supported.

However, rather than finding the predicted partial mediation, the third equation for testing hypotheses 20d and 20e (see Table 4.8) showed that overall process fairness perceptions fully mediated the relationship between personal control and each of job acceptance intentions (b = .12, p = .16; Sobel test z = 3.96, p < .001) and reapplication intentions (b = .14, p = .80; Sobel test z = 4.58, p < .001).

I also followed the above mediation analysis procedures to test whether the influence of the stability dimension of attributions on organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions is mediated by overall process fairness perceptions (H21a - H21e). As shown in Table 4.9, the first equation of the analysis showed that stability was only related to organizational perceptions (b = .22, p = .01). In the second equation, however, stability was not significantly related to overall process fairness perceptions (b = .08, p = .34). Therefore, according to Baron and Kenny's criteria, the mediation effects predicted in hypotheses H21a - H21e were not found (see Table 4.9 for more detail).

The Sobel test results corroborated the above findings by demonstrating that overall process fairness perceptions did not mediate the relationship between stability and organizational perceptions (z = .94, p = .36), recommendation intentions (z = .95, p =.34), litigation intentions (z = -.93, p = .35), job acceptance intentions (z = 1.57, p = .12), and reapplication intentions (z = -.51, p = .61). Thus, hypotheses H21a - H21e were not

supported as overall process fairness perceptions did not mediate the relationship between stability and each of organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions.

Mediation analyses were also conducted to test whether the influence of external control attributions on organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions is mediated by overall process fairness perceptions (H22a - H22e). Table 4.10 provides results of these analyses. As shown there, the first equation of the analysis revealed that external control related only to recommendation intentions (b = -.15, p < .05). In the second equation, however, external control was not significantly related to overall process fairness perceptions (b = -.08, p = .31). Thus, according to Baron and Kenny's criteria, the mediation effects predicted in H22a - H22e were not found. The Sobel test results corroborated the above findings by demonstrating that overall process fairness perceptions (z = -1.00, p = .32), recommendation intentions z = -1.01, p = .31), litigation intentions (z = .99, p = .33), job acceptance intentions (z = -1.04, p = .30), and reapplication intentions (z = -1.01, p = .31). Thus, hypotheses 22a through 22e were not supported.

In sum, the results showed that locus and personal control attributions predicted organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions. Accordingly, hypotheses 16a through 16e were supported. However, the first equation of the mediation analyses performed to test hypotheses 21a -22e revealed that stability was only related to organizational perceptions and external control was related only to recommendation intentions. Accordingly, only hypotheses 17a and18b¹³ were supported. In addition, the mediation analyses conducted to test the partial mediation predicted in hypotheses 19a -19e showed that overall process fairness perceptions partially mediated the relationship between locus and each of organizational perceptions (H19a) and recommendation intentions (H19b). However, rather than finding partial mediation as predicted in H19c – H19e, overall process fairness perceptions fully mediated the relationship between locus and each of litigation intentions (H19c), job acceptance intentions (H19d), and reapplication intentions (H19e).

Analyses conducted to test hypotheses 20a - 20e demonstrated that overall process fairness perceptions partially mediated the relationship between personal control and each of organizational perceptions (H20a), recommendation intentions (H20b), and litigation intentions (H20c), supporting H20a, b and c, respectively. However, although H20d and H20e predicted that overall process fairness perceptions would partially mediate the relationship between personal control and each of job acceptance intentions (H20d) and reapplication intentions (H20e), the results suggested full mediation rather partial mediation.

4.5.3.9. The Interactive Effect of Procedural Fairness and Selection Decision on Self-Perceptions

Hypotheses 23a and 23b predicted an interaction between selection decision and interview procedural fairness on participant self-perceptions. To test these hypotheses, a

¹³ Recall that hypotheses 17a and 18b was tested within the mediation analysis performed to test hypotheses 21a -22e.

two-way ANOVA was conducted (see Table 4.10). The analysis revealed a significant main effect for selection decision ($F_{(1,243)} = 65.82$; $\eta^2 = .213$, p < .001). Participants who received a job offer reported higher self-perceptions (M = 5.13) than did participants who did not receive a job offer (M = 3.74, p < .001). More importantly, there was a significant interaction between selection decision and interview procedural fairness ($F_{(1,243)} = 14.28$, $\eta^2 = .055, p < .001$). The pattern of the interaction is reflected in Figure 4.3. To further understand the nature of this interaction effect. I formed a new variable with four groups by crossing the selection decision levels with the interview procedure levels. I then used the new variable to conduct planned comparisons, which showed that individuals who were selected and experienced fair interview procedures reported higher self-perceptions (M = 5.56) than did individuals who were selected and experienced unfair interview procedures (M = 4.73, p < .001). On the other hand, individuals who were rejected and experienced unfair interview procedures reported higher self-perceptions (M = 3.98) than did individuals who were rejected and experienced fair interview procedures (M = 3.50, p <.05). Therefore, the interaction predicted in hypothesis 23a and 23b was supported.

4.5.3.10. The Interactive Effect of Selection Decision and Attributions on Self-Perceptions

Hypotheses 24a through 24d predicted that selection decision and attribution in terms of locus, stability, personal control, and external control interact to influence applicant self-perceptions. Each of these hypotheses was examined by using separate regression analysis. Prior to each analysis, continuous predictors were centered as recommended by Aiken and West (1991). In each regression analysis, the effects on self-

perceptions were simultaneously assessed with respect to selection decision, attribution dimension, and the interaction between the two. Table 4.12 - 4.15 report the results of these regression analyses. The unstandardized coefficients (b) and their associated t and p statistics are reported here. As shown in Table 4.12, the results from testing H24a revealed significant main effects for selection decision (b = 1.37, p < .001) and locus (b =-.29, p < .001) on self-perception. The interaction term between locus and selection decision on self perceptions was also significant (b = .64, p < .001). Table 4.13 reflects the results from testing H24b. As shown there, significant main effects for selection decision (b = 1.38, p < .001) and personal control (b = -.26, p < .001) on self-perception were found. More importantly, a significant interaction between selection and personal control on self-perception was also observed (b = .56, p < .001). Table 4.14 presents the results of the hypothesized interaction between selection decision and stability attribution on self-perception (H24c). As shown there, the regression analysis indicated a significant main effect for selection decision (b = 1.32, p < .001), and for stability (b = .21, p < .05) on self-perceptions. However, the interaction effect between selection and stability attribution was not significant (b = -.04, p = .75). Table 4.15 reflects the results of the hypothesized interaction between selection decision and external control attributions on self-perceptions (H24d). As shown there, only a significant main effect for selection decision on self-perception was found (b = 1.42, p = 001). Therefore, the above results support hypotheses 24a and 24b, but not hypotheses 24c and 24d.

To further understand the significant interactive effect of selection decision and participant locus attribution on self-perceptions, I conducted simple slope analysis as

suggested by Aiken and West (1991). The simple slope analysis showed that the relationship between locus and self-perception is *positive* for selected applicants (b = .35, p < .001). For rejected applicants, however, the analysis revealed a negative relationship between locus and self-perception (b = -.28, p < .001). Figure 4.4 reflects the pattern of this interaction. I also conducted simple slope analysis to probe the significant interactive effect of selection decision and personal control attribution on self-perceptions. This analysis showed that while the relationship between personal control and self-perception is *positive* for selected applicants (b = .30, p < .001), it is *negative* for rejected applicants (b = -.26, p < .001). Figure 4.5 reflects the nature of this interaction. These results provide further illustration and support for hypotheses 24a and 24b.

4.5.3.11. The Role of Attributions in Mediating the Interactive Effect of Selection Decision and Procedural Fairness on Self-Perceptions

Hypotheses 25a - 25d predicted that the interaction effects hypothesized in H24a -H24d between selection decision and attribution dimensions on self-perceptions would fully mediate the interaction effects hypothesized in H23a and H23b between interview procedural fairness and selection decision on self-perceptions. To examine these hypotheses, I mainly used the approach suggested by Muller et al. (2005) for testing *mediated moderation.*¹⁴ I also used procedures suggested by Edwards and Lambert (2007) to probe the nature of any interaction uncovered. Specifically, I computed the related simple effects (Aiken & West, 1991) for each significant interaction and tested

¹⁴ There are differences among researchers about what should be labelled "moderated mediation" and what should be labelled "mediated moderation" (see Edwards & Lambert, 2007; Muller et al., 2005 for more detail discussion about this issue). I adopted Muller et al.'s view because it better fits with testing the predictions of hypothesis 25 of this research (see footnote number 15).

whether the simple effects at the two levels of the moderator (i.e., selection decision) were significantly different from each other (Edwards & Lambert, 2007).

According to Muller et al.'s (2005) approach (which implements the steps recommended by Baron and Kenny (1986) for establishing mediation), three regression equations should be performed to evaluate mediated moderation. The first simultaneously assesses the effects of the independent variable, the moderator, and their interaction on the dependent variable. The second simultaneously assesses the effect of the independent variable, the moderator, and their interaction on the mediator. The third regression simultaneously assesses the effects of the independent variable, the moderator, and their interaction on the independent variable assesses the effect of the independent variable, the moderator, and their interaction on the mediator. The third regression simultaneously assesses the effects of the independent variable, the moderator, the mediator, and interactions between: a) the independent variable and the moderator, and b) the independent variable and the mediator on the dependent variable.

To conclude that the interaction effect between the independent variable and the moderator is mediated by the interaction effect between the mediator and the moderator, the following conditions should be satisfied according to Muller et al. (2005). First, a significant interaction effect on the dependent variable should be observed between the independent variable and the moderator in the first equation.¹⁵ Second, the independent variable or the interaction between the independent variable and the moderator must predict the mediator in the second equation. Third, a significant interaction between the

¹⁵ In their approach, Edwards and Lambert (2007) suggest that this condition (step) is not necessary and therefore they drop it from their analytical procedures (see Mackinnon, 2008). However if I drop this step from my analysis I will be unable to clearly show the nature (i.e., partial or full mediation) and magnitude of the tested mediated moderation. Hence, I believe that Muller et al.'s approach is better for testing the prediction of hypotheses 25a - 25d. The approach by Edwards and Lambert offers excellent procedures for estimating other models that integrate mediation and moderation. It also offers procedures to compute the values of the simple effects and to test the difference between these simple effects at different levels of the moderator variable.

PhD Thesis – K. I. Ababneh

mediator and the moderator or a significant effect for the mediator on the dependent variable must be observed in the third equation. Fourth, if each of the above conditions is fulfilled and in the third equation we find that after controlling for the mediator effect and its interaction with the moderator, the significant interaction effect between the independent variable and the moderator (established in equation 1) becomes nonsignificant, we conclude the presence of full mediation. However, if the interaction effect between the mediator and the moderator is reduced but still significant, then partial mediation can be concluded.

Table 4.16 provides the results of the mediated moderation analysis for H25a, in which the locus dimension of attribution served as the mediator. As shown in Table 4.16, the first regression demonstrated a significant interaction effect between interview procedural fairness and selection decision on self-perceptions (b = 1.30, p < .001). Hence, this satisfies the first condition of the mediated moderation. The results from the second regression revealed a significant effect of interview procedural fairness on locus attribution (b = .87, p < .001). Thus, this satisfies the second condition of the mediated moderation. The results from the mediated moderation. The third regression showed that after controlling for locus attribution (mediator) and its interaction with selection decision, the coefficient associated with the interaction between interview procedural fairness and selection decision on self-perceptions reduced from 1.30 (first regression equation) to .96 (p < .005). The third equation also revealed a significant interaction effect between locus attribution and selection decision on self-perceptions (b = .58 p < .001). Accordingly the above results

indicate that with locus attribution as the mediator, partial mediation is observed rather than the full mediation hypothesized in H25a.

A similar mediated moderation analysis (as the one just conducted above) was performed for H25b. Table 4.17 shows the results of this analysis. The first regression revealed a significant interaction effect between interview procedural fairness and selection decision (b = 1.30, p < .001) on self-perceptions.¹⁶ The results from the second regression revealed a significant effect for interview procedural fairness (b = .68, p <.005) on personal control attributions (mediator). The third regression showed that after controlling for personal control attribution and its interaction with selection decision, the coefficient associated with the interaction between interview procedural fairness and selection decision on self-perceptions dropped from 1.30 (first regression) to .99 (p <.005). The third regression also showed that the interaction effect between personal control attribution and selection decision on self-perceptions was significant (b = .50, p <.001). Accordingly the above results indicate that when personal control attribution served as the mediator, partial mediation was observed rather than full mediation as hypothesized in H25b.

Two other mediated moderation analyses (same as those conducted above) were done for the attribution dimensions of stability (H25c) and external control (H25d). The results did not satisfy the conditions outlined by Muller et al. (2005) for establishing

¹⁶ The results of this first equation are the same as the one conducted above with locus attribution. It is repeated here to facilitate comparison with the third regression.

mediated moderation. Hence, H25c and H25d were not supported. Tables 4.18 and 4.19 present the detailed results of these mediated moderation analyses.

To further understand the nature of the significant interactions found in testing hypothesis 25a and 25b, I computed the simple effects for each path of the basic mediated models¹⁷ at the two levels (i.e., selected or rejected) of the moderator. In line with Edwards and Lambert's (2007) approach, tests of differences for simple effects between the two levels of the moderator at each path of the basic mediated model and tests of differences for the indirect and total effects (based on bias-corrected confidence intervals derived from bootstrap estimate) were computed (Edwards & Lambert, 2007). Table 4.20 and 4.21 present the values of the simple effects and the results of comparing these effects for selected and rejected individuals when locus and personal attributions were used as mediators. As reflected in Table 4.20, when locus (H25a) was used as a mediator, the results from comparing the simple effects for selected and rejected applicants revealed that the path from locus to self-perceptions (0.32 - .26 = .58 p < .001), the direct effect (0.70 - 0.26 = 0.96 p < .001), the indirect effect (0.12 - 0.22 = 0.34 p < .001), and the total effect (0.82 - 0.48 = 1.30 p < .001) were significantly different.¹⁸ On the other hand, the results from comparing the simple effects for selected and rejected applicants indicated that path from interview procedural fairness to locus (0.36 - .86 = 0.50 p < .001)was not significantly different.

¹⁷ A basic mediated model is one that consists of a path from an independent variable to a dependent variable, a path from the independent variable to a mediator, and a path from a mediator to the dependent variable. See Figure 4.6 which represents the basic mediated model for H25a.

¹⁸ *Direct effect* refers to the path from the independent variable to the dependent variable. *Indirect effect* refers to the product of the path from the independent variable to the mediator plus the path from the mediator to the dependent variable. *Total effect* refers to the sum of the direct and the indirect effect.

With personal control as mediator (see Table 4.21), the results from comparing the simple effects for selected and rejected applicants revealed that the path from personal control to self-perceptions (0.26 - 0.24 = 0.50 p < .001), the direct effect (0.67 - 0.32 = 0.99 p < .001), and the total effect (0.15 - 0.16 = 0.31 p < .001) were significantly different. On the other hand, the results from comparing the simple effects for selected and rejected applicants indicated that the path from interview procedural fairness to locus (0.32 - .03 = 0.29 p > .05), and the indirect effect (0.15 - 0.16 = 0.31 p > .05), were not significantly different. As shown in Tables 4.20 and 4.21, for selected applicants all the slopes were positive. For rejected applicants, however, all the slopes were negative except the slopes for the paths from interview procedural fairness to locus and personal control attributions (which were positive).

This chapter has presented the methods used and results obtained. Although several hypotheses of the current research were supported, a good number of hypotheses were not supported. A complete summary of these is shown in Table 22.

CHAPTER 5: DISCUSSION

The research on applicant reactions has provided theoretical reasons (e.g., Gilliland, 1993) -- and empirical support for -- the influence of justice rules on fairness perceptions, as well as the influence of fairness perceptions on applicant behaviours (Hausknecht et al., 2004; Ryan and Ployhart, 2000). However, few studies have systematically investigated the psychological mechanisms by which such influence occurs. Ployhart and Harold (2004) introduced AART, in which applicant perceptions and behavioural reactions are explained in terms of the attributions applicants make throughout the selection process. A key aim of the current study was to draw upon AART propositions to investigate the role of attributions in forming applicant perceptions (e.g., fairness and self perceptions) and in influencing their behavioural reactions (e.g., recommendation and litigation intentions). Another objective was to understand the differential effects of procedural, personal, and diversity explanations on applicant perceptions and behaviours.

In line with AART predictions (Ployhart & Harold, 2004), the results in general underscore the influence of attributions on applicant perceptions and behavioural reactions. The results are also consistent with the organizational justice framework (Gilliland, 1993; Hausknecht et al., 2004). I turn now to discussing the key findings and their contribution to advancing theory and practice, and conclude by noting key limitations to the current study and offering suggestions for future research.
5.1. Key Findings

5.1.1. The Influence of Procedural Justice Rules, Outcome Favourability, and Explanations on Attributions

A central finding of this study is that the nature of attributions that applicants make concerning the cause of their selection outcome (i.e., selected/rejected) is influenced by: a) their experience of a staffing process that satisfies/violates procedural justice rules, b) a favourable (selected) or an unfavourable (rejected) selection outcome, and c) explanations given for the selection decision.

Applicants who experienced a selection procedure that satisfied Gilliland's justice rules (i.e., job relatedness, opportunity to perform, consistency of administration) rated the cause of their selection outcome higher on the a) internal, b) stable, and c) personal control attribution dimensions than did applicants who experienced a selection procedure that violated these rules. These results support AART (Ployhart & Harold, 2004) and are consistent with the few empirical studies that have attempted to link procedural rules with attributions (Brockner, 2002; Leung et al., 2001). A unique contribution of the current study lies with having shown under an experimental design that satisfaction/violation of justice rules is an antecedent of applicant *attributions* in terms of locus, personal control, and stability. Establishing this linkage empirically is very important due to the AART proposition that applicant attributions in terms of these dimensions determine applicant perceptions and behavioural reactions (Ployhart & Harold, 2004; Weiner, 1985, 86).

Regarding the influence of the selection decision (i.e., selected or rejected) on the form of attribution applicants make, individuals who received a job offer rated the cause of this positive outcome higher on the internal, stable, and personal control attribution dimensions and lower on the external control attribution dimension. In contrast, individuals who were rejected rated the cause of this negative outcome lower on the internal, stable, and personal control dimension of attributions and higher on the external control dimension of attribution. In line with AART predictions and prior research (e.g., Abramson et al., 1978; Chan et al., 1997; Chan et al., 1998a; Gilbert & Malone, 1995; Ployhart & Ryan, 1997), these results show that applicants are more likely to engage in self-enhancing attributions after a favourable event; and in self-protecting attributions following an unfavourable event. While research outside the field of personnel selection has shown that people engage in these two forms of self-serving attributions, this is the first time this has been shown explicitly in terms of attribution dimensions within an employment selection context, albeit a simulated one. Ployhart and Ryan (1997) showed self-serving bias among individuals applying for admission into a university graduate program and Chan and colleagues (Chan et al., 1997; Chan et al., 1998a) showed selfserving bias in employment testing. However, Chan and colleagues operationalized selfserving bias in terms of perceived performance rather than attribution dimensions. As stated earlier, demonstrating self-serving bias in terms of attribution dimensions is important because they are the primary factors that influence applicant perceptions and behavioural reactions (Ployhart & Harold, 2004; Weiner, 1985, 86).

With respect to explanations justifying the selection decision, it was predicted that procedural, personal, and diversity explanations would have different effects on the attribution dimensions of locus, personal control, external control and stability. Consistent with these predictions, participants who received a procedural explanation reported higher internal locus attributions than did participants who received either a diversity explanation or no explanation. In addition, individuals who received a procedural or a personal explanation reported higher personal control attributions than did participants who received a diversity explanation. Consistent with Ployhart et al. (2005) and AART predictions, the results generally suggest that job applicants react to the content of the information provided in explanation letters and that this content shapes their attributions.

While findings reported here provide some support for the differential influence of explanation types on applicant attributions, a number of the hypothesized differential effects were not supported. For example, there were no effects for the different types of explanations (i.e., procedural, personal, diversity, and no explanations) on the stability and the external control dimensions of attributions. Though it is difficult to explain this theoretically, perhaps the content of the procedural, personal, and diversity explanation letters did not contain enough specific information for participants to infer whether the cause of the selection decision was stable or under external control. Hence, other types of explanations that are more likely to trigger such effects should be investigated. For instance, a *causal explanation* -- highlighting external conditions (e.g., bad economic conditions) that led to not making a job offer (Bies, 1987) -- may significantly affect

applicant external attributions. This is likely to happen as this type of explanation clearly specifies external factors for an event.

5.1.2. The Relationship between Procedural Justice Rules, Attributions, and Overall Process Fairness Perceptions

In line with AART (Ployhart & Harold, 2004), this study predicted that attributions in terms of locus, personal control, stability, and external control would fully mediate the relationship between satisfaction/violation of procedural justice rules perceptions and overall process fairness perceptions. Although *full* mediation was not found, attributions (in terms of locus and personal control) *partially* mediated the effects of satisfaction/ violation of justice rules on overall process fairness perceptions. However, this mediated effect was very small in magnitude. Since this is the first known study to investigate this particular mediation, more research is needed before firm conclusions can be drawn regarding the mediating effects of attributions.

Given that attribution dimensions were not strong mediators of the relationship between satisfaction/violation of procedural justice rules and overall process fairness perceptions, I conducted an auxiliary hierarchical regression to see whether attribution dimensions explain unique variance in overall process fairness perceptions. This auxiliary analysis showed that attribution dimensions explained variance in process fairness perceptions beyond that explained by perceived satisfaction/violation of procedural justice rules. Specifically,¹⁹ the locus and the personal control attribution dimensions

¹⁹ In the first block of the hierarchical regression analysis, I regressed overall process fairness perceptions (dependent variable) on perceived satisfaction/violation of the justice rules variable (independent variable). This step explained 39% ($\Delta R^2 = .39 \text{ p} < .001$) of the variance in process fairness perceptions. In the second

explained a significant proportion of unique variance (13%) in the overall process fairness perceptions variable. This suggests that locus and personal control attributions play an important role in forming overall process fairness perceptions, even if they don't represent the process by which the satisfaction/violation of procedural justice rules influence process fairness perceptions.

5.1.3. The Role of Attributions in Mediating the Interactive Effect of Selection Decision and Procedural Fairness on Self-Perceptions

An important issue that was examined in this study is the role of attributions in explaining (mediating) the interaction between procedural fairness and outcome favorability on self-perceptions. As discussed earlier, although previous researchers who drew on attribution principles to understand this interaction shed some light on it (Brockner et al., 2003; Schroth & Shah, 2000), they either speculated (without testing) that individuals' attributions accounted for the interaction (e.g., Schroth & Shah, 2000) or they focused only on the effects of the specific causes (e.g., ability and effort) without examining the effects of the attribution dimensions underlying these specific causes (Brockner et al., 2003). Therefore, the present research specifically examined the role of attribution dimensions (i.e., locus, stability, personal control, and external control) in mediating (explaining) the influence of the interaction between procedural fairness and outcome favorability on self-perceptions.

block, I added locus and personal control attribution dimensions as other independent variables. The addition of locus and personal control attributions dimensions in second block resulted in a 13% significant unique increase in R^2 ($\Delta R^2 = .13$, p < .001).

In line with previous research findings, the present research demonstrated the interaction effect of procedural fairness and outcome favourability on applicant selfperceptions (Ployhart et al., 1999; Schroth & Shah, 2000); and the interaction effect of attribution dimensions and outcome favourability (Weiner, 1985, 1986) on applicant selfperceptions. While research has demonstrated each of these two interactions in separate studies (Ployhart et al., 1999; Schroth & Shah, 2000; Weiner, 1985, 1986), Brockner et al. (2003) is the only other study to have shown these two interactions simultaneously in one research setting. Demonstrating the two interactions simultaneously is important because it provides more compelling evidence of the role of attributions in mediating the interactive effect of procedural fairness and outcome favourability on self perceptions. However, this study differs from Brockner et al.'s (2003) in showing the interaction between outcome favourability and attributions in terms of attribution dimensions (McAuley et al., 1992, Ployhart & Harold, 2004) rather than with respect to the specific causes of attributions. The former is important because there is much consensus among attribution researchers that it is not the specific attributed causes of personal events that influence people's perceptions and behaviour (Graham, 1991; Weiner, 1985, 1986) but rather the underlying dimensions of the specific causes.

Most importantly, the current study has shown that the effect of the interaction between procedural fairness and outcome favourability on self-perceptions is partially mediated (explained) by the interaction between attribution dimensions and outcome favourability. Specifically, procedural fairness perceptions influenced applicant locus and personal attributions, and these attributions, which were affected by procedural fairness

perceptions, interacted with outcome favourability to influence self-perceptions. To some degree this finding is in line with Brockner et al.'s (2003) research. However, while Brockner et al. found full mediation, partial mediation was shown here. This partial mediation is somewhat surprising as most attribution researchers hold that specific causes of attributions (e.g., ability and effort) are not as important in determining people's perceptions and behaviour as is the attributional dimensionality of the cause (Graham, 1991; Weiner, 1985, 1986). However, it has been shown elsewhere that attribution dimensions and specific causes of attributions have joint and independent effects on people's perceptions and behaviours (Dresel, Schober, & Ziegler, 2005; Russell & McAuley, 1986).

5.1.4. The Direct and Indirect Effects of Attributions on Applicant Perceptions and Behavioural Intentions

Consistent with the AART predictions, applicant locus and personal control attributions predicted organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions. However, stability predicted only organizational perceptions, while external control attributions predicted only recommendation intentions. Overall procedural fairness perceptions predicted organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions, litigation intentions, job acceptance intentions, and reapplication intentions. These findings are in line with the findings of the numerous applicant reaction studies that draw on the organizational justice framework (Hausknecht et al., 2004; Ryan & Ployhart, 2000). With respect to the AART proposition that overall process fairness perceptions partially mediate the effects of attribution dimensions on each of organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions, mixed results were obtained. Specifically, as predicted, process fairness perceptions partially mediated the relationships between applicant locus of attributions and each of organizational perceptions and recommendation intentions. Also as predicted, overall process fairness perceptions partially mediated the relationship between personal control and each of organizational perceptions, recommendation intentions, and litigation intentions. However, rather than finding the hypothesized partial mediation, overall process fairness perceptions fully mediated the effect of locus on litigation intentions, job acceptance intentions, and reapplication intentions. Similarly, overall process fairness perceptions fully mediated the influence of personal control on job acceptance intentions and reapplication intentions.

While the influence of attribution dimensions on applicant reactions has been established (Ployhart & Ryan, 1997, Ployhart et al., 2002), the current study is one of the first to support the AART (Ployhart & Harold, 2004) proposition that applicant attributions directly and indirectly (via process fairness) influence applicant perceptions and behavioural reactions. This result is consistent with Holtz et al.'s (2005) who found that test-taker perceptions mediated the association between locus and each of organizational attractiveness and recommendation intentions. Together, the above findings (along with the results regarding the influence of justice rules, outcome favourability, and explanations on applicant attributions) suggest that applicant

attributions are influenced by: (a) experiencing a staffing process that satisfies/violates procedural justice rules; (b) receiving a favourable (selected) or unfavourable (rejected) selection outcome; and (c) receiving an explanation for a selection decision. Applicant attributions, in turn, influence applicant perceptions and behaviours. In other words attributions explain how staffing procedures and selection decisions influence applicant perceptions and behavioural reactions.

5.1.5. The Interaction Effect of Explanations and Procedural Justice Rules on Overall Process Fairness Perceptions.

Explanations generated different effects on process fairness perceptions only when justice rules were satisfied rather than violated. Particularly, when justice rules were satisfied, participants who received either a procedural or a personal explanation reported greater fairness in the selection process than did participants who received a diversity explanation. Additionally, when justice rules were satisfied, participants who received a personal explanation perceived greater fairness in the selection process than did participants who received no explanation. These findings to some degree extend prior research on explanations by placing a boundary condition on the effectiveness of procedural and personal explanations in enhancing process fairness perceptions (Gilliland et al., 2001; Ployhart et al., 1999). Specifically, when justice rules are not satisfied, procedural and personal explanations cannot generate their expected positive effects on process fairness perceptions. The above results likely emerged because participants who experienced a selection process that violated the three procedural justice rules perceived the contents of the procedural and personal explanation as lacking truth and honesty. These speculations are consistent with prior research (Greenberg, 1990b; Shapiro, 1991; Shapiro et al., 1994; Shaw et al., 2003) that showed explanation adequacy as an important factor in determining the effectiveness of explanations.

5.1.6 The Interactive Effect of Outcome Favourability by Types of Explanations on Self-Perceptions

Compared to selected individuals in the procedural, personal, and no explanation conditions, selected individuals receiving the diversity explanation reported the lowest self-perceptions. In contrast, rejected individuals who received the diversity explanation reported the highest self-perceptions relative to rejected individuals who received the other types of explanations. These results replicate those of Ployhart et al. (1999). More importantly, they (coupled with the influence of explanations on applicant attributions) lend empirical support for Ployhart et al.'s (1999) proposition that the psychological mechanism by which explanations exert different effects on applicant self-perceptions is the nature of attributions applicants make regarding their selection outcomes. As noted earlier, relative to individuals receiving the other three types of explanations, individuals with the diversity explanation reported the lowest locus and personal control attribution ratings for their outcome. Consequently, the nature of attributions did not enhance the self-perceptions for selected applicants receiving the diversity explanation nor did it harm the self-perceptions of rejected applicants receiving the diversity explanations. On the other hand, the nature of attributions enhanced the self-perceptions of selected individuals who were in the procedural, personal, and no explanation conditions; but it harmed the

self-perceptions of rejected individuals in the procedural, personal, and no explanation conditions.

These results are consistent with Kelley's (1972) discounting principle and with Schroth and Shah (2000) in that it was difficult for selected individuals receiving a diversity explanation to claim responsibility for their positive outcome since this outcome could be easily attributed to external causes (i.e., preferential treatment given to them). Consequently, their self-perceptions were not enhanced. Alternatively, it was easy for rejected individuals receiving a diversity explanation not to inflict self-blame for the negative outcome since the cause of their rejection was not a lack of ability or qualifications but rather preferential treatment given to minority applicants. Consequently, their self-perceptions were not harmed.

5.2. Implications for Theory

The results of this research offer a number of theoretical implications. First, this study responds to the calls of other scholars for more application of attribution theory principles to the study of applicant reactions (e.g., Anderson et al., 2001; Hausknecht et al., 2004; Ployhart & Harold, 2004; Ryan & Ployhart, 2000). In particular, it explicitly tested propositions from AART (Ployhart & Harold, 2004), a theory that integrates features from the organizational justice framework, with those from attribution theory. Overall, results suggest that instead of focusing only on identifying the antecedents of fairness perceptions as most research in the area of applicant reactions has done (see reviews by Hausknecht et al., 2004; Ryan & Ployhart, 2000), researchers should also

focus on identifying the antecedents of attributions because both applicant attributions and fairness perceptions likely influence applicant perceptions and behavioural reactions.

Second, this study provides empirical evidence, under controlled conditions, that satisfaction/violation of procedural justice rules cause variation in job applicant attributions. Specifically, the higher the satisfaction of the justice rules of job relatedness, consistency of administration, and opportunity to perform, the more those applicants make internal and personal control attributions. These findings are important as no study has examined and demonstrated this particular link. This linkage is also important because these attributions determine applicant perceptions and behaviours (Ployhart & Harold, 2004; Ployhart & Ryan, 1997; Weiner, 1986).

Third, the results from this research show that attributions have a direct and an indirect effect (via process fairness) on applicant attitudes and behavioural intentions. They provide support for the AART proposition that process fairness perceptions mediate the attributions-behaviour intentions relationship. These findings also replicate findings regarding the direct effect of process fairness on applicant attitudes and behavioural intentions (see reviews by Hausknecht et al., 2004; Ryan & Ployhart, 2000).

Fourth, in contrast to research from selection and nonselection contexts that has speculated (but not tested) that attributions account for the influence of the interaction effect between process fairness and selection outcome on self-perceptions (e.g., Schroth & Shah, 2000; see Brockner et al., 2003 for an exception), the current study used dimensions of attributions to test for this directly. Results suggest that applicant selfperceptions are formed in part via the locus and personal control attributions which

appear to have been derived from procedural fairness perceptions. More importantly, together, the above suggests that attributions play an important role in explaining how staffing procedures and selection decisions influence applicant perceptions and behavioural reactions.

Fifth, splitting the original controllability dimension of attribution (Weiner, 1986) into two separate dimensions (i.e., personal and external control) as suggested by McAuley et al. (1992) revealed that, while personal control attributions predicted the five outcome variables examined, external control attributions only predicted recommendation intentions. This suggests that personal control and external control should be treated as two separate dimensions of controllability. Doing so should lead to a richer understanding of the influence of attributions on applicant perceptions and behaviour.

5.3. Implications for Practice

Practically, this study's results suggest that organizations seeking to enhance fairness perceptions by providing procedural and personal explanations should first develop and implement selection procedures that satisfy procedural justice rules in terms of job relatedness, consistency of administration and opportunity to perform. Without satisfying such rules, procedural and personal explanations are not likely to generate their potential positive effect on applicant process fairness perceptions. Organizations should also focus on satisfying justice rules in their selection system because the degree to which these rules are satisfied influence applicant attributions, which in turn influence applicant perceptions and behavioural reactions (such as whether or not to accept a job offer, to recommend the organization to others, to litigate). These reactions are important for organizations striving to achieve effectiveness and efficiency (Gilliland, 1993; Ryan & Ployhart, 2000).

Though findings reported here suggest that managers can elicit favourable applicant reactions by getting job applicants to attribute the cause of selection outcomes to more internal and personal control factors, managers should also know that doing so could be harmful to the psychological well-being (e.g., low self-esteem) of job applicants who receive the personally unfavourable outcomes (e.g., not passing an employment test, not receiving a job offer).

Organizations should be aware that providing diversity explanations or implementing diversity programs is likely to produce negative reactions not only among people who do not benefit from them, but also from the very people for whom diversity initiatives are designed. For example, individuals receiving the diversity explanations were less likely: (a) to accept a job offer, (b) to apply for future jobs, (c) to recommend the organization; and they were more likely to litigate (as compared to individuals who received the personal, procedural, and no explanation conditions).

The findings of the current study also suggest that the information given in explanation letters shapes the nature of applicant attributions. This suggests that organizations can use explanations to reduce self-serving bias, especially among individuals who receive unfavourable outcomes (Ployhart & Harold, 2004). Though this is likely to result in applicant reactions favourable to the organization, it is likely to lead to lower applicant self-esteem and self-efficacy.

5.4. Limitations

First, using undergraduate students is likely to limit the generalizability of the current findings to actual selection contexts. However, the participants (senior students) represent an important pool of job candidates organizations depend on. Additionally, the fact that the majority $(82\%)^{20}$ of participants were searching for jobs at the time of their participation renders the findings more pertinent because participants were likely interested and involved in the study.

Second, the use of a scenario-based experimental design could limit the generalizability of the findings because responses under a hypothetical situation may differ from those under an actual staffing situation. In an effort to minimize this problem, participants were asked to complete the survey as if they were experiencing an actual organizational staffing process. An experimental design here is required to ascertain whether the effects hypothesized would be established under controlled settings (e.g. to build internal validity). Moreover, ethical considerations forbid one from manipulating selection procedures within an actual organizational staffing process, which may largely explain why most organizations are unwilling to participate in such studies (e.g. concern for legal liabilities; Gilliland et al., 2001).

Third, applicant intentions were measured rather than actual behaviours. Accordingly, there could be differences between applicants' reported intentions and what

 $^{^{20}}$ The remaining 18% of the participants consists of 8% of individuals who were planning to look for a job within three months from completing the survey and the other 10% who were planning to look for a job in more than three months.

they would actually do. However, the theory of reasoned action (TRA, Fishbein & Ajzen, 1975) and the theory of planned behaviour (Madden, Ellen, & Ajzen, 1992) suggest that behavioural intentions predict actual behaviour. Research from different contexts, including personnel selection, support this (Armitage & Conner, 2001; Sheppard, Hartwick, & Warshaw, 1988; Vinokur & Caplan, 1987).

Fourth, because data were collected from only one source (role playing job applicants) using a self-report survey, there may be a common method variance problem (Spector, 2006). I conducted Harman's one-factor test (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003) using principal axis factoring and found that no single factor accounted for the majority of the variance among study variables. Although the results of Harman's test may reduce the concern over common method variance, it does not guarantee its absence.

Fifth, this research included a large number of different statistical tests, increasing the possibility of inflated type I error rates. To minimize this threat, I used conservative statistical techniques. For example, I used MANOVA rather than a series of ANOVAs. While such steps may reduce concerns with inflated type I error rates, it does not entirely remove them. Notably, the majority of the hypotheses supported were significant at p <.01 or less, lowering further the chances of inflated type I error rates.

5.5. Future Research Directions

Since this study focused only on some elements of the AART, research needs to examine the other elements that were not explored here. For example, the influence of cultural and individual differences on applicant attributions and behavioural reactions

PhD Thesis - K. I. Ababneh

should be studied (Digman, 1990; Hofstede, 1980; Ployhart & Harold, 2004). Specifically, research on attribution style has demonstrated that individual differences influence the degree to which people assign internal and stable attributions to the events they experience (Abramson, Seligman, & Teasdale, 1978; Gladstone & Kaslow, 1995). Similarly, while individuals from Western cultures are more likely to make dispositional attributions, people from non-Western cultures are more likely to make situational attributions (Morris & Peng, 1994; Ployhart & Harold , 2004; Zhang, Reyna, Qian, & Yu, 2008,).

Second, while it can be concluded to some degree that different patterns of applicant attributions for selection outcomes are caused by satisfaction/violation of justice rules, selection decision outcomes, and content of outcome explanations, the design of the current study precludes definitive causal statements about the relationship between attribution dimensions and overall process fairness perceptions. Specifically, perhaps overall fairness perceptions lead to attributions (rather than the reverse). However, the direction of causality inherent in the model tested is founded on AART and the general attribution framework from the social psychological literature (Forsterling, 2001; Martinko et al., 2006; Weiner, 1986; Wong & Weiner, 1981). To further understand the nature of causality between these variables, experimental and longitudinal designs are required.

Third, most of the research into the differential influence of explanations focused on the effects of providing explanations in a written format. Hence, research should examine the differential influence of providing the same type of explanation through

PhD Thesis - K. I. Ababneh

different communication media (i.e., orally face to face, written letters, e-mail, phone) (Horvath et al., 2000). The principles of media richness theory (Daft & Lengel, 1984, 1986) can be integrated with organizational justice theory or attribution theory to guide such research. Communication media differ in their capacity to convey multiple cues simultaneously, speediness of feedback, and personal touch (Daft & Lengel, 1984, 1986). For example, face-to-face communication is the richest medium of communication with respect to these criteria (Daft & Lengel, 1984, 1986). Therefore, the richness of face-toface communication or a phone call is likely to generate positive reactions, or mitigate negative reactions, compared with written letters or e-mails. Face-to-face or phone communications are most likely to covey organizational concern for, and respect of, the job applicants (Conlon & Murray, 1996).

Fourth, research needs to study the influence of different types of diversity explanations on applicant perceptions and behavioural reactions (Cox & Blake, 1991; Kirby & Richard, 2000). While the content of the diversity justification used in the current study (i.e., informing applicants that the organization's selection decision was made to ensure that its workforce is more reflective of its population) generated negative reactions toward the organization, research suggests that organizations could elicit more favourable applicant reactions by communicating that workplace diversity provides organizations with marketing and innovation advantages (e.g., Williamson, Slay, Shapiro, & Shivers-Blackwell, 2008). Therefore, studies that show when and what type of diversity explanations can generate favourable reactions are especially required for organizations that implement diversity programs.

5.6. Conclusion

Recent research in the personnel selection area has witnessed an increasing number of studies focusing on applicant reactions to staffing procedures. While most of this research used an organizational justice framework to understand applicant reactions, an attributional framework was applied here. More specifically, Applicant-Attribution-Reaction Theory (AART) was drawn upon in an effort to better understand the influence of attributions on applicant perceptions and behavioural reactions to staffing procedures and decisions. It was shown that procedural justice rules, outcome favourability (i.e., selected or rejected), and explanations given for a selection decision influenced applicant attributions. These attributions, in turn, predicted applicant perceptions and behaviours. In line with AART's predictions, process fairness perceptions mediated the relationships between applicant attributions and each of organizational perceptions, recommendation intentions, litigation intentions, job acceptance intentions, and reapplication intentions. In sum, these results indicate the importance of an attribution framework in understanding applicant reactions and suggest that this framework warrants further investigations.

PhD Thesis – K. I. Ababneh

References

- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans - critique and reformulation. Journal of Abnormal Psychology, 87(1), 49-74.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Anderson, N., Born, M., & Cunningham-Snell, N. (2001). Recruitment and selection:
 Applicant perspectives and outcomes. In N. Anderson, D. S. Ones, H. K. Sinangil
 & V. C. (Eds.), Handbook of industrial, work, and organizational psychology (pp. 200 218). London: Sage.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. British Journal of Social Psychology, 40, 471-499.
- Arvey, R. D., & Campion, J. E. (1982). The employment interview a summary and review of recent research. Personnel Psychology, 35(2), 281-322.
- Arvey, R. D., Strickland, W., Drauden, G., & Martin, C. (1990). Motivational components of test taking. Personnel Psychology, 43(4), 695-716.
- Baron, R. M., & Kenny, D. A. (1986). The moderator mediator variable distinction in social psychological-research - conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173-1182.
- Bauer, T. N., Maertz, C. P., Dolen, M. R., & Campion, M. A. (1998). Longitudinal assessment of applicant reactions to employment testing and test outcome feedback. Journal of Applied Psychology, 83(6), 892-903.
- Bauer, T. N., Truxillo, D. M., Sanchez, R. J., Craig, J. M., Ferrara, P., & Campion, M. A. (2001). Applicant reactions to selection: Development of the selection procedural justice scale (spjs). Personnel Psychology, 54(2), 387-419.
- Bauer, T. N., Truxillo, D. M., Tucker, J. S., Weathers, V., Bertolino, M., Erdogan, B., et al. (2006). Selection in the information age: The impact of privacy concerns and computer experience on applicant reactions. Journal of Management, 32(5), 601-621.
- Bies, R. J. (1987). The predicament of injustice: The management of moral outrage. Research in Organizational Behavior, 9, 289-319.

- Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. Research in Organizational Behavior, 1, 43-55.
- Bies, R. J., & Shapiro, D. L. (1988). Voice and justification their influence on procedural fairness judgments. Academy of Management Journal, 31(3), 676-685.
- Bies, R. J., Shapiro, D. L., & Cummings, L. L. (1988). Causal accounts and managing organizational conflict - is it enough to say its not my fault. Communication Research, 15(4), 381-399.
- Bobocel, D. R., & Farrell, A. C. (1996). Sex-based promotion decisions and interactional fairness: Investigating the influence of managerial accounts. Journal of Applied Psychology, 81(1), 22-35.
- Bobocel, D. R., & Zdaniuk, A. (2005). How can explanations be used to foster organizational justice? In J. Greenberg & J. A. Colquitt (Eds.), Handbook of organizational justice (pp. 469-498). NJ: Erlbaum: Mahwah.
- Breaugh, J. A., & Starke, M. (2000). Research on employee recruitments so many studies, so many remaining questions. Journal of Management, 26(3), 405-434.
- Brockner, J. (2002). Making sense of procedural fairness: How high procedural fairness can reduce or heighten the influence of outcome favorability. Academy of Management Review, 27(1), 58-76.
- Brockner, J., Dewitt, R. L., Grover, S., & Reed, T. (1990). When it is especially important to explain why - factors affecting the relationship between managers explanations of a layoff and survivors reactions to the layoff. Journal of Experimental Social Psychology, 26(5), 389-407.
- Brockner, J., Heuer, L., Magner, N., Folger, R., Umphress, E., Van Den Bos, K., et al. (2003). High procedural fairness heightens the effect of outcome favorability on self-evaluations: An attributional analysis. Organizational Behavior and Human Decision Processes, 91(1), 51-68.
- Cascio, W. F. (1991). Applied psychology in personnel management (Vol. 4th). Englewood Cliffs, NJ: Prentice Hall.
- Chan, D. (1997). Racial subgroup differences in predictive validity perceptions on personality and cognitive ability tests. Journal of Applied Psychology, 82(2), 311-320.
- Chan, D., Schmitt, N., Deshon, R. P., Clause, C. S., & Delbridge, K. (1997). Reactions to cognitive ability tests: The relationships between race, test performance, face

PhD Thesis – K. I. Ababneh

validity perceptions, and test-taking motivation. Journal of Applied Psychology, 82(2), 300-310.

- Chan, D., Schmitt, N., Jennings, D., Clause, C. S., & Delbridge, K. (1998a). Applicant perceptions of test fairness: Integrating justice and self-serving bias perspectives. International Journal of Selection and Assessment, 6(4), 232-239.
- Chan, D., Schmitt, N., Sacco, J. M., & Deshon, R. P. (1998b). Understanding pretest and posttest reactions to cognitive ability and personality tests. Journal of Applied Psychology, 83(3), 471-485.
- Chapman, D. S., & Webster, J. (2001). Rater correction processes in applicant selection using videoconference technology: The role of attributions. Journal of Applied Social Psychology, 31(12), 2518-2537.
- Cole, N. D. (2008). The effects of differences in explanations, employee attributions, type of infraction, and discipline severity on perceived fairness of employee discipline. Canadian Journal of Administrative Sciences-Revue Canadienne Des Sciences de L Administration, 25(2), 107-120.
- Conlon, D. E., & Murray, N. M. (1996). Customer perceptions of corporate responses to product complaints: The role of explanations. Academy of Management Journal, 39(4), 1040-1056.
- Cox, T. H., Jr., & Blake, S. (1991). Managing cultural diversity: Implications for organizational competitiveness. The Executive, 5(3), 45.
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. Journal of Vocational Behavior, 58(2), 164-209.
- Daft, R. L., & Lengel, R. H. (1984). Information richness a new approach to managerial behavior and organization design. Research in Organizational Behavior, 6, 191-233.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. Management Science, 32(5), 554-571.
- Digman, J. M. (1990). Personality structure emergence of the 5-factor model. Annual Review of Psychology, 41, 417-440.
- Dresel, M., Ziegler, A., & Schober, B. (2005). Nothing more than dimensions? Evidence for a surplus meaning of specific attributions. Journal of Educational Research, 99(1), 31-44.

- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. Psychological Methods, 12(1), 1-22.
- Elkins, T. J., & Phillips, J. S. (2000). Job context, selection decision outcome, and the perceived fairness of selection tests: Biodata as an illustrative case. Journal of Applied Psychology, 85(3), 479-484.
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behaviour: An introduction to theory and research. Reading, MA: Addison-Wesley.
- Folger, R. (1986). Rethinking equity theory: A referent cognitions model. In H. W. Bierhoff, R. L. Cohen. & J. Greenberg (Eds.), Justice in social relations (pp. 145-162). New York: Plenum.
- Folger, R., & Cropanzano, R. (1998). Organizational justice and human resource management. Thousand Oaks, CA: Sage.
- Forsterling, F. (2001). Attribution: An introduction to theories, research, and applications. Hove, UK: Psychology Press.
- Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. Psychological Bulletin, 117(1), 21-38.
- Gilliland, S. W. (1993). The perceived fairness of selection systems an organizational justice perspective. Academy of Management Review, 18(4), 694-734.
- Gilliland, S. W. (1994). Effects of procedural and distributive justice on reactions to a selection system. Journal of Applied Psychology, 79(5), 691-701.
- Gilliland, S. W. (1995). Fairness from the applicants perspective reactions to employee selection procedures. International Journal of Selection and Assessment, 3(1), 11-19.
- Gilliland, S. W., & Beckstein, B. A. (1996). Procedural and distributive justice in the editorial review process. Personnel Psychology, 49(3), 669-691.
- Gilliland, S. W., Groth, M., Baker, R. C., Dew, A. F., Polly, L. M., & Langdon, J. C. (2001). Improving applicants' reactions to rejection letters: An application of fairness theory. Personnel Psychology, 54(3), 669-703.
- Gladstone, T. R. G., & Kaslow, N. J. (1995). Depression and attributions in children and adolescents - a metaanalytic review. Journal of Abnormal Child Psychology, 23(5), 597-606.

- Goldman, B. M. (2001). Toward an understanding of employment discrimination claiming: An integration of organizational justice and social information processing theories. Personnel Psychology, 54(2), 361-386.
- Goldman, B. M. (2003). The application of referent cognitions theory to legal-claiming by terminated workers: The role of organizational justice and anger. Journal of Management, 29(5), 705-728.
- Goodman, L. A. (1960). On the exact variance of products. Journal of the American Statistical Association, 55, 708-713.
- Graham, S. (1991). A review of attribution theory in achievement contexts. Educational Psychology Review, 3, 5–39.
- Greenberg, J. (1986). Determinants of perceived fairness of performance evaluations. Journal of Applied Psychology, 71(2), 340-342.
- Greenberg, J. (1990a). Employee theft as a reaction to underpayment inequity the hidden cost of pay cuts. Journal of Applied Psychology, 75(5), 561-568.
- Greenberg, J. (1990b). Looking fair vs being fair managing impressions of organizational justice. Research in Organizational Behavior, 12, 111-157.
- Greenberg, J. (1993). Stealing in the name of justice informational and interpersonal moderators of theft reactions to underpayment inequity. Organizational Behavior And Human Decision Processes, 54(1), 81-103.
- Greenberg, J. (1994). Using socially fair treatment to promote acceptance of a work-site smoking ban. Journal of Applied Psychology, 79(2), 288-297.
- Harrison, D. A., Kravitz, D. A., Mayer, D. M., Leslie, L. M., & Lev-Arey, D. (2006). Understanding attitudes toward affirmative action programs in employment: Summary and meta-analysis of 35 years of research. Journal Of Applied Psychology, 91(5), 1013-1036.
- Hausknecht, J. P., Day, D. V., & Thomas, S. C. (2004). Applicant reactions to selection procedures: An updated model and meta-analysis. Personnel Psychology, 57(3), 639-683.
- Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley.
- Heilman, M. E., Kaplow, S. R., Amato, M. A. G., & Stathatos, P. (1993). When similarity is a liability - effects of sex-based preferential selection on reactions to like-sex and different-sex others. Journal of Applied Psychology, 78(6), 917-927.

- Herriot, P. (1981). Towards an attributional theory of the selection interview. Journal of Occupational Psychology, 54(3), 165-173.
- Hofstede, G. (1980). Culture's consequences: International differences in work related values. Newbury Park, CA: Sage Publications.
- Holmvall, C. M., & Bobocel, D. R. (2008). What fair procedures say about me: Selfconstruals and reactions to procedural fairness. Organizational Behavior and Human Decision Processes, 105(2), 147-168.
- Holtz, B. C., Ployhart, R. E., Lozzi, D., & Ferreter, J. (2005). Reactions to feedback about performance on web-based tests, Annual Conference of the Society for Industrial Organizational Psychology. Los Angeles, CA.
- Horvath, M., Ryan, A. M., & Stierwalt, S. L. (2000). The influence of explanations for selection test use, outcome favorability, and self-efficacy on test-taker perceptions. Organizational Behavior and Human Decision Processes, 83(2), 310-330.
- Kelley, H. H. (1967). Attribution theory in social psychology. Paper presented at the Nebraska Symposium on Motivation and Emotion, Lincoln, NE.
- Kelley, H. H. (1972). The processes of causal attribution. American Psychologist, 28(2), 107-128.
- Kent, R. L., & Martinko, M. J. (1995). The measurement of attribution in organisational research. In M. J. Martinko (Ed.), Attribution theory: An organisational perspective (pp. 17-34). Florida: St. Lucien Press.
- Kirby, S. L., & Richard, O. C. (2000). Impact of marketing work-place diversity on employee job involvement and organizational commitment. Journal of Social Psychology, 140(3), 367-377.
- Kluger, A. N., & Rothstein, H. (1993). The influence of selection test type on applicant reactions to employment testing. Journal of Business and Psychology, 8, 3-25.
- Kravitz, D. A., Klineberg, S. L., Avery, D. R., Nguyen, A. K., Lund, C., & Fu, E. J. (2000). Attitudes toward affirmative action: Correlations with demographic variables and with beliefs about targets, actions, and economic effects. Journal of Applied Social Psychology, 30(6), 1109-1136.
- LaHuis, D. M., Perreault, N. E., & Ferguson, M. W. (2003). The effect of legitimizing explanations on applicants' perceptions of selection assessment fairness. Journal of Applied Social Psychology, 33(10), 2198-2215.

- Leung, K., Su, S., & Morris, M. W. (2001). When is criticism not constructive? The roles of fairness perceptions and dispositional attributions in employee acceptance of critical supervisory feedback. Human Relations, 54(9), 1155-1187.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationship. In K. J. Gergen, M.S. Greenberg, & R. H. Willis (Eds.), Social exchange: Advances in theory and research (pp. 27-55). New York: Plenum.
- Lind, E. A., Greenberg, J., Scott, K. S., & Welchans, T. D. (2000). The winding road from employee to complainant: Situational and psychological determinants of wrongful-termination claims. Administrative Science Quarterly, 45(3), 557-590.
- Macan, T. H., Avedon, M. J., Paese, M., & Smith, D. E. (1994). The effects of applicants reactions to cognitive-ability tests and an assessment-center. Personnel Psychology, 47(4), 715-738.
- Mackinnon, D. P. (2008) Introduction to Statistical Mediation Analysis. Mahwah, NJ: Erlbaum.
- Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. Personality and Social Psychology Bulletin, 18(1), 3-9.
- Martinko, M. J. (1995). Attribution theory: An organizational perspective. Delary Beach, FL: St. Lucie Press.
- Martinko, M. J., Douglas, S. C., & Harvey, P. (2006). Attribution theory in industrial and organizational psychology: A review. In G. P. Hodgkinson & J. K. Ford (Eds.), International review of industrial and organizational psychology (Vol. 21, pp. 127-187). Chichester, UK: Wiley.
- Mcauley, E., Duncan, T. E., & Russell, D. W. (1992). Measuring causal attributions the revised causal dimension scale (cdsii). Personality and Social Psychology Bulletin, 18(5), 566-573.
- Mccarthy, J., & Goffin, R. (2004). Measuring job interview anxiety: Beyond weak knees and sweaty palms. Personnel Psychology, 57(3), 607-637.
- Mcdonald, R. A., Thurston, P. W., & Nelson, M. R. (2000). A monte carlo study of missing item methods. Organizational Research Methods, 3(1), 71-92.
- Mcfarland, C., & Ross, M. (1982). Impact of causal attributions on affective reactions to success and failure. Journal of Personality and Social Psychology, 43(5), 937-946.

- Mertler, C., & Vannatta, R. (2005). Advanced and multivariate statistical methods. Glendale: Pyrczak Publishing.
- Morris, M. W., & Peng, K. (1994). Culture and cause american and chinese attributions for social and physical events. Journal of Personality and Social Psychology, 67(6), 949-971.
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. Journal of Personality and Social Psychology, 89(6), 852-863.
- Nacoste, R. B. (1993). Procedural justice and preferential treatment a brief review and comment. Current Psychology, 12(3), 230-235.
- Nacoste, R. W. (1987). But do they care about fairness the dynamics of preferential treatment and minority interest. Basic and Applied Social Psychology, 8(3), 177-191.
- Nunnally, J. (1978). Psychometric methods (Vol. 2nd). New York: McGraw-Hill.
- Olson, C. L. (1976). On choosing a test statistic in multivariate analysis of variance. Psychological Bulletin, 83, 308-335.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). Measurement, design, and analysis: An

integrated approach. Hillsdale, NJ: Erlbaum.

- Ployhart, R. E., Ehrhart, K. H., & Hayes, S. C. (2005). Using attributions to understand the effects of explanations on applicant reactions: Are reactions consistent with the covariation principle? Journal of Applied Social Psychology, 35(2), 259-296.
- Ployhart, R. E., & Harold, C. M. (2004). The applicant attribution-reaction theory (aart): An integrative theory of applicant attributional processing. International Journal of Selection and Assessment, 12(1-2), 84-98.
- Ployhart, R. E., & Holtz, B. C. (2008). The diversity-validity dilemma: Strategies for reducing racioethnic and sex subgroup differences and adverse impact in selection. Personnel Psychology, 61(1), 153-172.
- Ployhart, R. E., Mcfarland, L. A., & Ryan, A. M. (2002). Examining applicants' attributions for withdrawal from a selection procedure. Journal of Applied Social Psychology, 32(11), 2228-2252.
- Ployhart, R. E., & Ryan, A. M. (1997). Toward an explanation of applicant reactions: An examination of organizational justice and attribution frameworks. Organizational Behavior and Human Decision Processes, 72(3), 308-335.

- Ployhart, R. E., & Ryan, A. M. (1998). Applicants' reactions to the fairness of selection procedures: The effects of positive rule violations and time of measurement. Journal of Applied Psychology, 83(1), 3-16.
- Ployhart, R. E., Ryan, A. M., & Bennett, M. (1999). Explanations for selection decisions: Applicants' reactions to informational and sensitivity features of explanations. Journal of Applied Psychology, 84(1), 87-106.
- Podsakoff, P. M., Mackenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879-903.
- Preacher, K. J., & Hayes, A. F. (2004). Spss and sas procedures for estimating indirect effects in simple mediation models. Behavior Research Methods Instruments & Computers, 36(4), 717-731.
- Reeve, C. L., & Lam, H. (2007). Consideration of g as a common antecedent for cognitive ability test performance, test motivation, and perceived fairness. Intelligence, 35(4), 347-358.
- Richard, O. C., & Kirby, S. L. (1998). Women recruits' perceptions of workforce diversity program selection decisions: A procedural justice examination. Journal of Applied Social Psychology, 28(2), 183-188.
- Roese, N. J. (1997). Counterfactual thinking. Psychological Bulletin, 121(1), 133-148.
- Rousseau, D. M., & Tijoriwala, S. A. (1999). What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. Journal of Applied Psychology, 84(4), 514-528.
- Russell, D. (1982). The causal dimension scale a measure of how individuals perceive causes. Journal of Personality and Social Psychology, 42(6), 1137-1145.
- Russell, D., & Mcauley, E. (1986). Causal attributions, causal dimensions, and affective reactions to success and failure. Journal of Personality and Social Psychology, 50(6), 1174-1185.
- Russell, D., Mcauley, E., & Tarico, V. (1987). Measuring causal attributions for success and failure - a comparison of methodologies for assessing causal dimensions. Journal of Personality and Social Psychology, 52(6), 1248-1257.
- Ryan, A. M., & Ployhart, R. E. (2000). Applicants' perceptions of selection procedures and decisions: A critical review and agenda for the future. Journal of Management, 26(3), 565-606.

PhD Thesis – K. I. Ababneh

- Sackett, P. R., & Lievens, F. (2008). Personnel selection. Annual Review of Psychology, 59, 419-450.
- Salgado, J. F., Viswesvaran, V., & Ones, D. S. (2003). Predictors used for personnel selection: An overview of constructs, methods and techniques. In N. Anderson, H.K. Sinangil & C. Viswesvaran (Ed.), Handbook of industrial, work and organizational psychology: Personnel psychology (Vol. 1, pp. 165-199): Sage.
- Sanchez, R. J., Truxillo, D. M., & Bauer, T. N. (2000). Development and examination of an expectancy-based measure of test-taking motivation. Journal of Applied Psychology, 85(5), 739-750.
- Schaufeli, W. B. (1988). Perceiving the causes of unemployment an evaluation of the causal dimensions scale in a real-life situation. Journal of Personality and Social Psychology, 54(2), 347-356.
- Schleicher, D. J., Venkataramani, V., Morgeson, F. P., & Campion, M. A. (2006). So you didn't get the job. Now what do you think? Examining opportunity-to-perform fairness perceptions. Personnel Psychology, 59(3), 559-590.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. Psychological Bulletin, 124(2), 262-274.
- Schmitt, N., & Gilliland, S. W. (1992). Beyond differential prediction: Fairness in selection. In I. D. Saunders (Ed.), Human rights and employment: Interdisciplinary perspectives (Vol. 1, pp. 21-46). Greenwich, CT: JAI Press.
- Schmitt, N., Oswald, E. L., Kim, B. H., Gillespie, M. A., & Ramsay, L. J. (2004). The impact of justice and self-serving bias explanations of the perceived fairness of different types of selection tests. International Journal of Selection and Assessment, 12(1-2), 160-171.
- Schroth, H. A., & Shah, P. P. (2000). Procedures: Do we really want to know them? An examination of the effects of procedural justice on self-esteem. Journal of Applied Psychology, 85(3), 462-471.
- Scott, M. B., & Lyman, S. M. (1968). Accounts. American Sociological Review, 33, 46-62.
- Shapiro, D. L. (1991). The effects of explanations on negative reactions to deceit. Administrative Science Quarterly, 36(4), 614-630.

- Shapiro, D. L., Buttner, E. H., & Barry, B. (1994). Explanations what factors enhance their perceived adequacy. Organizational Behavior and Human Decision Processes, 58(3), 346-368.
- Shaw, J. C., Wild, E., & Colquitt, J. A. (2003). To justify or excuse? A meta-analytic review of the effects of explanations. Journal of Applied Psychology, 88(3), 444-458.
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action a meta-analysis of past research with recommendations for modifications and future-research. Journal of Consumer Research, 15(3), 325-343.
- Silvester, J. (1997). Spoken attributions and candidate success in graduate recruitment interviews. Journal of Occupational and Organizational Psychology, 70, 61-73.
- Silvester, J., Anderson-Gough, F. M., Anderson, N. R., & Mohamed, A. R. (2002). Locus of control, attributions and impression management in the selection interview. Journal of Occupational and Organizational Psychology, 75, 59-76.
- Singer, M. S. (1992). The application of relative deprivation theory to justice perception of preferential selection. Current Psychology-Research & Reviews, 11(2), 128-144.
- Sitkin, S. B., & Bies, R. J. (1993). Social accounts in conflict situations using explanations to manage conflict. Human Relations, 46(3), 349-370.
- Smither, J. W., Reilly, R. R., Millsap, R. E., Pearlman, K., & Stoffey, R. W. (1993). Applicant reactions to selection procedures. Personnel Psychology, 46(1), 49-76.
- Snyder, C. R., Higgins, R. L., & Stucky, R. J. (1983). Excuses: Masquerades in search of social grace. New York: Wiley.
- Stevens, J. (1986). Applied multivariate statistics for the social sciences. NJ: Erlbaum: Hillsdale.
- Struthers, C. W., Colwill, N. L., & Perry, R. P. (1992). An attributional analysis of decision-making in a personnel-selection interview. Journal of Applied Social Psychology, 22(10), 801-818.
- Tabachnick, B., & Fidell, L. (2001). Using multivariate statistics (Vol. 4th). Boston: Allyn & Bacon.
- Timm, N. (2002). Applied multivariate analysis. New York: Springer Verlag.
- Trope, Y. (1986). Identification and inferential processes in dispositional attribution. Psychological Review, 93(3), 239-257.

- Truxillo, D. M., & Bauer, T. N. (1999). Applicant reactions to test score banding in entry-level and promotional contexts. Journal of Applied Psychology, 84(3), 322-339.
- Truxillo, D. M., Bauer, T. N., Campion, M. A., & Paronto, M. E. (2002). Selection fairness information and applicant reactions: A longitudinal field study. Journal of Applied Psychology, 87(6), 1020-1031.
- Truxillo, D. M., Bauer, T. N., & Sanchez, R. J. (2001). Multiple dimensions of procedural justice: Longitudinal effects on selection system fairness and testtaking self-efficacy. International Journal of Selection and Assessment, 9(4), 336-349.
- Van Den Bos, K. (1999). What are we talking about when we talk about no-voice procedures? On the psychology of the fair outcome effect. Journal of Experimental Social Psychology, 35(6), 560-577.
- Van Den Bos, K., Bruins, J., Wilke, H. A. M., & Dronkert, E. (1999). Sometimes unfair procedures have nice aspects: On the psychology of the fair process effect. Journal of Personality and Social Psychology, 77(2), 324-336.
- Vinokur, A., & Caplan, R. D. (1987). Attitudes and social support determinants of jobseeking behavior and well-being among the unemployed. Journal of Applied Social Psychology, 17(12), 1007-1024.
- Weiner, B. (1985). An attributional theory of achievement-motivation and emotion. Psychological Review, 92(4), 548-573.
- Weiner, B. (1986). An attributional theory of motivation and emotion. New York: Springer-Verlag.
- Williamson, I. O., Slay, H. S., Shapiro, D. L., & Shivers-Blackwell, S. L. (2008). The effect of explanations on prospective applicants reactions to firm diversity practices. Human Resource Management, 47(2), 311-330.
- Wong, P. T. P., & Weiner, B. (1981). When people ask why questions, and the heuristics of attributional search. Journal of Personality and Social Psychology, 40(4), 650-663.
- Zhang, A. Q., Reyna, C., Qian, Z. B., & Yu, G. T. (2008). Interpersonal attributions of responsibility in the chinese workplace: A test of western models in a collectivistic context. Journal of Applied Social Psychology, 38(9), 2361-2377.

Table 4.1: Means, Standard Deviations, Alpha Reliabilities^a and Correlations^b for the Major Variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	_
1. Locus	4.06	1.41	(.74)													_
2. Personal Control	3.62	1.55	.59	(.86)												
3. Stability	3.57	1.28	.32	05	(.67)											
4. External Control	4.45	1.43	33	11	21	(.77)										
5. Process Fairness	3.00	1.69	.31	.48	.06	07	(.95)									
6. Self perceptions	4.45	1.55	.11	.09	.22	02	.13	(.94)								
7. Organizational Perception	3.21	1.68	.36	.48	.16	06	.60	.51	(.96)							
8. Recommendation Intention	3.02	1.64	.35	.49	.10	13	.72	.33	.72	(.94)						
9. Litigation Intention	3.52	1.54	19	30	04	.11	39	10	39	37	(.93)					
10. Offer acceptance	4.31	1.60	.19	.33	.03	.11	.55	.57	.67	.68	34	-				
11. Reapplication Intention	2.98	1.95	.24	.39	05	10	.60	12	.54	.69	42	.41	-			
12. Satisfaction/Violation ^c	.50	.50	.21		.15	07	.63	.05	.27	.36	12	.29	.26	-		
13. Selection Decision ^d	.50	.50	.20	.17	.14	29	.09	.45	.42	.28	21	.00	.02	02	-	

^a Alpha reliabilities are in parentheses along the diagonal. ^b Correlations >.12.5 or < -.12.5 are significant at the .05 level, and those >.16 or < -.16 are significant at the .01 level. Tests of significance were twotailed.

^c Satisfaction/Violation of justice rules was coded as "1" for satisfaction of procedural justice rules and "0" for violation of procedural justice rules. ^d Selected decision was coded as "1" for selected and "0" for rejected

n = 247 (except "offer acceptance" n = 125; "reapplication intention" n = 122).

Higher values indicate greater levels of the construct measured.

	Perceived	Satisfaction	Perceived Violation		
Dependent Variables	Mean	SD	Mean	SD	
Locus	4.37 ^a	1.50	3.77	1.25	
Personal Control	3.92 ^b	1.48	3.31	1.56	
Stability	3.76 ^c	1.27	3.38	1.27	
External Control	4.36	1.50	4.54	1.37	

Table 4.2: Means and	Standard	Deviations	for Attrib	ution D	imensions	by 1	Perceived
Satisfaction/Violation	of Justice	Rules					

^{*a*} Different from the perceived violation condition (p <.005). ^{*b*} Different from the perceived violation condition (p <.001). ^{*c*} Different from the perceived violation condition (p <.05).

	Sele	cted	Rejected		
Dependent Variables	Mean	SD	Mean	SD	
Locus	4.35 ^a	1.35	3.76	1.42	
Personal Control	3.87^{a}	1.51	3.35	1.55	
Stability	3.74 ^b	1.21	3.38	1.32	
External Control	4.22 ^c	1.35	4.68	1.50	

Table 4.3: Means and Standard Deviations for Attribution Dimensions by Selection Decision

^{*a*} Different from rejected condition (p <.001). ^{*b*} Different from rejected condition (p <.01). ^{*c*} Different from rejected condition (p <.05).

Enpiumations								
	Procedural		Perso	Personal		Diversity		
Dependent	Explanation		Explan	Explanation		Explanation		ation
Variables	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Locus	4.46 ^{ab}	1.22	4.12	1.46	3.84	1.39	3.82	1.42
Personal Control	3.92 ^c	1.58	3.97°	1.40	2.87	1.55	3.69	1.42
Stability	3.59	1.09	3.52	1.29	3.89	1.53	3.28	1.10
External Control	4.41	1.35	4.46	1.39	4.10	1.63	4.45	1.44

Table 4.4: Means and	Standard	Deviations	for Attr	ibution	Dimensions	by T	ypes of
Explanations							

^{*a*} Different from diversity explanation condition (p <. 01). ^{*b*} Different from no explanation condition (p <. 01). ^{*c*} Different from diversity explanation condition (p <. 001).

Table 4.5: Means and Standard Deviations for Organizational Perceptions, Recommendation Intentions, Reapplication Intentions, Job Acceptance Intentions, and Litigation Intentions by Explanations Types

	Procedural Explanation		Personal Explanation		Diversity Explanation		No	
Dependent Variables							Explana	ation
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Organizational Perceptions	3.55 ^{ab}	1.55	3.86 ^{ac}	1.78	2.48	1.54	2.98	1.53
Recommendation Intentions	3.32^{d}	1.69	3.47^{db}	1.68	2.45	1.49	2.86	1.54
Reapplication Intentions	3.53 ^{ab}	2.16	3.48^{cb}	1.89	2.13	1.74	2.53	1.70
Job Acceptance Intentions	4.67^{a}	1.44	4.73 ^{<i>a</i>}	1.41	3.46^{b}	1.68	4.40	1.58
Litigation Intentions	3.15 ^a	1.39	3.01 ^a	1.32	4.59	1.55	3.33 ^d	1.39

^{*a*} Different from diversity explanation condition (p <.001). ^{*b*} Different from no explanation condition (p <.05). ^{*c*} Different from no explanation condition (p <.005).

^d Different from diversity explanation condition (p < .005).

^c Different from diversity explanation condition (p <.01).

^e Different from no explanation condition (p < .005.
Table 4.6: Results of Mediation Regression Analyses for Testing the Mediating Role of Attributions in the Relationship between Perceived Satisfaction/Violation of Justice Rules and Process Fairness (Hypotheses 14a-14d)

Hypothesis	Equation and Variables	b	t	<i>p</i> <
Hypothesis 1/2	Equation 1^* : Process Eatrness (DV) [#]			
<u>Hypothesis 14a</u>	Satisfaction/Violation of Justice Rules (IV)	2.11	12.62	.001
	Equation 2: Locus (DV)			
	Satisfaction/Violation of Justice Rules (IV)	.60	3.40	.001
	Equation 2: Process Estrange (DV)			
	Equation 5: Process Fairness (DV)	22	3 70	001
	Satisfaction/Violation of Justice Rules (IV)	1.98	11.87	.001
Hypothesis 14b		1190	11107	
/1				
	Equation 2: Personal Control (DV)			
	Satisfaction/Violation of Justice Rules (IV)	.61	3.13	.005
	Equation 3: Process Fairness (DV)	10	0.17	0.01
	Personal Control (IV)	.40	8.17	.001
II-motherain 14-	Satisfaction/ violation of Justice Rules (IV)	1.8/	12.34	.001
Hypotnesis 14c	Equation 2: Stability (DV)			
	Satisfaction/Violation of Justice Rules (IV)	38	2 36	05
		.50	2.50	.00
	Equation 3: Process Fairness (DV)			
	Stability (IV)	04	67	<i>n.s</i> .
	Satisfaction/Violation of Justice Rules (IV)	2.13	12.57	.001
Hypothesis 14d				
	Equation 2: External Control (DV)	10	1.01	
	Satisfaction/ Violation of Justice Rules (IV)	19	-1.01	<i>n</i> . <i>s</i> .
	Equation 3: Process Eatrness (DV)			
	External Control (IV)	02	48	ns
	Satisfaction/Violation of Justice Rules (IV)	2.10	12.55	.001

^{*} Since equation 1 of the mediation analyses for H14a established that perceived satisfaction/violation of justice rules significantly influenced process fairness perceptions, this equation is only reported here with H14a and not reported with H14b-H14d.

[#] Letters listed next to the names of the variables indicate whether a variable serves as independent variable (IV) or a dependent variable (DV) in each regression equation conducted.

n = 247 (except "offer acceptance" n = 125; "reapplication intention" n = 122).

Table 4.7: Results of Mediation Regression Analyses for Testing the Mediating Role of Process Fairness in the Relationship between Locus Attribution and Organizational Perceptions, Recommendation Intentions, Litigation Intentions, Job Acceptance Intentions, and Reapplication Intentions (Hypotheses 19a-19e).

Hypothesis	Equation and Variables	b	t	<i>p</i> <
Hypothesis 19a	Equation 1: Organizational Perceptions (DV)	#		
	Locus (IV)	.43	6.00	.001
	Equation 2 ⁺ : Process Fairness (DV)			
	Locus (IV)	.37	5.08	.001
	Equation 3: Organizational Perceptions (DV))		
	Process Fairness (IV)	.53	10.03	.001
	Locus (IV)	.23	3.68	.001
Hypothesis 19b	Equation 1: Recommendation Intentions (DV	<i>'</i>)		
	Locus (IV)	.40	5.80	.001
	Equation 3: Recommendation Intentions (DV	')		
	Process Fairness (IV)	.65	14.03	.001
	Locus (IV)	.16	3.03	.005
Hypothesis 19c	Equation 1: Litigation Intentions (DV)			
	Locus (IV)	21	-3.09	.005
	Equation 3: Litigation Intentions (DV)			
	Process Fairness (IV)	33	-5.91	.001
	Locus (IV)	09	-1.30	<i>n.s.</i>
Hypothesis 19d	Equation 1: Acceptance Intentions (DV)			
	Locus (IV)	.22	2.14	.05
	Equation 3: Acceptance Intentions (DV)	10	6.01	0.01
	Process Fairness (IV)	.49	6.91	.001
	Locus (IV)	.09	.97	<i>n.s.</i>
Hypothesis 19e	Equation 1: Reapplication Intentions (DV)			
	Locus (IV)	.33	2.73	.01
	Equation 3: Reapplication Intentions (DV)			0.01
	Process Fairness (IV)	.72	7.65	.001
	Locus (IV)	.01	.12	n.s.

[#] Letters listed next to the names of the variables indicate whether a variable serves as independent variable (IV) or a dependent variable (DV) in each regression equation conducted.

* Since equation 2 of the mediation analysis for H19a established that locus significantly influenced process fairness, this equation is only reported here with H19a and not reported with H19b-H19e. n = 247 (except "offer acceptance" n = 125; "reapplication intention" n = 122).

Table 4.8: Results of Mediation Regression Analyses for Testing the Mediating Role of Process Fairness in the Relationship between Personal Control Attribution and Organizational Perceptions, Recommendation Intentions, Litigation Intentions, Job Acceptance Intentions, and Reapplication Intentions (Hypotheses 20a-20e).

Hypothesis	Equation and Variables	b	t	<i>p</i> <
Hypothesis 20a	Equation 1: Organizational Perceptions (DV)*			
	Personal Control (IV)	.52	8.60	.001
	Equation 2 ⁺ : Process Fairness (DV)			
	Personal Control(IV)	.51	8.49	.001
	Equation 3: Organizational Perceptions (DV)			
	Process Fairness (IV)	.47	8.27	.001
	Personal Control (IV)	.28	4.60	.001
Hypothesis 20b	Equation 1: Recommendation Intentions (DV)			
	Personal Control (IV)	.51	8.80	.001
	Equation 3: Recommendation Intentions (DV)			
	Process Fairness (IV)	.61	12.81	.001
	Personal Control (IV)	.20	3.87	.001
Hypothesis 20c	Equation 1: Litigation Intentions (DV)			
	Personal Control (IV)	30	-4.93	.001
	Equation 3: Litigation Intentions (DV)			
	Process Fairness (IV)	29	-4.81	.001
	Personal Control (IV)	14	-2.23	.05
Hypothesis 20d	Equation 1: Acceptance Intentions (DV)			
in pourois 200	Personal Control (IV)	35	3.93	.001
			0170	
	Equation 3: Acceptance Intentions (DV)			
	Process Fairness (IV)	46	5.97	.001
	Personal Control (IV)	.12	1.40	ns
Hypothesis 20e	Equation 1: Reapplication Intentions (DV)			
Trypotticsis 200	Personal Control (IV)	40	4 60	001
	reisonal control (1V)	. 72	T. 09	.001
	Equation 3: Reapplication Intentions (DV)			
	Process Eairness (IV)	66	6 54	001
	Personal Control (IV)	14	1 36	.001 n c
		.14	1.50	11.5.

[#] Letters listed next to the names of the variables indicate whether a variable serves as independent variable (IV) or a dependent variable (DV) in each regression equation conducted.

* Since equation 2 of the mediation analysis for H20a established that personal control significantly

influenced process fairness, this equation is only reported here with H20a and not reported with H20b-H20e. n = 247 (except "offer acceptance" n = 125; "reapplication intention" n = 122).

Table 4.9: Results of Mediation Regression Analyses for Testing the Mediating Role of Process Fairness in the Relationship between Stability Attribution and Organizational Perceptions, Recommendation Intentions, Litigation Intentions, Job Acceptance Intentions, and Reapplication Intentions (Hypotheses 21a-21e).

Hypothesis	Equation and Variables	b	t	<i>p</i> <
Here there is 21 a	Equation 1: Operational Benerations (DVA)	#		
Hypothesis 21a	Equation 1: Organizational Perceptions (DV) Stability (IV)	22	2 61	01
	Subility (17)	.22	2.01	.01
	Equation 2 [*] : Process Fairness (DV)			
	Stability (IV)	.08	.95	n.s.
	E			
	Equation 3: Organizational Perceptions (DV)	50	11.20	001
	Process Fairness (IV)	.58	11.39	.001
	Stability (IV)	.16	2.52	.05
Hypothesis 21b	Equation 1: Recommendation Intentions (DV)		
	Stability (IV)	.13	1.61	n.s.
	Equation 2. Decomposed ation Interations (DV)	2		
	Equation 3: Recommendation Intentions (DV)	16.02	001
	Process Fairness (IV)	.09	10.03	.001
TT 1 1 01		.07	1.33	n.s.
Hypothesis 21c	Equation 1: Litigation Intentions (DV)	~ -		110
	Stability (IV)	05	.59	NS
	Equation 2: Litization Intentions (DV)			
	Equation 5: Lingation intentions (DV)	26	((0	001
	Process Fairness (IV)	30	-0.09	.001
		07	1.05	n.s.
Hypothesis 21d	Equation 1: Acceptance Intentions (DV)	0.0	21	
	Stability (IV)	.03	.31	n.s.
	Equation 2: A contanto Intentions (DV)			
	Process Esimoss (UV)	51	7 20	001
	Stobility (IV)	.51	1.29	.001
II (1 : 01		07	1.08	n.s.
Hypothesis 21e	Equation 1: Reapplication Intentions (DV)	0.4	(1	
	Stability (IV)	04	61	n.s.
	Equation 2: Dependication Intentions (DV)			
	Process Esimoss (IV)	70	0 22	001
	Stobility (IV)	.12	0.52	.001
	Stability (IV)	04	3/	n.s.

Letters listed next to the names of the variables indicate whether a variable serves as independent variable (IV) or dependent variable (DV) in each regression equation conducted.

* Since equation 2 of the mediation analysis for H21a established that Stability significantly influenced process fairness, this equation is only reported here with H21a and not reported with H21b-H21d. n = 247 (except "offer acceptance" n = 125; "reapplication intention" n = 122).

Table 4.10: Results of Mediation Regression Analyses for Testing the Mediating Role ofProcess Fairness in the Relationship between External Control Attribution andOrganizational Perceptions, Recommendation Intentions, Litigation Intentions, JobAcceptance Intentions, and Reapplication Intentions (Hypotheses 22a-22e).

Hypothesis	Equation and Variables	b	t	p <
Hypothesis 22a	Equation 1: Organizational Perceptions (DV)#			
	External Control (IV)	06	90	n.s.
	Equation 2 : Process Fairness (DV)			
	External Control (IV)	08	-1.01	n.s.
	Equation 3: Organizational Perceptions (DV)			
	Process Fairness (IV)	.58	11.38	.001
	External Control (IV)	02	37	n.s.
Hypothesis 22b	Equation 1: Recommendation Intentions (DV)			
	External Control (IV)	15	-2.00	.05
	Equation 3: Recommendation Intentions (DV)			
	Process Fairness (IV)	.69	16.14	.001
	External Control (IV)	09	3.03	n.s.
Hypothesis 22c	Equation 1: Litigation Intentions (DV)			
	External Control (IV)	.12	1.80	n.s.
	Equation 3: Litigation Intentions (DV)			
	Process Fairness (IV)	35	-6.54	.001
	External Control (IV)	09	-1.52	<i>n.s.</i>
Hypothesis 22d	Equation 1: Acceptance Intentions (DV)			
	External Control (IV)	.14	1.37	n.s.
	Equation 3: Acceptance Intentions (DV)			
	Process Fairness (IV)	.50	7.16	.001
	External Control (IV)	.08	.93	n.s.
Hypothesis 22e	Equation 1: Reapplication Intentions (DV)			
	External Control (IV)	13	-1.66	n.s.
	Equation 3: Reapplication Intentions (DV)			
	Process Fairness (IV)	.71	8.05	.001
	External Control (IV	07	78	n.s.

Letters listed next to the names of the variables indicate whether a variable serves as independent variable (IV) or dependent variable (DV) in each regression equation conducted.

* Since equation 2 of the mediation analysis for H22a established that external control significantly

influenced process fairness, this equation is only reported here with H22a and not reported with H22b-H22d. n = 247 (except "offer acceptance" n = 125; "reapplication intention" n = 122).

Source	SS	df	MS	F	р	η^2
Between treatments	147.73	3	49.25			
Selection (A)	120.62	1	120.62	65.82	.000	.213
Interview Fairness (B)	1.73	1	1.73	.95	.331	.004
(A) X (C)	26.17	3	26.17	14.28	.000	.055
Error	445.36	243	1.83			
Total	5476.31	247				

Table 4.11: The	Effect o	of Selection	Decision	and	Interview	Fairness	on	Self-
Perceptions								

PhD Thesis – K. I. Ababneh

Predictors	Dependent Variable: Self-Perception				
	b	t	р		
Locus	29	-3.39	.001		
Selection	1.37	7.99	.001		
Locus X Selection	.64	5.26	.001		

Table 4.12: Results of Regression Analysis Testing for Interaction between Selection
Decision and Locus Attribution on Self-Perceptions (Hypothesis 24a).

PhD Thesis – K. I. Ababneh

Predictors	Depend	lent Variable: Self-	Perception
-	Ь	t	р
Personal Control	26	-3.32	.001
Selection	1.38	8.07	.001
Personal Control X Selection	.56	5.07	.001

 Table 4.13: Results of Regression Analysis Testing for Interaction between Selection

 Decision and Personal Control Attribution on Self-Perceptions (Hypothesis 24b).

Predictors	Dependent Variable: Self-Perception				
	b	t	р		
Stability	.21	2.26	.05		
Selection	1.32	7.50	.001		
Stability X Selection	04	32	<i>n.s.</i>		

Table 4.14: Results of	Regression	Analysis	Testing for	Interaction	between Selection
Decision and Stability	Attribution	1 on Self-	Perceptions	(Hypothesis	s 24c)

1	3	9
	-	

Predictors	Dependent Variable: Self-Perception					
	b	t	р			
External Control	.08	.94	n.s.			
Selection	1.42	7.90	.001			
External Control X Selection	05	372	n.s.			

Table 4.15: Results of	Regression Analysis	Testing for Interaction	between Selection
Decision and External	Control Attribution	on Self-Perceptions (H	ypothesis 24d)

 Table 4.16: The Role of the Interactive Effect of Selection Decision and Locus Attribution in Mediating the Interactive Effect of the Selection Decision and Procedural Fairness on Self-Perceptions.

		<u>Equation 1</u> (Dependent Variable: Self-Perceptions)		Equation 2		ation 3
	(Depend			lent Variable:	(Dependent Variable: Self-Perceptions)	
Predictors	Self-1			ocus)		
	Ь	t	Ь	ť	Ь	t
Interview Procedural Fairness	48	- 1.97*	.87	3.57****	26	-1.05
Selection Decision	.75	3.07***	.85	3.47**	.90	3.71***
Interview Procedural Fairness x Selection Decision	1.30	3.78****	50	-1.46	.96	2.82**
Locus					.26	2.96**
Locus x Selection Decision					.58	4.67***
N=247 *p<.05 ** p<.01 ***p<.005 ****p<.001				and a second		

Table 4.17: The Role of the Interactive Effect of Selection Decision and Personal Control Attribution in Mediating the Interactive Effect of the Selection Decision and Procedural Fairness on Self-Perceptions.

Predictors	Equation 1 (Dependent Variable: Self-Perceptions)		Equation 2 (Dependent Variable: Personal Control)		Equation 3 (Dependent Variable: Self-Perceptions)	
	Ь	t	Ь	t	Ь	t
Interview Procedural Fairness	48	- 1.97*	.68	2.50***	32	-1.33
Selection Decision	.75	3.07***	.60	2.21*	.89	3.73****
Interview Procedural Fairness x Selection Decision	1.30	3.78****	13	34	.99	2.93***
Personal control					24	-3.00****
Personal control x Selection Decision					.50	4.47****
N=247 *p<.05 ** p< .01 ***p< .005 ****p<.001						

Fable 4.18: The Role of the Interactive Effect of Selection Decision and Stability Attribution in Mediating the
Interactive Effect of the Selection Decision and Procedural Fairness on Self-Perceptions.

Predictors	Equation 1 (Dependent Variable: Self-Perceptions)		Equation 2 (Dependent Variable: Stability)		Equation 3 (Dependent Variable: Self-Perceptions)	
	Ь	t	Ь	t	Ь	t
Interview Procedural Fairness	48	- 1.97*	.24	1.04	54	-2.21*
Selection Decision	.75	3.07***	.22	.95	.69	2.82***
Interview Procedural Fairness x Selection Decision	1.30	3.78****	.30	.10	1.30	3.77***
Stability					.19	2.50*
Stability x Selection Decision					07	97
N=247 *p<.05 ** p<.01 ***p<.005 ****p<.001						

143

Table 4.19: The Role of the Interactive Effect of Selection Decision and External Control Attribution in Mediating the Interactive Effect of the Selection Decision and Procedural Fairness on Self-Perceptions.

Predictors	Equa (Depende: Self-Pe	ation 1 nt Variable: rceptions)_	Equ (Depende Extern	ation 2 ent Variable: al Control)	Equation 3 (Dependent Variable: Self-Perceptions)	
	Ь	t	Ь	t	Ь	t
Interview Procedural Fairness	48	- 1.97*	42	-1.62	46	-1.85
Selection Decision	.75	3.07***	69	-2.69**	.78	3.15***
Interview Procedural Fairness x Selection Decision	1.30	3.78****	.11	1.21	1.28	3.67***
External control					.06	.72
External control x Selection Decision					03	23

N=247 *p < .05 ** p < .01 ***p < .005 ****p < .001

Moderator	Pa	th		Effects	
Variable	$X \rightarrow M$	$M \rightarrow Y$	Direct	Indirect	Total
Selection Outcome					
Selected	0.36	0.32**	0.70**	0.12	0.82**
Rejected	0.86**	-0.26**	-0.26	-0.22*	-0.48**
Differences	-0.50	0.58**	0.96**	0.34**	1.30**

Table 4.20: Analysis of Simple Effects for Hypothesis 25a with Locus as the Moderator

N= 247; **p* < .05 ***p* < .01 "X→ M" signifies the path from interview procedural fairness to locus "X→ M" signifies the path from locus to Self-Perceptions

Moderator	Path			Effects			
Variable	$X \rightarrow M$	$M \rightarrow Y$	Direct	Indirect	Total		
Selection Outcome							
Selected	0.55**	0.26**	0.67**	0.15*	0.82**		
Rejected	0.68**	-0.24**	-0.32	- 0.16*	-0.48**		
Differences	-0.13	0.50**	0.99**	0.31**	1.30**		

Table 4.21: Analysis of Simple Effects for Hypothesis 25b with Personal Control as the Moderator

N= 247; **p* < .05 ***p* < .01 "X→ M" signifies the path from interview procedural fairness to personal control "X→ M" signifies the path from personal control to Self-Perceptions

Hypothesis	Supported	Not Supported
Hypothesis 1a-4d: Relative to applicants who experience a selection procedure that violates Gilliland's justice rules (i.e., job relatedness, opportunity to perform, consistency of administration; Box A, Figure 3.2), applicants experiencing a selection procedure that satisfies these rules will rate the cause of their selection outcome to be higher on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) lower on the external control (Box D, Figure3. 2) dimension of attribution.	H1a - H1c	H1d
Hypotheses 2a- 2d: Relative to those who are rejected (Box B, Figure 3.2), individuals who are selected (Box B, Figure 3.2) will rate the cause of their selection outcome to be higher on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) lower on the external control (Box D, Figure3. 2) dimension of attribution.	H2a - H2d:	
Hypotheses 3a-3d: Individuals who receive a procedural explanation (Box C, Figure 3.2) for their selection outcome (selected or rejected) will rate the cause of their outcome to be higher on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) will rate the cause to be lower on the external control (Box D, Figure 3.2) dimension of attribution than will individuals who receive a diversity explanation (Box C, Figure 3.2).	H3a & H3c	H3b & H3d
Hypotheses 4a-4d: Individuals who receive a procedural explanations (Box C, Figure 3.2) for their selection outcome (selected or rejected) will rate the cause of their outcome to be higher on: the a) internal (Box D, Figure 3.2); b) stable (Box D, Figure 3.2); and c) personal control (Box D, Figure 3.2) dimensions of attributions; and d) will rate the cause to be lower on the external control (Box D, Figure 3.2) dimension of attribution than will individuals who receive no explanation (Box C, Figure 3.2).	H4a	H4b, H4c, & H4d

Tabl	e 4.22	: Contin	ued

Hypothesis	Supported	Not Supported
Hypotheses 5a-5d: Individuals who receive a	H5c	H5a, H5b, &
personal explanation (Box C, Figure 3.2) for their		H5d
selection outcome (selected or rejected) will rate the		
cause of their outcome to be higher on: the a)		
internal (Box D, Figure 3.2); b) stable (Box D,		
Figure 3.2); and c) personal control (Box D, Figure		
3.2) dimensions of attributions; and d) will rate the		
cause to be lower on the external control (Box D,		
Figure 3.2) dimension of attribution than will		
individuals who receive a diversity explanation (Box		
C, Figure 3.2).		
Hypotheses 6a-6d: Individuals who receive a		H6a- H6d
personal explanation (Box C, Figure 3.2) for their		
selection outcome (selected or rejected) will rate the		
cause of their outcome to be higher on: the a)		
internal (Box D, Figure 3.2); b) stable (Box D,		
Figure 3.2); and c) personal control (Box D, Figure		
3.2) dimensions of attributions; and d) will rate the		
cause to be lower on the external control (Box D,		
Figure 3.2) dimension of attribution than will		
individuals who receive no explanation (Box C,		
 Figure 3.2).		
Hypotheses 7a & 7b: When participants experience	H7a	H7b
a selection procedure that satisfies procedural justice		
rules, overall process fairness perceptions will be		
greater for participants in the procedural explanation		
condition (Box C, Figure 3.3) than for participants		
in the (a) diversity and (b) no explanation conditions		
 (Box C, Figure 3.3).		
Hypotheses /c & /d: When participants experience	H7c & H7d	
a selection procedure that satisfies procedural justice		
rules, overall process fairness perceptions will be		
greater for participants in the personal explanation		
condition than for participants in the (a) diversity $(D = C - E)$		
and (b) no explanation conditions (Box C, Figure		
 J.J.	117.	
appointeses /e. when participants experience a	п/е	
selection procedure that satisfies procedural justice		
rules, overall process fairness perceptions will be		
andition than for participants in the diversity		
condition than for participants in the diversity		
condition (Box C, Figure 3.3).		

TADIC 4.22. Communu	Table	4.22:	Continu	ed
---------------------	-------	-------	---------	----

Hypothesis	Supported	Not Supported
Hypotheses 8: When participants experience a	H8	
selection procedure that violates procedural justice		
rules, there will be no difference in process fairness		
perceptions across the four types of the explanation		
conditions.		
Hypotheses 9: Individuals who are selected (Box B,	H9	
Figure 3.4) and receive procedural or personal		
explanations (Box C, Figure 3.4) will report higher		
self-perceptions (Box E, Figure 3.4) than will		
selected individuals (Box B, Figure 3.4) who receive		
a diversity explanation (Box C, Figure 3.4).		
Hypotheses 10: Individuals who are rejected (Box	H10	
B, Figure 3.4) and receive procedural or personal		
explanations (Box C, Figure 3.4) will report lower		
self-perceptions (Box E, Figure 3.4) than will		
rejected individuals (Box B, Figure 3.4) who receive		
a diversity explanation (Box C, Figure 3.4).		
Hypotheses 11a & 11e: Individuals who receive	H11a - H11e	
procedural or personal explanations (Box C, Figure		
3.2) will report higher: a) organizational perceptions		
(Box F, Figure 3.2); b) recommendation intentions		
(Box F, Figure 3.2); c) reapplication intentions (Box		
F, Figure 3.2); and d) job acceptance intentions (Box		
F, Figure 3.2); and will report lower e) intentions to		
litigate (Box F, Figure 3.2) compared to individuals		
who receive a diversity explanation (Box C, Figure		
3.2).		
Hypotheses 12a & 12e: Individuals who receive	H12a &	H12d & H12e
procedural or personal explanations (Box C, Figure	H12c	were not
3.2) will report higher: a) organizational perceptions	supported;	supported
(Box F, Figure 3.2); b) recommendation intentions	12b was	
(Box F, Figure 3.2); c) reapplication intentions (Box	partially	
F, Figure 3.2); and d) job acceptance intentions (Box	supported	
F, Figure 3.2); and will report lower e) intentions to		
litigate compared to individuals receiving no		
explanation (Box C, Figure 3.2).		

	Table	4.22:	Continued	l
--	-------	-------	-----------	---

Hypothesis	Supported	Not Supported
Hypothesis 13: Perceived satisfactions of justice	H13	
rules (i.e., consistency of administration, job		
relatedness, and opportunity to perform; Box A,		
Figure 3.2) will have a direct positive influence on		
overall fairness perceptions (Box E, Figure 3.2).		
Hypotheses 14a-14d: Applicant attributions in terms		H14a- H14d
of a) locus (Box D, Figure 3.5); b) personal control;		(however partial
stability (Box D, Figure 3.5); c) personal control		mediation
(Box D, Figure 3.5); and d) external control (Box D,		instead of full
Figure 3.5) will fully mediate the relationship		mediation was
between perceptions of procedural justice rules (i.e.,		found for 14a
job relatedness, opportunity to perform, and		and 14b)
consistency of administration; Box A, Figure 3.5)		
and overall process fairness perceptions (Box E,		
Figure 3.5).		
Hypotheses 15a-15e: Perceptions of overall process	H15a -H15e	
fairness perceptions (Box E, Figure 3.2) will be		
positively associated with a) organizational		
perceptions (Box F, Figure 3.2); b) recommendation		
intentions (Box F, Figure 3.2); c) reapplication		
intentions (Box F, Figure 3.2); d) job acceptance		
intentions (Box F, Figure 3.2); and e) negatively		
associated with litigation intentions.		
Hypotheses 16a-16e: Attributions in terms of locus	H16a - H16e	
and personal control (Box D, Figure 3.2) will be		
positively related to: a) organizational perceptions		
(Box F, Figure 3.2); b) recommendation intentions		
(Box F, Figure 3.2); c) job acceptance intentions		
(Box F, Figure 3.2); and d) reapplication intentions		
(Box F, Figure 3.2); and negatively related to e)		
litigation intentions (Box F, Figure 3.2).		
Hypotheses 17a-17e: Attributions in terms of	H17a	H17b- H17e
stability (Box D, Figure 3.2) will be positively		
related to: a) organizational perceptions (Box F,		
Figure 3.2); b) recommendation intentions (Box F,		
Figure 3.2); and c) job acceptance intentions (Box F,		
Figure 3.2); and negatively related to d) litigation		
intentions (Box F, Figure 3.2); and e) reapplication		
intentions (Box F, Figure 3.2).		

Table	4.22	Con	tin	ued

Hypothesis	Supported	Not Supported
Hypotheses 18a-18e: Attributions in terms of	H18b	H18a,c,d,e
external control (Box D, Figure 3.2) will be		
negatively related to: a) organizational perceptions		
(Box F, Figure 3.2); b) recommendation intentions		
(Box F, Figure 3.2); c) job acceptance intentions		
(Box F, Figure 3.2); and d) reapplication intentions		
(Box F, Figure 3.2); and positively related to e)		
litigation intentions (Box F, Figure 3.2).		
Hypotheses 19a-19e: Overall process fairness		H19c - H19e
perceptions (Box E, Figure 3.6) will partially	H19a-H19b	(Instead of
mediate the relationship between locus attribution		partial
(Box D, Figure 3.6) and: a) organizational		mediation full
perceptions; b) recommendation intentions; c)		mediation was
litigation intentions; d) job acceptance intentions;		found)
and e) reapplication intentions (all Box F, Figure		
3.6).		
Hypotheses 20a-20e: Overall process fairness	H20a - H20c	H20d - H20e
perceptions (Box E, Figure 3.6) will partially		(Instead of
mediate the relationship between personal control		partial
attribution (Box D, Figure 3.6) and: a)	ļ	mediation full
organizational perceptions; b) recommendation		mediation was
intentions; c) litigation intentions; d) job acceptance	ļ	found)
intentions; and e) reapplication intentions (all Box F,		
Figure 3.6).		
Hypotheses 21a-21e: Overall process fairness		H21a - H21e
perceptions (Box E, Figure 3.6) will partially		
mediate the relationship between stability attribution		
(Box D, Figure 3.6) and: a) organizational		
perceptions; b) recommendation intentions; c)		
litigation intentions; d) job acceptance intentions;		
and e) reapplication intentions (all Box F, Figure		
3.6).		
Hypotheses 22a-22e: Overall process fairness		H22a - H22e
perceptions (Box E, Figure 3.6) will partially		
mediate the relationship between external control		
attribution (Box D, Figure 3.6) and: a)		
organizational perceptions; b) recommendation		
intentions; c) litigation intentions; d) job acceptance		
intentions; and e) reapplication intentions (all Box F,		
Figure 3.6).		

Table 4.22: Contin

Hypothesis	Supported	Not Supported
Hypothesis 23a: Individuals who are selected (Box B,	H23a	
Figure 3.7) and experience a fair selection procedure		
(Box A, Figure 3.7) will report higher self-perceptions		
than individuals who are selected (Box B, Figure 3.7)		
and experience an unfair selection procedure (Box A,		
Figure 3.7).		
Hypothesis 23b: Individuals who are rejected (Box B,	H23b	
Figure 3.7) and experience an unfair selection (Box A,		
Figure 3.7) procedure will report higher self-		
perceptions than individuals who are rejected (Box B,		
Figure 3.7) and experience a fair selection procedure		
(Box A, Figure 3.7).		
Hypothesis 24a: There will be an interaction between	H24a	
selection decision and locus attribution on self-		
perceptions such that the relationship between locus	ļ	
(Box D, Figure 3.8) and self-perceptions (Box E,		
Figure 3.8) will be positive for selected applicants and		
negative for rejected applicants.		
Hypothesis 24b: There will be an interaction between	H24b	
selection decision and personal control attribution on		
self-perceptions such that the relationship between		
personal control (Box D, Figure 3.8) and self-		
perceptions (Box E, Figure 3.8) will be positive for		
selected applicants and negative for rejected		
applicants.		
Hypothesis 24c: There will be an interaction between		Interaction was
selection decision and stability attribution on self-		not found (main
perceptions such that the relationship between stability		effect for
(Box D, Figure 3.8) and self-perceptions (Box E,		stability was
Figure 3.8) will be positive for selected applicants and		found on self-
negative for rejected applicants.		perceptions)
Hypothesis 24d: There will be an interaction between		H24d
selection decision and external control attribution on		
self-perceptions such that the relationship between		
external control (Box D, Figure 3.8) and self-		
perceptions (Box E, Figure 3.8) will be negative for		
selected applicants and positive for rejected applicants.		
Hypothesis 25a-25d: The interaction effect hypothesized		H25a - H25e
in H24a – H24d between selection decision and locus		(partial
(25a), personal control (25b), stability (25c), and external		mediations were
control attributions (25d) on self-perceptions will fully		found with locus
mediate the interaction effect hypothesized in H23a and		and personal
H23b between fair procedures and selection decision on		control)
self-perceptions.		,





*Ployhart, R. E., & Harold, C. M. (2004). The applicant attribution-reaction theory (AART): An integrative theory of applicant attributional processing. International Journal of Selection and Assessment, 12(1-2), 84-98.

Figure 3.2: The Role of Attribution and Justice in Understanding Applicant Reactions



Note: For simplicity reasons, the interactions and mediation hypotheses are reflected in Figure 3 through Figure 8.

Figure 3.3: The Interactive Effect of Explanations and Perceived Satisfaction/ Violation of Justice Rules on Overall Process Fairness Perceptions (H7a – H8)



Figure 3.4: The Interactive Effect of Explanations and Selection Decision on Self-Perceptions (H9 – H10)



Figure 3.5: The Influence of Procedural Justice Rules and Attributions on Overall Process Fairness Perceptions (H14a – H14d)



Figure 3.6: The Influence of Attributions and Overall Process Fairness perceptions on Attitudes and Behavioural Intentions (H19a – H22e)





Figure 3.7: The Impact of Procedural Fairness and Selection Decision on Self-Perceptions (H23a – H23b)











Figure 4.2: Selection Decision by Explanation Types Interaction on Self-Perceptions

Selection Decision



Figure 4.3: Selection Decision by Interview Procedural Fairness Interaction on Self-Perceptions







Figure 4.5: Personal Control Attribution by Selection Decision Interaction on Self-Perceptions

PhD Thesis – K. I. Ababneh

Figure 4.6: Example of a Basic Mediated Model


Appendix A: Conditions of the Study

		Explanation Letters						
Perceived Satisfaction/Violation of Justice Rules	Outcome Decisions	Procedural	Personal	Diversity	No Explanation (Control)			
Satisfaction of Justice Rules	Selected	C1	C2	C3	C4			
Satisfaction of Justice Rules	Rejected	C5	C6	C7	C8			
Violation of Justice Rules	Selected	C9	C10	C11	C12			
Violation of Justice Rules	Rejected	C13	C14	C15	C16			

Schematic of a 2 x 2 x 4 Factorial Design of the Study*

* The above figure reflects the conditions resulted from this research manipulation. "C1", for example, reflects the condition in which participants experienced an interview procedure that satisfied three of Gilliland's procedural justice rules (i.e., consistency of administration, job relatedness, and opportunity to perform) and in which participants also received a procedural explanation letter that conveyed a favourable selection outcome.

Appendix B: Types of Interview Procedures

Fair Procedural Interview Scenario.

Interview Procedures

Imagine that you had recently applied for a desirable job with an organization (let us call it XYZ) and as part of XYZ organization's selection process had gone through the following selection interview procedure.

The interview lasted 30 minutes. After a brief introduction by the interviewer, you were allowed to make a brief opening statement to highlight certain aspects of your resume. After this introduction, the interviewer asked you questions about your resume, work knowledge, and job experience. All of the questions asked by the interviewer were related to the job that you applied for. At the same time, you had an opportunity to ask the interviewer questions about the job and the company. Before the end of the interview, the interviewer also invited you to point out any qualifications and skills that had been overlooked.

After finishing your interview, you found out from a trustworthy source that: a) the same interviewer conducted all of the interviews for this job; b) this one interviewer followed the same interview procedures and asked the same interview questions of all applicants; c) all applicants were treated and evaluated on the same criteria/standards; and d) the duration of the interviews were similar for all applicants (i.e., each interview lasted 30 minutes).

Unfair Procedural Interview Scenario.

Interview Procedures

Imagine that you had recently applied for a desirable job with an organization (let us call it XYZ) and as part of XYZ organization's selection process had gone through the following selection interview procedure.

The interview lasted 20 minutes. After a brief introduction, the interviewer spent the entire time describing the company, its history and possible new directions for the company's future. The interviewer did not ask you questions concerning your resume, work knowledge, or work experience, and the interviewer questions were unrelated to the job that you applied for. Also, you were not even given the opportunity to ask the interviewer any questions about the job or the company. Furthermore the interviewer did not give you a chance to point out your qualifications and skills that are relevant to this job opportunity.

After finishing your interview, you found out from a trustworthy source that: a) different interviewers were used to interview applicants for this same job; b) the various interviewers followed different interview procedures and asked different interview questions of the job applicants; c) each interviewer used different criteria/standards to evaluate applicants for the same job; and d) the duration of the interviews varied from one applicant to the next (i.e., some interviews lasted 30, others 20, and others last only 10 minutes).

Appendix C: Types of Explanation Letters.

Procedural Explanation Letter/Selected



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we are offering you a position with our organization. The decision was based on a thorough selection process. This process was developed by a leading research firm in the area of recruitment and selection and is similar to the process used by a number of Fortune 100 companies. This process has been demonstrated to be accurate and highly effective for identifying and selecting successful candidates.

"Your Name Here," congratulations on your job offer from XYZ Organization. We will be contacting you very soon with more details about this job offer.

May Tanes

Human Resources Director XYZ Organization

Personal Explanations Letter/Selected



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we are offering you a position in our organization. This decision was based on the fact that your qualifications and performance on the selection tools were rated higher than those of the rejected applicants. Furthermore, your industry and job related experience were other important factors in making our selection decision.

"Your Name Here," congratulations on your job offer from XYZ Organization. We will be contacting you very soon with more details about this job offer.

Mark James

May Tanes

Human Resources Director XYZ Organization

Diversity Explanation Letter/Selected



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we are offering you a position with our organization. We strive for diversity in our organization, and aim to select a workforce that is diverse (based on gender, race, and/or ethnicity background) in order to ensure that our workplaces are more reflective of our population.

"Your Name Here," congratulations on your job offer from XYZ Organization. We will be contacting you very soon with more details about this job offer.

May Tanes

Human Resources Director XYZ Organization

Control Explanation Letter/Selected



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we are offering you a position in our organization. "Your Name Here," congratulations on your job offer from XYZ Organization. We will be contacting you very soon with more details about this job offer.

Mal anes

Human Resources Director XYZ Organization

Procedural Explanation Letter/Rejected



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we cannot offer you a position with our organization. The decision was based on a thorough selection process. This process was developed by a leading research firm in the area of recruitment and selection and is similar to the process used by a number of Fortune 100 companies. This process has been demonstrated to be accurate and highly effective for identifying and selecting successful candidates.

"Your Name Here," we are sorry that we could not offer you a position. Good luck in your job search".

May Tomes

Human Resources Director XYZ Organization

Personal Explanation Letter/Rejected



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we cannot offer you a position in our organization. This decision was based on the fact that your qualifications and performance on the selection tools were rated lower than those of the selected applicants. Furthermore, your industry and job related experience were other important factors in making our selection decision.

"Your Name Here," we are sorry that we could not offer you a position. Good luck in your job search".

Mark James

Maly Tanes

Human Resources Director XYZ Organization

Diversity Explanation Letter/Rejected



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we cannot offer you a position in our organization. We strive for diversity in our organization, and aim to select a workforce that is diverse (based on gender, race, and/or ethnicity background) in order to ensure that our workplaces are more reflective of our population.

"Your Name Here," we are sorry that we could not offer you a position. Good luck in your job search".

Mark James

Mathanes

Human Resources Director XYZ Organization

Control Explanation Letter/Rejection



XYZ Organization 2006 New RD X4Y 5Z5 Anywhere Canada

Dear "Your Name Here"

This is to inform you that we cannot offer you a position with our organization. "Your Name Here," we are sorry that we could not offer you a position. Good luck in your job search".

alf anes M

Human Resources Director XYZ Organization

Appendix D: Scale Items

Procedural Justice Rules Manipulation (Perceived Satisfaction/Violation)

Consistency of Administration

- The interview was administered to all applicants in the same way.
- There were no differences in the way the interview was administered to different applicants.
- XYZ organization/interviewer made no distinction in how they treated applicants during the interview.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Job Relatedness

- The content of the interview was clearly related to the job.
- It would be clear to anyone that this interview is related to the job.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Opportunity to Perform

- I could really show my skills and abilities through this type of interview.
- This type of interview allowed me to show what my job knowledge and skills are.
- I was able to show what I can do on this type of interview.
- The interview gave applicants the opportunity to show what they know and can do.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Interview Fairness Perception Manipulation

- I feel the use of the interview by XYZ was fair.
- Using the interview instrument to select employees was fair.
- I am satisfied with XYZ's use of the interview.
- Overall, I believe that the use of the interview was fair.
- I felt good about the way the interview was conducted and administered.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Explanation Manipulations

- The decision was based on a thorough selection process which developed by a leading research firm in the area of recruitment and selection.
- The selection process has been demonstrated to be accurate and highly effective for identifying and selecting successful candidates.
- My qualifications and performance on the selection tools were higher than those of the rejected applicants.
- My industry and job related experience were other important factors in making the selection decision.
- XYZ is striving for diversity (based on gender, race, and/or nationality).
- XYZ is aiming to select a workforce that is diverse.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Explanation Adequacy

- The letter I received from XYZ provided an adequate explanation.
- I understand why XYZ made the hiring decision it did.
- The reason that XYZ provided for the selection decision was sufficient.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Attributions*

Is the cause of the selection outcome something that (is).....?

1.	Reflects an aspect of yourself	7	6	5	4	3	2	1	Reflects an aspect of the situation
2.	Manageable by you	7	6	5	4	3	2	1	Not manageable by you
3.	Permanent	7	6	5	4	3	2	1	Temporary
4.	You can regulate	7	6	5	4	3	2	1	You cannot regulate
5.	Over which others have control	7	6	5	4	3	2	1	Over which others have no control
6.	Inside of you	7	6	5	4	3	2	1	Outside of you
7.	Stable over time	7	6	5	4	3	2	1	Variable over time
8.	Under the power of other people	7	6	5	4	3	2	1	Not under the power of other people
9.	Something about you	7	6	5	4	3	2	1	Something about others
10.	Over which you have power	7	6	5	4	3	2	1	Over which you have no power
11.	Unchangeable	7	6	5	4	3	2	1	Changeable
12.	Other people can regulate	7	6	5	4	3	2	1	Other people cannot regulate

*Items 1, 6, 9 = locus of causality; 5, 8, 12 = external control; 3, 7, 11 = stability; 2, 4, 10 = personal control.

Self-Perceptions

If I received this letter, my opinion of myself would be.....

- Bad	1	2	3	4	5	6	7	Good
- Unfavourable	1	2	3	4	5	6	7	Favourable
- Disapproving	1	2	3	4	5	6	7	Approving
- Negative	1	2	3	4	5	6	7	Positive

Organization Perceptions

If I received this letter, my attitude toward XYZ would be...

-	Bad	1	2	3	4	5	6	7	Good
-	Unfavourable	1	2	3	4	5	6	7	Favourable
-	Disapproving	1	2	3	4	5	6	7	Approving
-	Negative	1	2	3	4	5	6	7	Positive

Process Fairness

- Whether or not I got the job, I feel the selection process was fair.

- The methods that XYZ used to select applicants were appropriate.

- XYZ Organization made hiring decisions in a way that was fair to job applicants.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Distributive Justice

- Overall, I feel the hiring process was consistent and unbiased.

- Given the situation, I feel that XYZ made the right hiring decision.

- Overall, I believe the hiring decision was appropriate.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Recommendation Intentions

- I would recommend XYZ organization to my friends/colleagues.

- I think my friends/colleagues would be interested in applying for a job at XYZ.

- I intend to recommend XYZ organization and its job openings to others.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Reapplication Intentions

- I intend to reapply for a new job with XYZ (rejected)

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Job offer Acceptance

- I will accept the job offer from XYZ (selected). (7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Litigation Intentions

- An organization that provides a letter like this would likely be sued by applicants.
- I think applicants might sue a company that provides letter like this.
- If letters like this become more widely used with job applicants, there will be an increase in the number of lawsuits against employers.
- I would be more likely to sue an organization that provides a letter like this than one that provides no letter.

(7-point response scale: 1= Disagree strongly; 7 = Strongly Agree)

Appendix E: Demographic and Other Related Questions

1. Please select your level of education

- A. High school or less
- B. Graduate from 1-3 years college
- C. Graduate from 4 years college
- D. Postgraduate study or degree
- E. Other (please specify):

2. Please select your gender:

Female Male

3. Please select your age group:

- A. 18 24
- B. 25 30
- C. 31 34
- D. 35 40
- E. 41 45
- F. More than 45

4. Which of the following best characterizes you?

- A. Canadian Citizen
- B. Canadian Landed Immigrant
- C. Other (please specify)

5. What ethnicity do you consider yourself to be?

- A. Aboriginal
- B. White
- C. Chinese
- D. South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
- E. Black (e.g., African, Haitian, Jamaican, Somali)
- F. Arab/west Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)
- G. Other (please specify)_____

6. Are you currently looking for a job

Yes No

7. Are you currently holding?

- A. Full time job
- B. Part time job
- C. I currently do not have a job
- D. Other (please specify)_____

8. When was the last time you applied for a job?

- A. In the last month.
- B. In the last 2-3 months.
- C. In the last 4-6 months.
- D. More than 6 months.
- E. I have not applied for a job.

9. How many times have you been in a job interview?

- A. Never
- B. Once
- C. Twice
- D. Three times or more

10. Are you planning to look for a job?

- A. In the next month.
- B. In the next 2-3 months.
- C. In the next 4-6 months.
- D. In more than 6 months.
- E. I do not plan to look for a job within the next 9 months.