EVALUATING LAYOFF TECHNIQUES:

A POLICY-CAPTURING STUDY OF

VOLUNTARY VERSUS INVOLUNTARY LAYOFFS

By

NITA NAVPREET CHHINZER, BA , MBA

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AUTHOR:	Nita Navpreet Chhinzer, B.A. (York University), M.B.A. (McMaster University)
SUPERVISOR:	Dr. Naresh Agarwal
COMMITTEE:	Dr. Willi Wiesner Dr. Kevin Tasa
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ABSTRACT

An organization can adopt one of two implementation techniques to execute layoffs. Through *involuntary layoffs,* management can unilaterally select which employees to layoff. Alternatively, through *voluntary layoffs*, employees can self-select through volunteering for a layoff. A model from the turnover realm was adapted and applied to assess antecedents of the layoff decision for both implementation techniques. Antecedents included work related variables (job performance, salary, job satisfaction, stress, organizational commitment, severance packages) and non-work related variables (age, education, tenure, gender, family size).

A policy-capturing approach compared voluntary versus involuntary layoffs. Management and employee dyads assessed employee profiles and judged the layoff decision for each profile. Given the exploratory nature of this research, subject matter experts (SMEs) assessed 388 profiles to validate the model. Semi-structured interviews with SMEs provided improvements adopted for the field study. The field study involved managers and employees from three companies evaluating 976 employee profiles to determine the likelihood for voluntary or involuntary layoffs. Logit regression analysis provided the significance, strength and direction of influence for each antecedent on the layoff decision.

The results provide evidence that job performance, job satisfaction and organizational commitment have a negatively correlated relationship with both layoff implementation techniques. Slightly more than half (56.35%) of employees had the same stay or leave decision during voluntary versus involuntary layoffs. The residual (43.65%) represent mismatches that are a result of different influence and interpretation of the remaining layoff antecedents. This thesis provides evidence that voluntary and involuntary layoff implementation techniques result in a different mix of employees leaving the organization. From a policy perspective, recommendations on how to minimize mismatch are provided. From a theory perspective, a closer bridge between layoff and turnover research is proposed. This thesis also suggests that layoffs should be assessed based on the voluntary-involuntary divide in future research.

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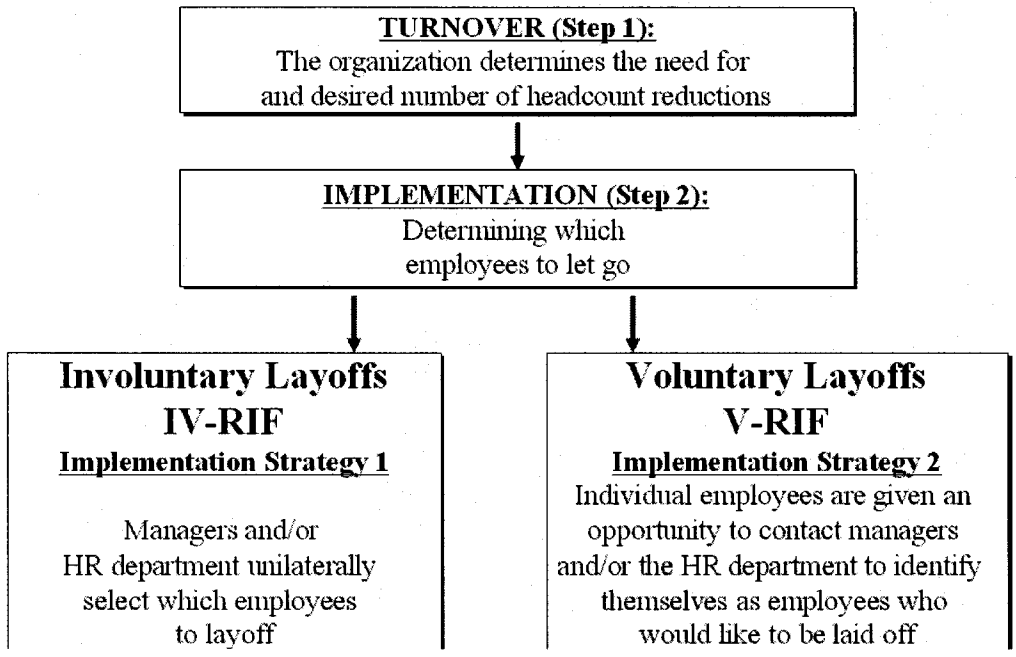
Chapter 1: Introduction

In an era of globalization, hyper-competition and rapid technological changes, workforce planning is a critical component of an organization's success. In order to ensure an optimal workforce, organizations must regularly adjust their workforce to the changing business conditions. Layoffs have emerged as a widely used workforce adjustment tool. Between 1998 and 2002, over 85% of Fortune 1000 companies experienced at least one round of mass layoffs (CBS Marketwatch). They have become a norm in a variety of industrial sectors such as automobile, forestry, financial, telecom and pharmaceutical (Woolhouse, 2005). In literature, the terms layoffs, reduction in force (RIF), downsizing, job separation, rightsizing, workforce imbalance correction and reengineering are used synonymously (Cravotta & Kleiner, 2001; Crooker, 1995; Davis, Savage, Stewart, & Chapman, 2003; Kozlowski, Chao, Smith, & Hedlund, 1993). They all represent the same thing, i.e., an organization's deliberate intention of mass headcount reductions (Cravotta et al., 2001; Dugan, 1996; White, 2003).

Operationally, the execution of layoffs involves two separate decision steps as outlined in Figure 1. First, a decision is to be made regarding the desired number of headcount reductions. The organization makes this determination taking into account its current and anticipated workforce requirements. In the second step, a selection decision has to be made regarding which specific employees will be laid off. Here an organization can adopt one of two implementation strategies. The first strategy is referred to as *Involuntary Reduction in Force (IV-RIF)*. Here, an organization unilaterally makes the selection decision without any participation of employees in this decision. Historically, this was the strategy typically

followed by organizations. The second strategy is referred to as *Voluntary Reduction in Force (V-RIF).* In this case, employees are given an opportunity to select themselves as candidates for layoffs. Many organizations have made use of this strategy in recent years. These organizations include General Motors, Ford, Nortel Networks, BellSouth, International Business Machines, Bayer, Allstate, US Department of Energy, Canadian Broadcast Company and Delta Airlines to list a few examples (FinancialWire, Apr 10, 2006; Fuhrmans, May 23, 2002; Hechinger, Aug 14, 2002; Hill, Sep 18, 2004; Jones, Oct 20, 2003; McKay, Apr 20, 2006; Sherefkin, May 16, 2005; Stempel, Mar 27, 2003; Zwiebach, Jun 27, 2005).

Figure 1. The Layoff Implementation Process



Layoffs result in two types of outcomes, one more quantitative and the other more qualitative. The first outcome is that the size of workforce will be reduced by the number of employees laid off (this outcome is as per the expressed intentions of the organization). The second outcome is that layoffs will change the workforce mix. However, as shown in Figure

2, the exact nature of change may depend upon whether the employer unilaterally selects the individual employees to layoff (IV-RIF) or the employees are given the choice to volunteer themselves for layoff (V-RIF). The decision function used by the employer and employees may involve considerations that may or may not be the same. To the extent considerations are similar, the employer-driven involuntary and the employee-driven voluntary layoff selection strategies would yield matched outcomes. To the extent they are not, the two strategies would yield mismatched outcomes. For example, the employer may want to select employees for layoff in the reverse order of their performance. However, it is conceivable that when given the choice, higher rather lower performing employees may be more likely to volunteer for layoff. Clearly, the workforce mix remaining after layoffs would have important implications for organizational success.

Figure 2. Conceptualizing Voluntary vs. Involuntary Layoffs: Match or Mismatch

Involuntary Layoff (IV-RIF)	Voluntary Layoff (V-RIF): Leave (volunteer for a layoff)	Voluntary Layoff (V-RIF): Stay (don't volunteer for a layoff)
Leave (select for a layoff)	*Match*	*Mismatch*
Stay (don't select for a layoff)	*Mismatch*	*Match*

While voluntary and involuntary strategies are now used by organizations to implement layoffs and these alternative strategies are producing potentially varying outcomes with significant policy implications, no comparative analysis of these alternative strategies is available to inform this practice. Layoffs have been studied as part of the turnover literature.

This literature distinguishes between voluntary and involuntary turnover. *Voluntary turnover* is defined as employee initiated turnover, mainly in the form of quits or resignations. The decision to terminate employment with the firm is made by the employee, without management enticement. *Involuntary turnover* is defined as employer initiated turnover, mainly in the form of dismissals or layoffs. The employee has little or no personal say in this turnover decision (Mobley, Griffeth, Hand, & Meglino, 1979; Steers & Mowday, 1981). Thus, past studies have treated layoffs as a form of involuntary turnover and consequentially have focussed on issues with the use of involuntary strategy for implementing layoffs (*IV-RIF* in Figure 1). The terms V-RIF and IV-RIF have been used in some recent studies to reflect voluntary and involuntary layoffs (Cravotta et al., 2001; Crooker, 1995; Legatski, 1997; Miller, 2002; Simone & Kleiner, 2004a). However, the difference between the employer and the employee decision functions for implementing layoffs has yet to be explored.

The present thesis is aimed at filling this void in the literature. It introduces a composite view of layoffs, by examining layoffs from both the voluntary and involuntary perspectives. The thesis seeks to examine the individual level determinants that influence an employee's decision to volunteer for layoff and an employer's decision to select specific employees for layoff. Through a comparison of these determinants, the extent of similarity or dissimilarity in the outcomes between the voluntary (V-RIF) and involuntary (IV-RIF) decision models can be determined. From this comparative analysis, we can gain an understanding of the relative effectiveness of voluntary and involuntary layoff implementation techniques. If the resulting mismatch in the outcomes is empirically supported and is substantial, organizations would need to consider re-evaluating their method

for implementing layoffs.

Although organizations are increasingly using layoffs to adapt their labour force to the demands of the business environment, our theoretical understanding of the layoff process remains minimal (Cascio, 1998; Dichter & Trank, 1991; Thornhill & Saunders, 1998). The importance of distinguishing between those who were terminated and those who left voluntarily was noted long ago (Eisenberg & Lazarsfeld, 1938) and has been reiterated in the turnover literature (Porter & Steers, 1973). However, differentiating between the determinants used during V-RIF and IV-RIF has never been overtly addressed.

Conceptual Approach

Although several empirical investigations of antecedents of quits and dismissals exist in the turnover literature (Cotton & Tuttle, 1986; Griffeth, Hom, & Gaertner, 2000; Hom & Griffeth, 1995), our understanding of layoffs is largely driven by media or professional literature, with relatively few empirical studies or theoretical papers published in academic journals (De Meuse, Bergmann, Vanderheiden, & Roraff, 2004; Smeltzer & Zener, 1992; Tombaugh & White, 1990). The downsizing literature is void of significant theories on individual level antecedents of layoff, largely due to the treatment of all layoffs as involuntary (Fraze, 1988; Latack, Kinicki, & Prussia, 1995; Mansour-Cole & Scott, 1998). Barrick, Mount and Strauss (1994) noted the scarcity of research on turnover due to workforce reduction as "somewhat surprising since the firm's choice of who should leave may have as large an impact on an organization's effectiveness as the employee's choice to leave" (pg. 515). Kozlowski et al. (1993) recognized a significant need to understand the downsizing process across micro and macro levels of analysis. Cameron and colleagues

(1994) claimed downsizing was "probably the most pervasive yet understudied phenomenon in the business world" (pg. 183).

To develop a conceptual model for this study, a framework from turnover research is selected, modified and applied to the layoff realm. Although a series of authors introduced comprehensive conceptual models of employee turnover (Baily, 1977; Lee & Mitchell, 1991; March & Simon, 1958; Mobley, 1982; Porter et al., 1973; Price, 1977), the model most suited for modification and application to the layoff realm is Mobley's (1982) *Simplified Model of the Causes and Correlates of Turnover.* Specifically, work related and non-work related variables are introduced and tested as the independent variables leading to an employee's decision to volunteer for layoff. This is compared to antecedents used by management when selecting employees for an involuntary layoff.

Methodological Approach

Empirical research on antecedents of layoffs is severely constrained by practical limitations on data collection. Ethically, we cannot ask an organization to undergo layoffs for research purposes. In cases where an organization has announced layoffs, the organization's dynamic nature, the unstable psychological position of the employees, and the legal implications involved make it extremely difficult to collect data. Combined, these limitations result in an inadequate understanding of the decisions that occur between the time a layoff is announced and the time it is implemented. Due to the data limitations associated with studying layoffs and the antecedent focus of the analysis, the proposed methodology in this thesis adopts a policy-capturing approach with an orthogonal design. The policy-capturing approach has been used in studies on human resources topics such as job search (Cable &

Judge, 1994; Rynes & Lawler, 1983), job performance (Rotundo & Sackett, 2002), recruitment (Dineen, Noe, & Wang, 2004; Fritzsche & Brannick, 2002; Moy & Lam, 2004) and compensation (Beatty, McCune, & Beatty, 1988; Sherer, Schwab, & Heneman, 1987). In addition, this method has been used in layoff/RIF research to help overcome methodological limitations with downsizing studies (Crooker, 1995; Rynes et al., 1983; Wingate, Thornton, McIntyre, & Frame, 2003).

Using a dyadic approach, both management and employees from field settings reviewed the same simulated profiles of a series of employees. Management's likelihood to layoff each individual employee described in each profile and employee's perception of the likelihood of employees in the profiles to volunteer for a layoff were compared. This resulted in the determination of antecedents of the selection process for voluntary versus involuntary layoffs. By providing a simulated environment in which antecedents of decisions can be explored, limitations of accessing field settings were overcome.

Organization of the Thesis

Chapter 1 provides a brief overview of the thesis including the research background, purpose, underlying theories, data collection and methodology used. Chapter 2 is a literature review of studies that examined antecedents of turnover or layoffs. Chapter 3 reviews prevalent theoretical models in the turnover literature and assesses the transferability of these models into the layoff realm. Chapter 4 selects, adapts and modifies a theoretical model from turnover, including hypotheses development around the model adapted for layoff research. Chapter 5 introduces the methodology used for testing the proposed model. Rationale, participants, measures and procedures are included. Results are divided into two chapters. Chapter 6 provides details of the pilot study, where I used a mixed methods approach to data

analysis. Chapter 7 reports results of the field study, where the focus was exclusively quantitative. The last chapter focuses on implications, contributions, limitations and areas for future research.

Chapter 2: Literature Review

The literature used in this thesis is hosted in two main domains; turnover and layoffs. The turnover realm is much more developed theoretically and empirically than the layoff realm (Cotton et al., 1986; Griffeth et al., 2000; Hom et al., 1995). Our understanding of layoffs is dominated by media or practitioner reviews (Crooker, 1995; De Meuse et al., 2004; Tombaugh et al., 1990). Thus, layoff literature lacks theories on antecedents of layoff (Fraze, 1988; Latack et al., 1995; Mansour-Cole et al., 1998). This thesis bridges both turnover and layoff literature. In this chapter, the turnover literature is first reviewed and evaluated to develop a comprehensive understanding of the turnover phenomenon and progress in this area. Then, the layoff literature is examined to evaluate downsizing, RIF and layoff specific research.

Turnover Literature Review

Turnover is defined as the termination of an individual's employment with an organization (Mobley, 1982). From the employee's perspective, turnover is classified into two sub groups; voluntary and involuntary (Mobley et al., 1979; Steers et al., 1981). Voluntary turnover is employee initiated, usually in the form of quits or retirement. Involuntary turnover is employer initiated, usually in the form of dismissals or layoffs (Mobley, 1982). The standard definition of total turnover is the total number of employees leaving an organization divided by the total number of employees in an organization, regardless of whether the turnover was voluntary or involuntary. The measure of turnover above has little practical value because it does not incorporate or assess different categorizations of turnover.

Thus, this literature review focuses on research that has a meaningful value in developing a view of turnover which includes an awareness of voluntary versus involuntary differences. In the turnover realm, research has generally compared quits to dismissals, without addressing the impact of layoffs. A limited number of researchers have segmented turnover in terms of identifying differences between quits (voluntary turnover) and layoffs (involuntary turnover) (Iverson & Pullman, 2000; Kidd, 1994; Picot, Lin, & Pyper, 1998).

Iverson and Pullman (2000) used an event history analysis on a hospital that laid off employees after a merger. They gained access to information on 415 employees and followed their movement over a 5 year period. The distinction was made between voluntary turnover (employees who quit and were not given a severance package) and involuntary turnover (employees who were dismissed or employees decided to take a voluntary layoff). Employees who did not choose to be laid off were not involuntarily let go. Thus, the Iverson and Pullman (2000) study was limited to an evaluation of voluntary layoffs and quits. In comparison, this thesis is a study of voluntary and involuntary layoffs.

Although the sample is not directly comparable[1], the results provide some insight in identifying gaps in the existing literature. Two weeks before the layoff announcement was made, a multi-item survey was distributed to a random sample of employees, soliciting information for the study. In a post hoc review of the 415 respondents, it was found that 194 stayed with the hospital, 170 resigned and 51 employees were laid off. Three variables had a statistically significant impact on both volunteers for layoffs and those who resigned. Volunteers for layoffs were more likely to be older ($r^2 = 0.181$), blue-collar workers ($r^2 =$

[1] The Iverson and Pullman study only compared voluntary layoffs with quits, not involuntary layoffs with voluntary layoffs

0.178) who had a negative perception of the amalgamation (r^2 = -0.118), whereas those who resigned were more likely to be younger (r^2 = -0.264), white-collar employees (r^2 = -0.122) who had a positive perception of amalgamation (r^2 = 0.104) [2]. It is critical here to note that even though the impact was small, employees who volunteered for layoffs and those who resigned consistently had opposite determinants for turnover. Thus, employees who volunteer for a layoff are driven by different factors than employees who quit.

Kidd (1994) also examined whether a meaningful difference between quits and layoffs existed. His findings showed that voluntarily and involuntarily unemployed persons were heterogeneous. The distinction between a quit and a layoff depended on whether unemployment status was voluntary; i.e., a quit was voluntary and a layoff was involuntary. The sample accessed was full time, paid male workers between the ages of 16-64. The wage equation estimates were relatively straight forward (controlling for marital status, age, education, industry, occupation and province of residence) and depended on if the job separation was voluntary versus involuntary (quit versus layoff). Kidd's econometric model assumed membership into one of four mutually exclusive categories: quit (n=617), layoff (n=261), job stayers (n=397), and a residual (other mover category).

The findings of Kidd's empirical research supported the fact that when the voluntary versus involuntary distinction was made, the party who wished to initiate the job separation gained monetary benefits after the turnover. Adopting an economic perspective, Kidd assumed that market wages were indicative of an employee's true productivity, whereas wages in a fixed market (i.e. the company the individual was employed by) were not necessarily reflective of an individual's value. After job separation, those who quit

[2] All correlations are significant using a $p<0.05$ one tailed test.

(voluntarily separated) earned an average salary 18% higher than job stayers. Likewise, those who were laid off (involuntarily separated) earned an average salary 30% less than job stayers. These results demonstrated that individual pay levels were not representative of productivity in a fixed market. Employees with a market value higher than the actual wage set by the employer gained economically from quitting, since they were underpaid by their previous employer. Comparatively, during layoffs, the employer gained economically from turnover, since the employer was paying laid-off employees more than their labour market value. Thus, from an economic perspective, there were opposing antecedents of quits versus layoff decisions.

Similarly, Picot, Lin and Pyper (1998) used a random sample of all Canadian workers in their study examining layoffs[3]. The information was extracted from the Longitudinal Worker File, which is a component of the Labour Force Survey. The purpose of the study was three-fold; 1) to examine the underlying causes of layoffs, 2) to empirically prove an increase in layoffs in the 1990's, and 3) to examine if layoffs were isolated or continuous events. The study found that from 1978-1993, a 1% increase in unemployment was associated with a 0.89% *decrease* in quit rates, a 0.61% *increase* in use of temporary layoffs and a 0.38% decrease in hiring rates. Quit rates and layoff rates consistently reacted in opposite directions.

Also, Picot et al. (1998) provided evidence that a number of correlations between various factors (such as age, gender, and skill level) and layoff likelihood existed. Layoff victims were older (over 55 years of age at time of layoff) when the layoff was a single event. In continuous layoff situations (where the individual was laid off from 5 or more companies

[3] With the exception of those employed in Agriculture

within a 10 year span), younger individuals were most likely to be the subjects (between 25 and 34 years of age). Annual earnings, education and skill level were found to be the most influential determinants of the likelihood of getting laid off. However, this study did not differentiate between voluntary and involuntary layoff implementation processes.

Quits are driven by the employee, whereas layoffs are initiated by the employer. Individual decisions during layoffs can be the result of employee or employer requests (V-RIF or IV-RIF). After a company announces layoff intentions, volunteering for a layoff might be a substitute for quitting. Therefore, the results of Picot et al's (1998) study might be skewed, due to a lack of procedural information behind what triggered the individual decision to leave the company.

Rather than distinguishing quits from layoffs, this thesis distinguishes employees who volunteer for layoff from those who don't, suggesting that those who do volunteer are driven by their own benefit in doing so. Research has consistently supported the notion that voluntary and involuntary unemployment have different antecedents and outcomes (Iverson et al., 2000; Kidd, 1994; Picot et al., 1998). From the turnover literature review above, the importance of voluntary versus involuntary differentiation is evident.

Layoff Literature Review

The literature on layoffs is segmented in two significant ways. First, there is a gap in our understanding of the micro level layoff selection decisions. Existing layoff research focuses on macro level outcomes or antecedents, or micro level outcomes. There is minimal research on micro level antecedents to the layoff decision. Second, an overwhelming majority of research neglects the voluntary-involuntary layoff divide. The limited studies

that include V-RIF and IV-RIF notions are reviewed at the end of this chapter.

An understanding of micro level antecedents to the layoff decision needs to be developed. A recent review of literature examined over 865 studies on downsizing (also referred to by some authors as layoffs, right-sizing, reduction in workforce or redundancies) (Thornhill et al., 1998). It found that the studies tended to concentrate on layoffs in terms of consequences, rather than causes. Most of the research on layoffs or downsizing focuses on either the laid off employee's view of the process (Leana & Ivancevich, 1987), the survivor's perspective (Bennett, Martin, Bies, & Brockner, 1995; Brockner, Davy, & Carter, 1985; Brockner & Wiesenfeld, 1993) or the employer's justification for the headcount reduction (Cascio, 1993).

Recently, researchers have begun to explore the topic of layoffs more comprehensively. Firms found that they laid off the wrong employees, which increased the anticipated costs of the layoffs (Mirvis, 1997). Researchers began to ascertain that the risk of turnover might be the highest amongst the firms' most valuable employees (Sutton, 1983). Organizations trying to downsize poor-performing employees were finding that the employees who worked well were the ones leaving during layoffs (Knapp, 2001; Mone, 1994; Simone et al., 2004a). Yet, research on antecedents or predictors of which employees would exit and which employee would remain with the organization during layoffs was limited to legal issues (Connell, 2001; Grossman, 2002; Kuhn & Stout, 2004) or focused on the goal of managing survivors (Bennett et al., 1995; Brockner et al., 1993; Shaw & Berrett-Power, 1997). Therefore, the need to assess individual level antecedents to the layoff decision becomes evident.

In addition, an overwhelming proportion of studies in the layoff realm defined laid-off persons as "involuntarily unemployed" (Fraze, 1988; Latack et al., 1995; Mansour-Cole et al., 1998). These researchers focused on the impact of job loss from job coping (Latack et al., 1995; Spera, Buhrfeind, & Pennebaker, 1994), psychological (Ambrose, 1996; Bennett et al., 1995; Brockner, 1990; Gowing, 1997; Wiesenfeld, Brockner, & Thibault, 2000), financial (Carter, 1995; Swaim & Podgursky, 1994; Vinokur, Price, & Caplan, 1996), social (Fraze, 1988) as well as labour relations perspectives (Dugan, 1996; Fallick, 1996; Seitchik, 1991), assuming that the individual employee had no influence in the layoff decision. The gap in literature exists in the fact that some layoffs are selected at the request of the employee.

After an exhaustive review, only six research papers were found that explored the above two gaps in the layoff literature. Greenhalgh and colleagues, as well as Kozlowski and colleagues attempted to conceptualize the layoff implementation techniques in their papers in the late 1980's and early 1990's (Greenhalgh, Lawrence, & Sutton, 1988; Kozlowski, Chao, Smith, & Hedlund, 1990). Empirical research including the voluntary-involuntary layoff divide is limited to only four studies (Barrick et al., 1994; Cox, 1996; Crooker, 1995; Legatski, 1997).

Greenhalgh, Lawrence and Sutton (1988) offered seminal work in the area of workforce reduction strategies. The authors presented a conceptual hierarchy of workforce reduction implementation strategies. The model suggested that the selection of workforce reduction strategy would be determined by features of the workplace oversupply (magnitude, duration, predictability) and contextual factors (aggregate/global organizational characteristics, environmental characteristics) (Greenhalgh et al., 1988). A five-level typology was proposed, which included Natural Attrition, Induced Redeployment,

Involuntary Redeployment, Layoff with Outplacement Assistance and Layoff without Outplacement Assistance. The levels were positively arranged by protection of employee well being (such that the first strategy offered the highest level of protection of employee well being) and negatively arranged by short-term cost savings to the organization (such that the last strategy offered the highest level of short term cost savings to the organization).

The first three levels indicated work redeployment, which rarely occurred in practice (Dyer, Foltman, & Milkovich, 1985; Greenhalgh et al., 1988). Greenhalgh and colleagues recognized that the last two levels were most frequently used by management to reduce workforce. Specifically, the authors created awareness that layoff implementation strategies required attention because the strategy affected employee well being, cost effectiveness, and had policy implications. Explicitly, management faced three main dilemmas in their choice of layoff implementation strategies; the choice of who to layoff and who to keep, the speed at which layoffs must occur to ensure rapid recovery, and the requirement to manage the employee's need for control.

Greenhalgh and colleagues provided a catalyst in layoff research in the form of establishing the earliest awareness of choice and implication of implementation strategies. Although they did not address the distinction between voluntary versus involuntary layoffs, the researchers provided a strong typology identifying potential layoff implementation techniques.

Half a decade later, the International Review of Industrial and Organizational Psychology published a chapter entitled "Organizational Downsizing: Strategies, Interventions and Research Implications" (Kozlowski et al., 1993). Focusing on macro level decisions, the authors recognized that layoffs were spreading beyond manufacturing into the

service sector. The authors extended macro theories of organizational evolution (Cameron, Sutton, & Whetton, 1988; Freeman, 1994; Sutton & D'Aunno, 1989; Whetton, 1980), and recognized that the literature available at the micro level focused on either reactions to job loss (Leana et al., 1987), or the psychological well being of survivors (Brockner, 1988; Brockner et al., 1985; Greenhalgh, 1982). As recently as 1993, the lack of theory and empirical evidence of downsizing processes at the individual level was noted. The need to understand the downsizing or layoff process was considered an 'emergent' phenomena (Kozlowski et al., 1993), thus bringing to light the timeliness of this thesis.

Kozlowski and colleagues suggested that layoff implementation could be either "proactive, well articulated, and designed to support organizational goals" or, conversely, could be "reactive in nature, with little effort to ensure that the process and the desired outcomes will be consistent with desired future states", paralleling the notions presented in this thesis of voluntary versus involuntary layoff implementation techniques (Kozlowski et al., 1993: pg. 269).

Barrick, Mount, Strauss and Perkins (1994) reviewed antecedents of layoffs, treating the laid off group as homogeneous. In an earlier study, Barrick, Mount and Strauss (1993) examined the relationship between conscientiousness and job performance. During that study the sample organization announced layoffs. The data collected for the 1993 study was compared with turnover data collected after the layoffs were conducted. The 8 variables measured were general mental ability (GMA), conscientiousness, age, gender, job involvement, sales volume, supervisory ratings (all collected in the earlier study) and layoffs. Using structural equation modeling and logistic regression analysis, the results showed that age, gender, job involvement, sales volume and supervisory ratings had a direct relationship

with layoffs, while GMA and conscientiousness were indirectly related to layoffs (through job performance). Although unique in its approach, the study had two significant limitations. First, the initial variables for which data were collected were grounded in theory linking conscientiousness to job performance. The layoff announcement provided an opportunity to expand on the previous study, but the antecedents selected were not selected on the basis of theoretical models. Second, the study failed to differentiate between V-RIF and IV-RIF, which is crucial in assessing layoff implementation techniques.

Crooker (1995) focused on V-RIF during her PhD studies at Indiana University. Her thesis identified organizational and individual differences that prompt V-RIF participation. A policy-capturing approach was adopted to determine individual turnover intentions in a V-RIF environment. In addition, direct estimation evaluated rank order. Each respondent in the study sample of MBA students reviewed 32 simulated environments to determine the likelihood to volunteer for a layoff in each environment. Participation was voluntary and included incentives of $25 per completed profile set. The response rate was 67% and 137 participants completed the study. Individual level analysis demonstrated that financial incentives, personally valued feedback and perceived job alternatives influenced decision making, more than an individual's financial position, realistic communication, or job performance[4]. At the group level of analysis, work history, certain elements of job satisfaction, and risk taking propensity were more influential in predicting turnover intentions than self monitoring or organizational commitment.

The research presented by Crooker differs from this thesis in three significant ways. First, my research extends Crooker's original question of "what are the specific factors which

[4] In fact, job performance received mixed results in the empirical analysis.

relate most closely to employee decisions to accept or reject V-RIF offers?" (1995: pg.7). I provide a comparative basis of voluntary versus involuntary antecedents of layoff decisions. Thus, I evaluate the policy implications of alternative layoff implementation techniques, while theoretically determining antecedents in each decision function. Second, Crooker manipulated external factors in her data collection, thus focusing on organizational level research (via hypothetical layoff situations from various companies and contexts). My study focuses on individual level research (context and company is stable, individual differences are tested). Thus, the focus of the research and level of analysis are not analogous. Third, Crooker incorporated Lee and Mitchell's Push/Pull model (1994), where an individual's psychological state was a push force, and external labour market conditions were pull forces. As explicitly stated in her text, Crooker reviews employee choice issues, rather than implementation issues. Instead, I explore Mobley's (1982) "Simplified Model of the Causes and Correlates of Turnover" as an alternative turnover model for the layoff realm.

Cox (1996) also conducted dissertation research on decision factors determining turnover during layoffs. She examined the various roles and perspectives of individuals who possess decision making power during involuntary layoffs. Specifically, Cox examined the perspectives of executives, managers, and human resource professionals to compare how they weigh certain factors (gender, age, salary, tenure, task performance and contextual performance) when determining which employees to select for an involuntary layoffs using a policy-capturing approach.

Cox (1996) solicited participation from ten professional organizations in the western Florida area and contacted presidents of three additional associations to distribute study materials. In total, 26 executives, 24 middle managers and 12 human resource professionals

reviewed 64 employee profiles each and determined the likelihood of each profile to be selected for an IV-RIF. Contrary to Cox's hypotheses, group membership (executives, middle managers or human resource professionals) had no influence in the likelihood to select an employee for an involuntary layoff. The author was unable to statistically analyse the cues (factors or independent variables) because the design lacked orthogonality. Although the evaluation of factors affecting the decisions made during IV-RIF was limited, Cox's research clearly identified that the executive, middle management, and human resource professional categorizations are actually homogenous in their approach and determination of which employees to layoff. Therefore, the rationale for the homogenous classification of management and human resource managers in this study is supported.

However, Cox arranged the six factors so that 25% of the 64 profiles would be highly likely to be laid off, 25% had a very low likelihood to be laid off, and the remaining 50% of the profiles had a medium likelihood to be laid off. In a study of individual level antecedents of likelihood to be laid off, Cox's seemingly arbitrary pre-classification of profiles can introduce design flaws that can potentially bias the results and skew a participant's evaluation of the profiles. Given the profile generation techniques used by Cox, a potential for demand effect bias existed.

Another dissertation in the late 1990's examined downsizing implementation strategies. Legatski (1997) expanded on the theoretical framework of Greenhalgh and colleagues (1988) to test the performance effects of layoff strategies. In the model proposed by Legatski, performance pressures, mimetic pressures, resistance to change and prior downsizing experiences influenced the strategy selected to implement layoffs. These choices were hypothesized to influence organizational performance after the layoff, thus the

researcher focused on effects at the macro (organizational) level of analysis.

Legatski attempted to collect information from a field study. After short listing organizations that underwent significant layoffs in the 1989-1992 period (n=575), target organizations were narrowed down to those exceeding the 5% ratio of the entropy measure of diversification (Hoskisson, Hitt, Johnson, & Moesel, 1993). At the end, the research target list was reduced to 260 companies. Legatski sent an average of 4.64 surveys per firm (to human resource managers and top management), and followed up the original contacts within 3 weeks for all non-responses. Even with the multiple contact points and survey requests, the response rate of the study was a mere 3.2%. A number of firms were in the process of Department of Labor investigations or other types of pending or possible litigations associated with layoffs. Therefore they refused to participate in the study. Of the surveys completed, less than 17% provided any information on the organization's previous layoff efforts.

Unfortunately, a severe limitation of Legatski's research was the sample size. Multiple hypotheses were dropped or collapsed. The results were inconclusive in determining which strategy worked best for reducing headcount. In addition, there was an overwhelming reliance on layoffs as the downsizing implementation strategy. Legatski replaced the multiple categorizations of headcount reduction strategies to a single category entitled "layoff". This further solidifies the belief that, in practice, downsizing, RIF, and layoffs are equivalent terms (as per the use of the terms in this thesis).

A review of the existing literature in turnover and layoffs shows that turnover and

layoff literature have developed largely segmented from each other. From turnover research, we understand that there are different antecedents to voluntary versus involuntary employee exits. From layoff literature we understand that the majority of research treats layoffs as all "involuntarily unemployed", therefore ignoring the notions of voluntary layoffs. Additionally, the antecedent focus of the layoff implementation strategy is neglected. Only six studies overcome the gaps in layoff literature.

What factors trigger an employee's decision to volunteer for a layoff and how do these compare with factors triggering management's selection of individual employees for a layoff? Research on this topic using the comparisons above has been non-existent to date. The conceptual model developed and variables outlined in this dissertation shed light for the first time on the profiles of employees who volunteer for a layoff versus employees who do not, and contrast that with management's decision regarding which employees to select for an involuntary layoff. The framework to be tested was developed by selecting a theoretically grounded model from turnover theory and adapting it to the proposed area of voluntary versus involuntary layoffs. My research is the first study evaluating antecedents of voluntary versus involuntary layoffs that I am aware of.

Chapter 3: Theoretical Framework

Turnover Models and Selection

Prevalent models in turnover research were evaluated in terms of transferability to the layoff realm, including; March and Simon (1958), Porter and Steers (1973), Baily (1977), Price (1977), Mobley (1982), and Lee and Mitchell (1991). Mobley's 1982 "Simplified Model of the Causes and Correlates of Turnover" model is the most adaptable to the area of layoffs. Prior to reviewing Mobley's model and developing a similar conceptual model for testing in the layoff realm, select significant turnover theories are summarized and critiqued in order to provide justification for the selection of Mobley's model for this research.

Summary and Critique of Prevalent Turnover Models

One of the earliest, and possibly, most influential integrative models of employee turnover is the March and Simon "Decision to Participate" model (1958)[5]. The model identifies major factors affecting perceived desirability of employee movement (including pay, job satisfaction and perceived possibility of intra-organization transfers), as well as major factors affecting perceived ease of movement (including number of extra-organization alternatives perceived). The March and Simon model linked economy, labour market and individual behaviour in the turnover realm. However, assumptions of equilibrium and balance limit research to commensurable measures, and result in an overemphasis on pay as a motivator (which reduces the influence of psychological elements of turnover) (Morrell,

[5] Also known as the Organizational Equilibrium Model, which can be traced back to Barnard, C. 1938. The Functions of the Executive. Massachusetts: Harvard University Press.

Loan-Clarke, & Wilkinson, 2001). Consequently, I did not adopt the March and Simon model for this study.

Porter and Steers introduced the "Met Expectation" model (1973). The model proposes that individuals have certain expectations about the organization that they join. Employees are likely to leave the organization if their expectations are not met. This theory is founded on the belief that different people have different expectations about an organization. If a disconnect between expectations and actual activity occurs, the result is turnover. However, individual level differences affecting perceptions about the organization are not outlined in the Porter and Steers model. Additionally, the model assumes that expectations are static and do not alter in response to organizational characteristics or situations. During a time of headcount reductions, organizations are in a dynamic state, which may lead to changing expectations. Given the static view of expectations and the lack of ways to measure individual level differences, the Porter and Steers model (1973) is not suitable for the proposed study.

According to Baily's "Economic Rationalization Theory" (1977), whenever there are layoffs, the firm equates individual worker costs and turnover costs with the profit maximization of the firm. Economic Rationalization theory suggests that in decision-making, units (people, departments, companies etc.) systematically compare the economic benefit of the available options and select the option that most benefits them. A firm is most likely to layoff an individual employee when the profit to the firm is less than worker's costs plus cost of turnover incurred by the firm. In Baily's model (1977), this rule determines which employees are selected for unemployment when an organization conducts involuntary layoffs. This assumes that the employer knows the exact number of the layoffs to be

conducted and each individual employee's contribution to the profitability of the firm. There is no mention of voluntary layoffs. The only selection factors for involuntary layoffs are economic factors. Thus, the applicability of Baily's (1977) model in the thesis is limited.

Price's "Model of Turnover Determinants and Intervening Variables" (1977) defines primary turnover determinants as pay level, integration, instrumental communication, formal communication and centralization. Both satisfaction and instrumentation are considered intervening variables. The fundamental hypothesis is that dissatisfaction results in turnover only when the opportunity is relatively high. Thus, there is an interaction between satisfaction and opportunity. Although the model is grounded in individual differences, which is applicable to this thesis, the model assumes that determinants are equivalently valued. It also assumes that individuals have knowledge about their alternatives. In turn, these assumptions minimize individual differences in values and perceptions. Therefore, the Price model (1977) is not highly applicable to this thesis.

Lee and Mitchell's "Unfolding Model of Voluntary Turnover" (1991) consists of several key constructs including; shock to the system, scripts or schema, image violation, dissatisfaction and job search, and actual quitting. There are four paths that lead to turnover, of which three start with a shock or a life event as the trigger[6]. In the first path, the shock forces the focal person to review their past experiences. If past experiences are the same and lead to turnover behaviour in the past, the person will quit. In the second decision path, if past experiences are not the same but if the shock violates the person's current or future image (e.g., value, trajectory and strategic), the person will quit. In the third path, experiences do

[6] Shock in Lee and Mitchell's model is not necessarily limited to only negative shock. Positive shock, such as winning a lottery might also occur.

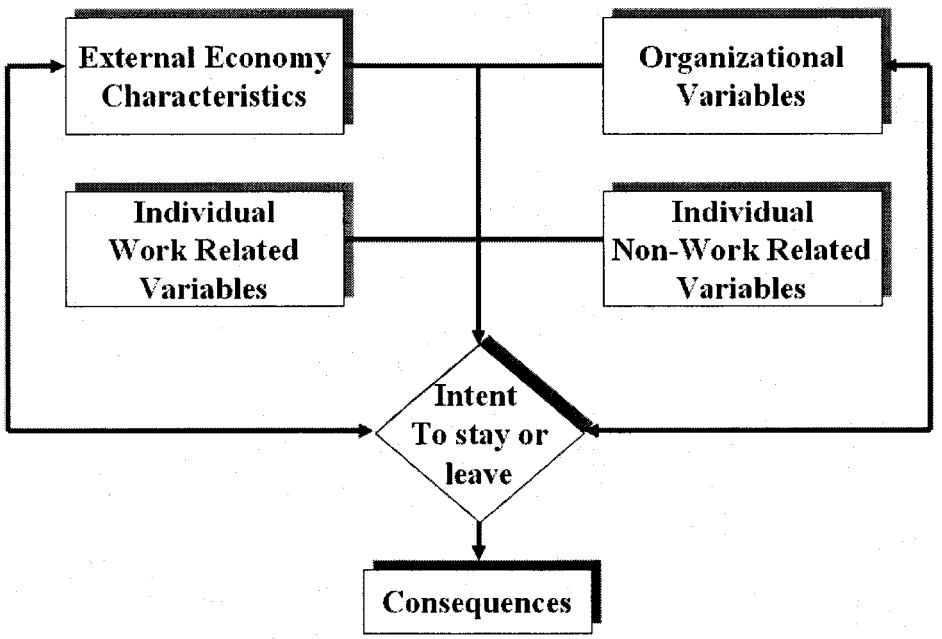
not directly result in a quit. Instead, the person experiences dissatisfaction, which leads to a job search and comparison of alternatives before actual turnover. In the fourth and final path, shock does not occur. People access past experiences and/or their current or future image is violated. In this case, similar processes such as the second or third path occur. Although thorough in analysis, and empirically supported in the turnover realm (e.g.: Lee, Mitchell, Wise, & Fireman, 1996; Lee, Mitchell, Holtom, McDaniel, & Hill, 1999) the model limits decisions about leaving an organization to only work related variables. In reality, some of the reasons why people leave organizations are not work related (Lee et al., 1996). Work and non-work variables must be included when assessing turnover decisions. Therefore, the Lee and Mitchell model (1991) is not adopted for this research.

Selection of Mobley's Simplified Model of the Causes and Correlates of Turnover

As reviewed above, a number of conceptual models available in the turnover realm can possibly be transferred into the downsizing realm including the ones developed by: March and Simon (1958), Baily (1977), Price (1977), Porter and Steers (1973), and Lee and Mitchell (1991). These models provide blueprints for developing theory on individual or organizational level antecedents of downsizing. However, Mobley's "Simplified Model of the Causes and Correlates of Turnover" is the most suitable for this study. Mobley introduces the notion of turnover as a process, including multiple factors that influence turnover intentions. The model emphasizes that employees evaluate their perceptions and behaviours about the current job and alternatives available, to determine turnover intentions.

More specifically, Mobley's model posits that an employee considers quitting if he/she feels dissatisfied with the organization. Next, the employee considers alternatives and calculates expected utility of each alternative available. If an alternative is superior to remaining employed by the current organization, the result is the intention to quit and actual turnover. As outlined in Figure 3, Mobley's model includes four main clusters of factors that influence intentions to remain with or leave an organization. These are organizational characteristics, economic characteristics, work related variables and non-work related variables.

Figure 3. Mobley's Simplified Model of the Causes and Correlates of Turnover



Mobley's model is the best suited for adoption into the layoff realm, specifically to assess the V-RIF versus IV-RIF decision for a number of reasons. First, Mobley's model views an employee's stay or leave intentions as a series of evaluations, rather than as a single decision. Second, Mobley's model includes both work related and non work related

variables as factors that influence stay or leave intentions of the employee. Thirdly, Mobley included perceptions and evaluations of alternative employment opportunities in the turnover decision. Additionally, the model has been consistently validated in empirical research (Griffeth & Hom, 1988; Hom, Griffeth, & Sellaro, 1984; Mowday, Koberg, & McArthur, 1984; Spector, 1991). Lastly, Mobley's model was one of the first comprehensive turnover models that identified a broad range of factors that are influential in the turnover decision. Similarly, this thesis addresses a new area of research in the layoff realm, and a comprehensive model must be adopted to understand the V-RIF and IV-RIF decisions. Combined, the strengths of Mobley's model make it ideal for adoption and modification into the layoff realm. Since the introduction of Mobley's model, some of the variables have been studied in the context of voluntary turnover (specifically the quit-stay decision), but not in the context of layoffs, as per this thesis.

The following discussion outlines Mobley's model and identifies areas adaptable to the layoff realm. In Mobley's model, external economy and organizational variables are macro level and require analysis at a general level. Individual work and non-work related variables are more micro focused and require analysis at an individual level.

External Economy

The external economy variables are of interest to the study of turnover, because these economic indices are related to labour market supply and demand. These indices examine unemployment and turnover rates such as unemployment levels, inflation, and labour force composition.

Organizational Variables

The organizational variables focus on categorical, structural and descriptive organizational characteristics. These include firm level characteristics such as type of industry, occupational categories, organization or work unit size, and supervision style. This category of variables examines relationships at an aggregate level, whereas nonaggregate level variables such as satisfaction with organization variables or other attitudinal constructs fall into the individual categories of Mobley's model.

For the purpose of this thesis, decisions about individual level selection during layoffs require identification of differences applied to each individual. Organizational characteristics and external economy variables provide a macro level understanding of turnover, but apply in a uniform way to the individual employees within an organization, therefore are not applicable to this thesis. Exploration of individual employee determinants of volunteering for a layoff and contrasting that with the selection management requires a focus on micro level factors, such as individual work related and non-work related variables.

Individual Work Related Variables

Individual work related variables include an individual's job related values, expectations and abilities, as well as perceptions and evaluations of the external environment, job factors or organization that might be directly related to turnover behaviour. These include job satisfaction, satisfaction with pay, satisfaction with promotion, satisfaction with supervision, and satisfaction with working conditions as well as organizational commitment and stress. These are termed "integrative variables", given that they integrate individual differences with perceptions of the external environment or organization.

In the context of layoffs from the individual employee perspective, these work related variables could influence the voluntary layoff decision. These variables could provide evaluative factors that influence an employee's decision making process at the time of downsizing.

From the organization's perspective, an employee's values and expectations towards the organization provide an understanding of affective and direct factors. These variables can have a direct effect on turnover, organizational success, profitability, and fit between the organization and the individual. The organization might interpret one or more of these variables to be factors in the decision to layoff an employee when executing IV-RIF.

Individual Non-Work Related Variables

In Mobley's turnover model, the individual non-work related variables category is composed of demographic and personal factors. These include age, gender, biographical data, personality, aptitude and ability. This group of variables refers to individual attributes that an employee brings to work. These generally remain stable across jobs, employers and contexts and are associated with the individual employee in all settings.

In the context of layoffs from an individual employee perspective, individual non-work related characteristics might influence the decision to volunteer for a layoff because these factors help the employee predict advantages and disadvantages of internal versus external employment. Given that these attributes are nonchangeable by the employee, demographic conditions dictate the employee's perception of opportunities outside of the company and likelihood to voluntarily leave.

Likewise, from an organizational perspective, managing the labour force mix that

remains after the layoff is crucial to an organization's ability to recover and progress. Diversity management is known to have both direct and indirect effects on an organization's success and growth (Krishnan, Miller, & Judge, 1997). Additionally, a combination of federal and provincial laws limit management's ability layoff an employee based on non-work related factors such as age, gender, and marital status. Only under exceptional circumstances (e.g. Bona Fida Occupational Requirement) can demographics be used in decisions (be it recruitment, selection, or exits). Managers have become more subtle in their use of discriminatory factors and typically do not leave obvious evidence of their demographic biases (Williams, Slonaker, & Wendt, 2003). If asked directly, management might not admit if age, gender or family status affects their layoff decisions (social desirability bias). However, cases of retirements, layoffs and dismissals specifically are met with increased legal resistance (Balkin, 1992). If asked indirectly, as per the methodology proposed in this study, these variables are expected to impact the decision function during involuntary layoffs.

Intention to Stay or Leave

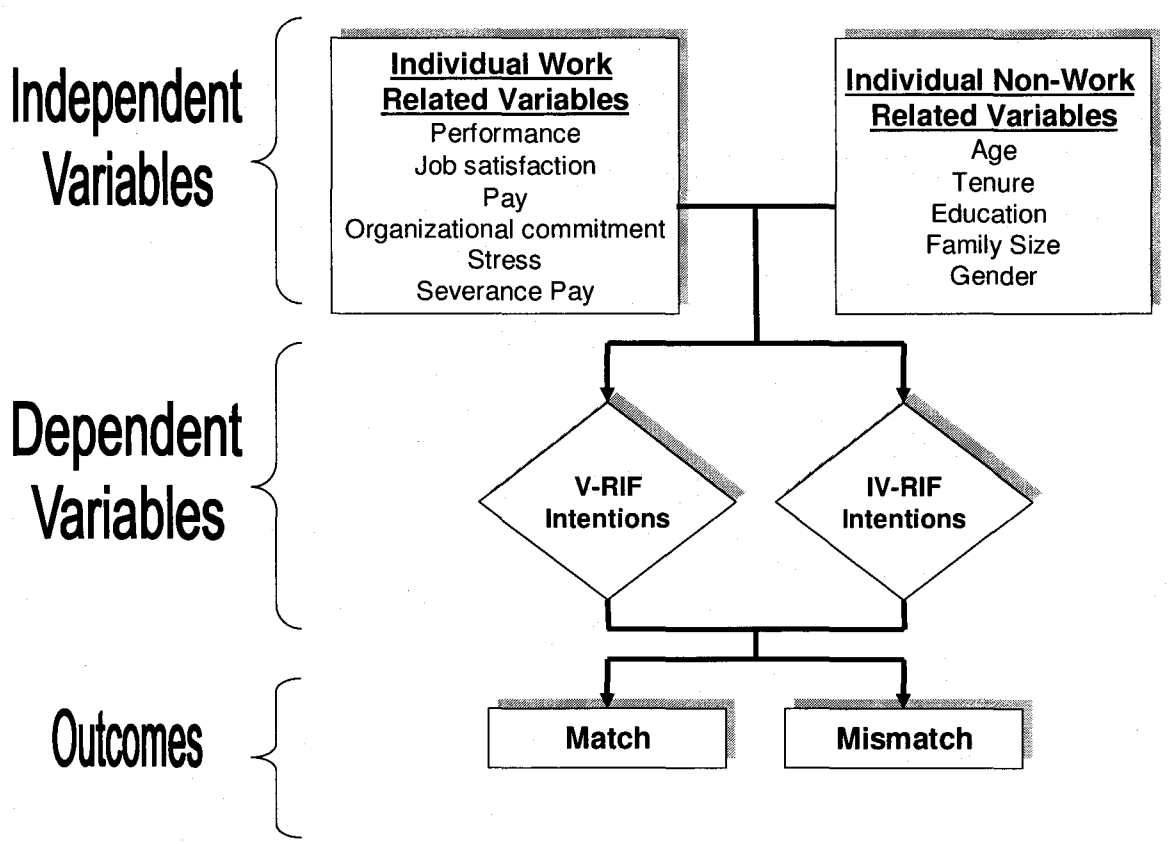
Conceptually, behavioural intentions are good predictors of actual behaviour. Mobley (1982) defines turnover intention as a conscious and deliberate wilfulness to leave an organization. In assessment of turnover, actual voluntary turnover measures are exceptionally difficult to obtain. As a result, the majority of turnover studies measure turnover intention as a proxy for actual turnover, as these intentions are the only variable that have been consistently found to directly predict actual turnover (e.g. Griffeth et al., 2000; Hom et al., 1995; Michaels & Spector, 1982).

As intention to quit or stay is the best predictor of actual turnover, intention to volunteer or not for a layoff might also be the best predictor of actually volunteering for a layoff. Turnover intention is the best predictor of actual turnover and mediates almost all of the attitudinal correlations with actual turnover (Tett & Meyer, 1993). Therefore, this predictor is transferable and valuable in the development of a multivariable model of layoff antecedents.

Chapter 4: Model Development and Hypothesis Generation

The layoff realm is void of theoretical models regarding who stays and who leaves an organization at the time of layoffs (Barrick et al., 1994; Cameron, 1994; Kozlowski et al., 1990). Given that layoffs are a form of turnover, Mobley's Simplified Model of the Causes and Correlates of Turnover is adopted and modified to evaluate competing layoff implementation techniques. This chapter develops the framework of the layoff process and introduces 24 hypotheses regarding antecedents to the voluntary and involuntary layoff decision.

Figure 4. Proposed Conceptual Framework



Individual Work Related Variables

Job Performance

The relationship between job performance and turnover is a growing area of concern. From an organization's perspective, success is pinned to the potential job performance of the employees who remain employed following a layoff. From an employee's perspective, employees surviving layoffs face an expectation of higher performance, given that there are now less employees to complete the same amount of work as prior to the layoff (London, 1996). Thus, performance can be a determinant in both voluntary and involuntary layoffs.

A meta-analysis examined the nature of the performance and turnover relationship, controlling for whether the turnover was voluntary (quit) or involuntary (layoff or dismissal) (McEvoy & Cascio, 1987). The relationship between involuntary turnover and performance was consistently negative. High performers were least likely to leave an organization and low performers were most likely to leave an organization. However, a significant portion of the variance explained can be attributed to sampling error as a result of the limited number of studies in the meta-analysis (McEvoy and Cascio's 1987 study included only three studies on involuntary turnover).

Jackofsky (1984) suggests a curvilinear relationship between turnover and performance, such that turnover is most probable among both low performers and high performers (Jackofsky, Ferris, & Breckenridge, 1986; Mossholder, Bedeian, Norris, Giles, & Field, 1988; Trevor, Gerhart, & Boudreau, 1997). However, most research studies support a negative relationship between performance and turnover (Bycio, Hackett, & Alvares, 1990; Cotton et al., 1986; McElroy, Morrow, & Rude, 2001; Morrow, McElroy, Laczniak, & Fenton, 1999; Vecchio & Norris, 1996). These research findings cannot be directly

transferred to the voluntary versus involuntary layoff model because the studies did not segment turnover in terms of the voluntary versus involuntary turnover. Additionally the studies addressed turnover, not layoffs specifically.

In the layoff context, from the individual employee's perspective, high performers might perceive their options in the labour market to be favourable, while low performers might view their potential for reemployment to be unfavourable. When management allows individual employees to volunteer for layoffs, low performers might not volunteer, because they won't be forced into unemployment if they do not volunteer for a layoff. Low performers might perceive both their labour market opportunities and risk of forced unemployment as minimal. In contrast, high performers might view the option of a layoff as an opportunity to change jobs, especially if they think that they have more opportunities in the labour market. This develops the premise for the first hypothesis.

Hypothesis 1a. Job performance is positively correlated with likelihood to volunteer for a layoff.

From an organization's perspective, turnover is viewed positively by the organization when poor performers leave, but negatively when strong performers leave (Boudreau & Berger, 1985; Hollenbeck & Williams, 1986). It is in the company's best interest to retain strong performers, to help the company recover and prevent losing all the strong performers to the competitors. Given this, a potential relationship between performance and involuntary layoffs is hypothesized.

Hypothesis 1b. Job performance is negatively correlated with likelihood to be selected for an involuntary layoff.

Job Satisfaction

Job satisfaction reflects how content an employee is with his or her current job (Spector, 1997). It is the affective attachment that an individual has to his or her job, either on an overall level, or in regard to a particular facet. High levels of job satisfaction can result in positive work behaviors and job dissatisfaction can generate negative work behaviors (Spector, 1997).

Tett and Meyer (1993) used meta-analytical procedures to examine the relationship between job satisfaction and withdrawal. Job satisfaction is the strongest predictor of an employee's intent to leave an organization (stronger than organizational commitment or job performance). Similarly, a meta-analysis of turnover predictors provided empirical evidence that overall job satisfaction is a statistically significant predictor of turnover intentions (Hom et al., 1995). Both studies support a negative relationship between overall job satisfaction and turnover intentions. Consequently, job satisfaction may be an antecedent in the layoff realm.

It is conceivable that the employees who initiate a job change via volunteering for a layoff and those who are selected by management for a layoff are in fact not satisfied with their existing jobs. Those who are not satisfied with their jobs might be more enticed to leave the organization when an opportunity arises. In this case, that window of opportunity might be the option of a voluntary layoff.

Hypothesis 2a. Job satisfaction is negatively correlated with likelihood to volunteer for a voluntary layoff.

Satisfied employees are easier to nurture for professional growth (Robbins, 1998)

Evidence suggests that employee satisfaction leads to higher productivity, willingness to assume additional job responsibilities, and a desire to take on new challenges (Robbins, 1998). Dissatisfied employees are more likely to exit the firm (Hom et al., 1995; Tett et al., 1993). If a dissatisfied employee survives a layoff, but still decides to leave the company after the layoffs have all occurred, then the organization would exceed projected headcount reductions. The additional turnover could result in increased costs associated with the recruitment and selection of replacement employees or increase productivity losses associated with higher than expected turnover. Management might view dissatisfied employees as difficult to motivate, therefore good candidates for layoffs. Consequently, job satisfaction can be an antecedent to involuntary layoffs.

Hypothesis 2b. Job satisfaction is negatively correlated with likelihood to be selected for an involuntary layoff.

Pay

Pay, in terms of salary level varies significantly across companies and jobs. A direct and objective measure of pay is used in this study (pay), rather than studying an affective measure of pay that is subjective (satisfaction with pay). By measuring pay in real dollar salary figures, the difference between pay levels results in a more direct and concrete interpretation of the effects of pay on the decisions made during voluntary versus involuntary layoffs.

Post-layoff salary can be compared to previous salary on a percentage level. After a layoff, an employee's salary drops on average 10-11%. (Podgursky & Swaim, 1987).

Employees with higher salaries are actually losing a larger absolute dollar amount when laid off than employees with lower salaries. Thus, employees with high salary levels might be less likely to volunteer for a layoff.

Hypothesis 3a. Salary is negatively correlated with likelihood to volunteer for a layoff.

From an organization's perspective, headcount reductions are usually announced as a concentrated effort by organization to reduce labour costs to the firm (Cameron, Freeman, & Mishra, 1991). The rationale provided for the majority of layoffs suggests that the layoffs are usually a cost cutting measure taken by an organization. Layoff announcements include the projected labour expense savings of the layoff. Therefore, management considers employees with high salaries better targets for involuntary layoffs, due to the cost saving nature of layoffs. In comparison, employees who are earning less would provide less of a cost saving to the organization if laid off. This leads to the hypothesis that employees with high salaries might be more likely targets of involuntary layoffs.

Hypothesis 3b. Salary is positively correlated with likelihood to be selected for an involuntary layoff.

Organizational Commitment

Organizational commitment is defined as employee attitudes or, more specifically, a set of behavioural intentions towards the organization they are employed by (such as desire to remain with the organization, intention to exercise high levels of effort on behalf of the organization, and identification with the organization's objectives) (Porter, Steers, & et al.,

1974; Steers, 1977). An individual's commitment to an organization, can be conceptualized in three main ways: affective, continuance and normative (Cohen, 2003; Meyer & Allen, 1997). Affective commitment centers on an emotional attachment to an organization. Continuance commitment is when an individual stays with an organization due to his or her analysis of opportunities outside of the organization. Normative commitment occurs when an employee stays with an organization based on his or her perceived moral obligations to the firm (Herscovitch & Meyer, 2002; Meyer, Stanley, Herscovich, & Topolnytsky, 2002). All three can be influential in the decisions made during layoffs. Employees might choose to leave or stay with an organization during a time of layoffs based on their emotional attachment to the firm, comparisons with opportunities outside of the firm or perceived moral obligations to the firm.

A much more complex study would be required to examine the effects of each facet of organizational commitment on the voluntary versus involuntary layoff decision. For the sake of simplicity and due to the fact that all three are perceivable forms of organizational commitment during a time of layoffs, only the global concept of organizational commitment is tested in this study.

Several models have posited organizational commitment as an antecedent of turnover (Farkas & Tetrick, 1989; Williams & Hazer, 1986; Williams et al., 2003). However, empirical studies of the relationship between organizational commitment and turnover have produced a weak relationship between the two. To strengthen the relationship, some authors have suggested testing moderators between organizational commitment and turnover. However, because the nature of turnover can vary (employee initiated versus employer initiated), the relationship between organizational commitment and layoffs is unknown.

From an individual employee's perspective, employees with high levels of organizational commitment feel more loyalty to their organization. Employees with high organizational commitment are more likely to be concerned about the organizations ability to recover from the downsizing, and want to contribute their share to accomplish the organization's goals. This commitment can result in a lower likelihood to volunteer for layoff.

Hypothesis 4a. Organizational commitment is negatively correlated with likelihood to volunteer for a layoff.

From an organization's perspective, employees with high organizational commitment might be willing to go above and beyond their job requirements to ensure that the organization is able to overcome adverse situations. Likewise, employees with low job commitment might be perceived as employees who are less likely to extend their efforts for the organization. Therefore, it might not be as beneficial to keep them employed with the organization. As a result, the following hypothesis is posed.

Hypothesis 4b. Perceived organizational commitment is negatively correlated with likelihood to be selected for an involuntary layoff.

Stress

Shaw and Berrett-Power (1997) emphasize that downsizing is a "constellation of stressor events" for the employee (pg. 109). In layoff research, stress is assessed from the leaver's perspective (coping with job loss) or the survivor's perspective (stress appraisal) (Armstrong-Stassen, 1993; Brockner et al., 1993; Lazarus & Folkman, 1984; Shaw et al.,

1997; Wiesenfeld et al., 2000). Stress is yet to be linked with turnover decisions during a time of layoffs.

For purposes of this study, stress is defined as a psychological reaction from stressors that could include depression, anxiety, frustration, and other physical symptoms (Beehr, 1995). Numerous studies from turnover indicate that an individual's level of job stress is consistently and significantly related to turnover intentions. Job stressors and the resulting strains are major contributors to voluntary turnover (Beehr, 1995; Jex, 1998). Research demonstrated that these stressors have a negative impact on the individual, and a toxic effect on the organization (Cropanzano, Howes, Grandey, & Toth, 1997; DeFrank & Ivancevich, 1998). Feelings of stress are positively correlated with turnover intentions (Parasuraman, 1982).

From an individual employee's perspective, when an organization announces layoffs, the employee could perceive high levels of stress. The opportunity to escape from the job related stress associated with layoffs might be perceived as favourable by the employee (Sheridan & Abelson, 1983). This is aligned with prior research suggesting that increasing levels of tension in the current job might lead to a decision to quit, in order to avoid a stressful work environment (Lofquist & Davis, 1969). Similarly, higher levels of perceived stress at work might lead some employees who are unable to manage the stress to volunteer for a layoff.

Hypothesis 5a. Work related stress is positively correlated with likelihood to volunteer for a layoff.

From an organization's perspective, job stress reflects the pressure or tension an

individual feels concerning his or her job (Motowidlo, Packard, & Manning, 1986). During a time of layoffs, an individual's stress level might influence management's decisions on which employees to involuntarily layoff. Employees perceived to be highly stressed might be perceived to have lower productivity and higher likelihood for post-layoff turnover (Cordes & Dougherty, 1993; Huang, Chuang, & Lin, 2003). Additionally employees with high stress during a time of layoff may be viewed as employees who run a higher risk of burnout (Lingard, 2003). The absenteeism associated with burnout would put additional pressures on the organization post-layoffs (Sethi, King, & Quick, 2004; Stack, 2003). Combined, the theories above suggest that employees experiencing high levels of stress are more likely to be targets of an involuntary layoff.

Hypothesis 5b. Perceived work related stress levels are positively correlated with likelihood to be selected for an involuntary layoff.

Severance package

The area and influence of severance packages has yet to be explored in depth. Although legislation for severance packages varies by governing body[7], most layoff victims are offered some financial compensation. After a layoff, an employee generally does not secure a comparable job immediately. Therefore, the severance package is meant to be a financial offering to assist with periods of unemployment. The size of the severance package is usually associated with tenure in a company.

From an individual employee perspective, the value of the severance package can

[7] In Canada, labour legislation is determined at the provincial level. In the United States and United Kingdom, the federal government determines labour legislation

influence decisions during layoffs. Those who might have been inclined to leave the company to pursue other career options or employment offers now have a double benefit from getting laid off. One, they can exit the firm to pursue employment elsewhere. Two, employees already contemplating turnover can view the severance package as a bonus. If they simply quit, they would have received no financial compensation from the company. Therefore, the value of the severance package might act as an additional enticement in the decision to volunteer for a layoff.

Hypothesis 6a. Severance package size (as a percent of salary) is positively correlated with likelihood to volunteer for a layoff.

From an organizational perspective, severance packages act as a cost of turnover. Given that management might use a dollar-for-dollar utility analysis to rationalize their selection decision in times of layoffs, the higher the percentage used to calculate an employee's severance package, the higher the dollar value of the costs of turnover. Management might perceive laying off employees with lower severance packages as more economical than laying off employees with high severance packages. Therefore, severance packages might be an antecedent in involuntary turnover.

Hypothesis 6b. Severance package size (as a percent of salary) is negatively correlated with likelihood to be selected for an involuntary layoff.

Individual Non-Work Related Variables

Two of the non-work related variables are founded in Human Capital theory. Education and employment experience are the two main human capital theory measures

(Bontis, 2001; Hitt, Bierman, Shimizu, & Kochhar, 2001; Hudson, 1993; Pennings, Lee, & Witteloostuijn, 1998). Prior to discussing these in the context of this thesis, an understanding of Human Capital theory is necessary. An organization obtains human capital by finding qualified individuals in the workforce, and develops it by providing relevant employment experience and training. From an individual employee perspective, the portion of an employee's firm specific skill set that is not transferable to another organization represents lost value to the worker if he or she changes employment. From an organization's perspective, employees with a firm specific skill set represent a unique advantage to the organization. These employees possess tacit knowledge about the organization that cannot be acquired immediately by replacement employees. In this thesis, rather than measuring the construct of Human Capital, direct measures of education and tenure are used.

Legislation restricts management's ability to discriminate against employees based on the remaining three non-work related variables discussed (age, family size, gender). The legal implications of using demographics as a determinant in layoff selection are very clear. Decisions regarding employment and unemployment cannot be made on the basis of a protected trait, such as employee's gender, age, marital status etc (Grossman, 2002). If a discrimination charge occurs, then the onus is on management to prove that the requirement was mandatory for the job (Bona Fide Occupational Requirement), thereby creating a legal exception (Falkenberg, Stone, & Meltz, 1999).

While it might not be possible to predict a main effect for these variables for involuntary layoffs (the employer's use of these variables is legally constrained), it is predicted that these variables will still have an effect on decisions made by management. Organizations might not realize that certain factors influence the decision of who to

involuntarily layoff, but statistical analysis is expected to help highlight the main effect of these variables (age, family size and gender) as predicted below.

Tenure

Tenure (referred to by Mobley as employment experience), is defined as the total time an individual has been employed by the company. Generally, the higher an individual's tenure, the more firm specific and less transferable their skill set. People with the most transferable skills (hence low firm specific skill set) are highly marketable. According to Lau (2002), employees with highly transferable skills are probably the most likely to respond to a voluntary layoff option first, because they can "grab the money, go for a long holiday and get another job the next day"(pg. 60). Employees with low firm specific skills have a faster time to reemployment due to the increased marketability of their skills.

From an employee's perspective, employees with high tenure might hesitate to volunteer for a layoff if they realize that their skill set is not highly transferable. Employees with high tenure in the organization have higher firm specific skills and are less marketable in the labour market. High tenure with a company also suggests that the individual employee might have more invested with the company, such as, investing in a house near work, work friendships extending to personal life, an attachment to the job or vested pensions. These investments are also jeopardized when an employee with high tenure decides to volunteer for a layoff. Due to the potential losses to an employee with high tenure, it is hypothesized that tenure and likelihood to volunteer for a layoff have a negative relationship.

Hypothesis 7a. Tenure is negatively correlated with likelihood to volunteer for a layoff.

From an organization's perspective, tenure with the firm develops tacit knowledge

about an organization's culture, procedures, product and customers. This knowledge cannot be replaced immediately once it is lost. Instead, it requires an investment in training an employee and providing him or her with time to get acquainted with the organization and its stakeholders. As a result, organizations might be less likely to layoff an employee who has high tenure in the organization.

Hypothesis 7b. Tenure is negatively correlated with likelihood to be selected for an involuntary layoff.

Education

Education provides general training to introduce individuals to broad concepts, industries and ideologies. Generally, the higher an individual's education, the less firm specific and more transferable his or her skill set. This translates into a lower level of firm specific human capital.

Empirically, there is some debate on the effects of education on job mobility. Hersch (1991) and Royalty (1998) reported a positive correlation between education and tendency to change jobs. On the other hand, McLaughlin (1990) reported insignificant effects of education on job mobility.

Other research demonstrates that displaced workers were concentrated in occupations with below average levels of education (Seitchik, 1991). During a time of involuntary separation, workers with higher educational credentials suffer smaller economic losses than employees with lower educational credentials (Swaim & Podgursky, 1989). Combined, the research suggests that employees with lower levels of education are at a competitive disadvantage when attempting to secure reemployment. This suggests that employees with

lower education levels might be less likely to volunteer for a layoff.

Hypothesis 8a. Education is positively correlated with likelihood to volunteer for a layoff.

Human capital theorists suggest that organizations view education as a proxy for ability and competence, because people with high initial ability have access to higher education (Pennings et al., 1998). Therefore, when management evaluates employees for involuntary layoffs, it might be interested in maintaining the most competent employees. Management might view an individual's ability higher if the individual has a higher level of education. Given this position, education might be an antecedent for involuntary layoffs.

Hypothesis 8b. Education is negatively correlated with likelihood to be selected for an involuntary layoff.

Age

There are a series of studies investigating the relationship between an employee's age and turnover. However, age as an antecedent of layoffs has yet to be explored. Older employees have lower career and job expectancy than younger employees, and as a result also suffer from more anxiety and depression post-layoff (Wooten, 1994). Older individuals have been found to be unemployed for a longer time than younger individuals, regardless of the means of unemployment (fired, laid off, plant closing etc) (Rife & Belcher, 1994). High job seeking support and low age positively affected reemployment post-layoff (Wanberg, Watt, & Rumsey, 1996).

From an individual employee perspective, there are two factors affecting likelihood to volunteer for V-RIF; the employment contract and perceptions of reemployment. In an economy of hyper-competition and globalization, organizations are increasingly relying on contingent or part-time workers to adapt to market changes (Hendry & Jenkins, 1997; Sparrow, 1998). The notion of 'cradle to grave' jobs that permeated the employment relationship prior to the 1980's, no longer exists. This is best captured by Cappelli (1999) when he states:

> "If the traditional, lifetime employment relationship was like a marriage, then the new employment relationship is like a lifetime of divorces and remarriages..." (pg. 2)

Older employees might be less likely to volunteer for a layoff due to their impression that opportunities for reemployment are low in the open market. Older employees might also be influenced by "cradle to grave" notions of the employment contract when they entered the workforce. Combined, these would reduce the likelihood of older employee's volunteering for a layoff. In contrast, younger employees might be more likely to volunteer, given that they might believe they have more external labour market jobs available. In addition, younger employees are willing to change jobs more frequently due to the employment relationship expectations of these employees. Younger employees began their careers at a time where the employment relationship survived as long as it was mutually beneficial. Cradle to grave jobs are not a reality for younger employees, therefore younger employees may be more willing to volunteer for a layoff.

Hypothesis 9a. Age is negatively correlated with likelihood to volunteer for a layoff.

From an organization's perspective, the wage profile might be steeper than the

productivity profile of older employees (Lazear, 1979). Thus, older employees might be perceived to reap the benefits of employment, because their wage increases might be higher than their productivity increases. The organization may be paying a wage higher than the wage that the employee would get in an open market. In contrast, the wage profile of a younger employee may be flatter. Additionally, older employees may be perceived to have a shorter remaining career span than younger employees, given future retirement, health trends and life expectancy. These perceptions do not have to be founded on fact, but a bias from management towards older employees that might exist at a time of layoffs. As a result, older employees might be more likely targets for an involuntary layoff.

Hypothesis 9b. Age is positively correlated with likelihood to be selected for an involuntary layoff.

Family Size

In order to help individuals cope with the consequences of layoffs, researchers need an awareness of family pressures associated with unemployment (Dunlop, 1997) Both Grant and Barling (1994) and Vinokur et al. (1996) studied the effects of financial strain on family relationships. Financial strain increased depression symptoms of the job seeker, the spouse and other family members. A parent's career unemployment had an adverse effect on the living standard and health of his or her children (Lobo & Watkins, 1995). Individuals living alone and those without children had a greater chance of finding a new job by 30% and 24% respectively (Galarneau & Stratychuk, 2001)[8]. A recent study using the Panel Survey of

[8] This difference is partially due to an increased mobility of single or nonparent individuals when trying to secure a job.

Income Dynamics found that layoffs and dismissals increased the risk of divorce (Charles & Melvin, 2004).

From an employee's perspective, the presence of dependents (spouse, children, parents, etc.) might reduce the likelihood to volunteer for a layoff. An individual action to volunteer for unemployment would affect multiple persons. There might be economic, social or psychological dependencies for people who are married or have children, that single or otherwise unattached individuals would not be affected by. Therefore, the following hypothesis is presented.

Hypothesis 10a. Employee family size is negatively correlated with likelihood to volunteer for a layoff.

From an organization's perspective, work family conflict leads to an inter-role conflict when "the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985: pg. 77). The employee's obligations to the family and his or her obligations to the employer are in conflict during a time of layoffs. The family requires job stability of its members, whereas the organization is a source of job insecurity. When work and family requirements are in conflict, turnover intentions increase (Burke, 1988). In addition, work and family conflict results in psychological withdrawal from work (Barling, MacEwen, Kelloway, & Higginbottom, 1994). Management might be more likely to retain employees with less family and work conflict. Employees with less work and family conflict are better aligned to help the organization achieve post-layoff goals. In contrast, employees with a spouse or children might be less

aligned with organizational goals given the job insecurity presented by an organization during a time of layoffs.

Hypothesis 10b. Employee family size is positively correlated with likelihood to be selected for an involuntary layoff.

Gender

Research on gender as a dichotomous variable (either male or female) and its effect on the probability of layoffs demonstrate that gender might be an antecedent to layoffs. During events of single layoffs, females are more likely to be laid off than males (Picot, Lemaitre, & Kuhn, 1994). In contrast, Seitchik (1991) found that men were more likely to be laid off than women. A study of local and national plant closings conducted by Perrucci, Perrucci and Targ (1997) reported no significant difference between length of unemployment and time to reemployment between male and female workers. Thus, no consistent relationship emerges when the literature of gender and turnover via layoffs is examined.

However, unemployment has been empirically shown to cause more distress for women, who reported more negative experiences such as depression and family stress than men (Perrucci et al., 1997). Women are less confident in institutions (including employer organizations) than men (Perrucci et al., 1997). This suggests that gender might be an influential factor in the decision to volunteer for a layoff. The psychological and economical differences between the genders might decrease the likelihood of women volunteering for layoffs.

Hypothesis 11a. Women are less likely than men to volunteer for a layoff.

From an organizational perspective, women have higher rates of job change, due to family pressures (e.g. child rearing) (Felmlee, 1995). Some managers believe that women are less devoted to their careers or organizations than men, and that family roles (wife or mother) increase turnover intentions among women (Lewis & Park, 1989). Many of these attitudes have been shown to prevent some male managers from hiring and promoting women (Stuart, 1992). As a result, these management attitudes and the perception that women would be more likely to leave the organization to fulfill non-work roles could increase the likelihood of women being selected for an involuntary layoff.

Hypothesis 11b. Women are more likely than men to be selected for an involuntary layoff.

Table 1. Summary of hypotheses

Variable	Proposed relationship with likelihood to volunteer for a layoff (V-RIF)	Proposed relationship with likelihood to be selected for an involuntary layoff (IV-RIF)	Proposed outcome of V-RIF versus IV-RIF implementation technique?
	Work Related Variables		
1. Performance	*Positive*	*Negative*	Mismatch
2.Job Satisfaction	*Negative*	*Negative*	Match
3. Salary	*Negative*	*Positive*	Mismatch
4.Organizational Commitment	*Negative*	*Negative*	Match
5. Stress	*Positive*	*Positive*	Match
6.Severance Package	*Positive*	*Negative*	Mismatch
	Non-Work Related Variables		
7. Tenure	*Negative*	*Negative*	Match
8. Education	*Positive*	*Negative*	Mismatch
9. Age	*Negative*	*Positive*	Mismatch
10.Family Size	*Negative*	*Positive*	Mismatch
11.Gender	*Women*	*Women*	Match
	12^{th} Hypothesis		
12. Overall influence	*More Non-Work Related*	*More Work Related*	Mismatch

Work related variables reflect an individual's job related values, expectations and abilities, integrating the individual's perceptions of the organization and external

environment. In contrast, individual non-work related variables represent demographic and personal factors that remain stable regardless of work, environment or organization differences. Non-work related factors could have a larger impact on the decisions made by employees during a time of organizational decline, given that they are unchangeable by the individual. Employees can change their work related variables in order to align them with the fixed non-work related variables. Therefore, non-work related variables might be more influential than work related variables in an employee's decision to volunteer for a layoff.

Hypothesis 12a. Individual non-work related variables are more influential than work related variables in an employees decision to volunteer for a layoff.

In contrast, the work related variables are the ones that drive the employee-employer relationship. An individual is selected for employment based on his or her work related attributes as judged by the organization. In addition, management might not have an equivalent awareness of their employees' non-work related factors. Therefore, work related variables might be more influential in the decisions made to involuntarily layoff an employee than non-work related variables.

Hypothesis 12b. Individual work related variables are more influential than non-work related variables in management's involuntarily layoff decisions.

Chapter 5: Methods

The goal of this thesis is to establish which antecedents are most influential in voluntary versus involuntary layoff decisions. A policy-capturing (PC) approach was the methodology used in this thesis, due to the antecedent focus presented in this thesis, the concentrated time between announcement and execution of layoffs, and the sensitive nature of involuntary unemployment. To evaluate competing layoff implementation techniques (V-RIF vs. IV-RIF), a two phased approach was taken for data collection.

Phase one was the pilot study, using Subject Matter Experts (SMEs) and decision makers from field settings (see Table 2 for SME stratas). In practice, it is challenging to establish *a priori* the variables influential in the decision function. The use of a pilot study assisted with identification of variables (Graves & Karren, 1992a; Viswesvaran & Barrick, 1992b). Given that the pilot study was exploratory in nature, the process involved a mixed methods approach, where quantitative and qualitative information was gathered simultaneously. The purpose of Phase 1 was to validate the framework, ensure no significant variables were missing and assess the reliability of the PC approach. Details regarding the research procedures specific to the pilot study are provided at the start of Chapter 6.

Table 2. Pilot Study Participant Targets – Phase 1

	Employee Sample (V-RIF Perspective)	Management Sample (IV-RIF Perspective)
Field Subject Matter Experts	2-3 People who are working right now, with no one reporting into them	2-3 People who are working right now, with some employees reporting into them
Theory Subject Matter Experts	2-3 HR Specialists from academe (SME)	2-3 HR specialists from the field/industry (SME)

Phase two was a field study using participants employed full time from three different companies. The field study component was important, because it involved employees and managers assessing profiles analogous to the profiles of actual employees in their organization. Thus, the level of realism in the study was significantly improved. Inferences about antecedents to voluntary and involuntary layoffs were examined and competing layoff implementation techniques were evaluated. Methodological considerations specific to the field setting are discussed in Chapter 7.

Policy-Capturing (PC) approach

PC methods are employed when researchers assess how decision makers use available information when making evaluative judgements (Zedeck, 1977). PC captures individual decision making policies including how multiple variables rank in importance, how information presented is combined and how results are selected. For the purpose of this thesis, logistic regression analysis was conducted on the PC results to evaluate the most influential decision in voluntary versus involuntary layoff decisions (Aiman-Smith, Scullen, & Barr, 2002; Cooksey, 1996a; Cox, 1996; Crooker, 1995).

Regression based methods for analyzing determinants of decision-making are termed differently across disciplines. In marketing, this is referred to as conjoint analysis, stated preference models or trade off analysis. In environmental or social policy research, terms such as contingent preference, contingent choice and analytical hierarchical processing are used. Strategy and HR/OB (Human Resources and Organizational Behaviour) generally use the term Policy-Capturing[9].

[9] For details on the similar functions, uses and methods of each term to represent the same concept, see Aiman-Smith, L., Scullen, S. E., & Barr, S. H. 2002. Conducting studies of decision making in organizational contexts:

The PC approach involves providing participants (referred to as judges) with a specific scenario, usually in a one page written format. Within that simulated scenario, multiple profiles are given to each judge. Profiles are designed to include all independent variables (a.k.a. cues). Usually cues provided are randomized and have two or three values per cue (one standard deviation below average, one standard deviation above average and, when required, the average) (Aiman-Smith et al., 2002). Participants are provided a specific scenario and assume a simulated role based on each profile they assess. Assuming this role, participants make a decision regarding the dependent variable (in this case, the decision to volunteer for a layoff in the V-RIF case *or* the decision to select an employee for an involuntary layoff in the IV-RIF case). The decision results are then regressed onto the cues provided. This creates an awareness of which cues are statistically significant in the decision function, the degree of influence (beta weight) and the nature of the relationship (positive or negative) of each independent variable in the decision process. The result is a linear equation estimating decision policies used in the decision making model.

PC is designed to address two types of questions, specifically idiographic and nomothetic. Idiographic questions focus on how different individuals evaluate cues in their decision making process. For example: how does an individual use information to make a choice about volunteering for a layoff? In contrast, nomothetical questions use similar contextual constraints, but concentrate on aggregate level decision making at the group level. For example: What influences management decisions regarding selecting employees for an involuntary layoff? Although this research is nomothetic focused (management decision during IV-RIFs vs. employee decisions during V-RIFs), idiographic information provides an

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A tutorial for policy-capturing and other regression-based techniques. Organizational Research Methods, 5(4): 388.

insight into decision factors used at the individual level. Therefore, idiographic information is also explored to identify policies of individual decision makers.

Strengths and Weaknesses of the PC approach

PC does have a number of strengths over traditional experimental manipulations. First, a fundamental strength of the PC approach stems from the researcher's ability to experimentally manipulate cues during profile development. Second, problems of multicollinearity are overcome, by minimizing intercorrelations among variables (Karren & Barringer, 2002; Pedhazur, 1982). Third, orthogonal designs are most frequently used in PC research, because they yield the most stable and unambiguous estimates of regression coefficients (Karren et al., 2002; Neter, Kutner, Nachtsheim, & Wasserman, 1996). Fourth, the high degree of control over which cues to use and the structure of the scenario allows the researcher to minimize competing explanations. Last, the overall reliability and accuracy are increased by repeating the stimuli combination (Caroll & Johnson, 1990; McGrath, 1981). Thus, the PC approach allows researchers to assess multiple decision influences independently.

PC techniques have been criticized in the past for their lack of realism and contextual differences among respondents. Specifically addressing, correcting *or* controlling these issues can help overcome these weaknesses.

The lack of realism is considered a weakness because participants are asked to situate themselves into a hypothetical scenario and make decisions based on that scenario. Also, participants do not have free access to a wide variety of social and environmental factors that might be influential in their decision (Gorman, Clover, & Doherty, 1978). Problems associated with lack of realism can be overcome through purposeful sample selection, careful

choice of decision cues and utilization of a focus group (Hoffman, 1960). A well-designed PC study aligns the respondents experience level and familiarity with the subject to the group in which the researcher would like to generalize the results (Aiman-Smith et al., 2002). For the purpose of this study, the group to which I wish to generalize results would be employees (on the analysis of who volunteers for a layoff – V-RIF) and management or human resource departments (on the analysis of who is selected for an involuntary layoff – IV-RIF).

In this research, participants from field settings were used. These participants were asked to assume the role of either a manager (evaluate involuntary layoff scenarios) or an employee (evaluate voluntary layoff scenarios) aligned with their real role in the field setting. The scenarios were modified to reflect the industry and size of the judge's working environment (in total 3 field settings were used). The use of randomization in the development of profiles aligned with the population or company in question as detailed in Appendix A. Through careful development of profiles, the realism in the study is maximized.

A second disadvantage commonly cited is that not all contextual elements might be included in the study (Olson, Dell'Omo, & Jarley, 1992). Typically, PC studies include 10 or fewer variables (the maximum published to date is 25 variables). In reality, an individual has access to a larger amount of information when making decisions. This argument of contextual exclusivity does not take into account cognitive limitations. An individual will selectively store a limited amount of information and reorganize that information to develop a view of their environment (Brehmer & Brehmer, 1988). Individuals make judgements on a relatively small number of cues (Cooksey, 1996b; Sanchez & Levine, 1989). If the researcher is thorough and methodical in selection of the cues (the decision criteria that are

salient to the judgements of the decision maker), then realism can be increased, contextual problems overcome, and validity increased (Karren et al., 2002).

Considerations of Policy-Capturing Methods

A number of respondent considerations were made when designing profiles. Potential for respondent boredom, demand effects, stress, and fatigue were accommodated. Boredom results when there are too few variations between profiles. A solution is to provide a range of values rather than the same number representing high pay (Karren et al., 2002). For example, use $82,600, $85,000, and. $78,900, to represent high pay instead of $80,000, $80,000, $80,000. The use of ranges minimized threats associated with boredom (drop out and lack of consistency in the results).

Demand effects occur when the participants can easily determine the nature of the research and possible hypotheses. Although demand effects are largely overemphasized in research, the use of a small number of cue variables can result in demand effect in policy-capturing (Karren et al., 2002). Using a minimum of 4 cues per study helps overcome demand effects (Karren et al., 2002). This thesis included 11 cues.

Stress and fatigue were considered in this study. Ideally, an individual should be able to complete the required number of profiles in one sitting. The total number of possible profiles for this study is 3072 (2^{10} x 3^{1}). It is unrealistic to suggest a participant analyse all profiles. In this situation, a common solution is to have respondents review and evaluate a **subset** of the profiles. This is accomplished by adopted a confounded factorial approach, whereby respondents receive randomly selected profiles from the entire set of profiles (Allen & Muchinsky, 1984; Crooker, 1995; Klaas & Dell'omo, 1991; Pablo, 1994; York, 1989). Provided that intercorrelations between independent variables are near zero, a confounded

factorial approach allows researchers to assess the significance of each cue, while avoiding respondent overload (Graham & Cable, 2001)[10].

Sample Size

Unlike direct questionnaires, the number of participants in PC research is a secondary concern. The primary concern in determining sample size is the number of profiles provided to each participant (Aiman-Smith et al., 2002). Cooksey (1996a) suggested a cue to scenario ratio of 1:5 when determining the minimum number of profiles. Thus, 11 cues would suggest that 55 profiles be assessed per judge. However, to manage respondent overload, only 35 profiles were reviewed per participant. Graham and Cable (2001) proved that when a subset of profiles is used the estimates of effects of the explanatory variables were similar across groups, without causing stress and fatigue of the respondents. In addition, time considerations had to be accounted for when requesting participation in the study. Cooksey (1996a) suggested that 40 profiles can be completed in an hour. Since participants from work settings were used, a study that demanded a significant time commitment from participants may significantly reduce the response rate. The final consideration was the number of profiles determined to be ideal in the pilot study. Pilot study participants suggested that 33 profiles was the ideal number. Taking stress, fatigue, time commitments, response rates, statistical

[10] Graham and Cable (2001) examined a full factorial design (32 profiles) and a subset design (8 profiles). Estimates of effects of the explanatory variables were similar across groups, but respondents in the full factorial design reported more fatigue and stress than the subset group. Graham, M. E. & Cable, D. M. 2001. Consideration of the incomplete block design for policy-capturing research. Organizational Research Methods, 4(1): 26.
The confounded factorial design offers researchers a means to evaluate how people make decisions without stressing participants or limiting the scope of the study Aiman-Smith, L., Scullen, S. E., & Barr, S. H. 2002. Conducting studies of decision making in organizational contexts: A tutorial for policy-capturing and other regression-based techniques. Organizational Research Methods, 5(4): 388.

power and pilot study results into account, 35 profiles per participant in this study can be defended.

For the purpose of the pilot study, five dyads were secured (sample size = 10), resulting in the viewing of 169[11] profiles for each group (V-RIF or IV-RIF). Based on the results of the pilot study, all eleven variables were maintained in the field setting. Pilot study participants indicated that ideally, 35 profiles is a desirable number to review. The field study involved 28 participants (14 dyads). The range of participants in published PC studies is 3-197, therefore 28 participants is within the range of studies in policy-capturing to date.

Overcoming Issues with Fully Orthogonal Designs

A full factorial design involves creating profiles by crossing all of the variables (referred to as an orthogonal design). However, completely crossing all of the variables would have been a weakness in this study, given that correlations among age, gender, education and salary naturally exist. Also, a correlation between age and tenure must be accounted for. If I applied complete randomization (orthogonality) without considering population correlations among age, gender, education, salary and tenure, a profile of a 21 year old woman, who has not completed high school, with an annual salary of $90,000 and 17 years of experience in the company could be developed. This combination is not possible in reality.

When decision makers are presented with unrealistic profiles, realism and validity are threatened. Cooksey (1996a) recommended sampling characteristics of situations found in real decision situations to ensure that cue values are realistic. Thus, modifications were made

[11] One profile was missing evaluative data therefore eliminated from the analysis of pilot study results completely

to the profiles to align profiles with Canadian population statistics in the pilot study where applicable. In the field study, profiles aligned with naturally occurring correlations in the specific companies that participated in the study. I used a random number generator to develop the profile positions on each variable ($0 < n < 1$). Even with corrections for natural environmental trends in the variables, the intercorrelations were kept near zero (Appendix B). This maintained my ability to experimentally manipulate cues in profile development and assess decision influences independently.

The policy-capturing approach allows for evaluation of layoff decisions in an ethical, reliable, realistic and valid way. This approach allowed me to reduce multicollinearity issues, develop stable estimates of decision functions, experimentally manipulate cues, and rule out competing explanations. Threats associated with a lack of realism were overcome by aligning the scenario and profiles with the actual environment in each field setting.

Materials

In the pilot and field studies, participants received all research material in one package. The package included a cover sheet, providing details of consent, confidentiality, task requirements and contact information (Appendix C). Additionally, each package included three envelopes clearly marked "Step 1, 2 or 3". The consent form included a brief outline of the 3 steps.

Step 1 outlined the context of the headcount reductions, the position and the task the participant had to assume (manager versus employee). Inside this envelope, 6 trial profiles created an awareness of the study requirements and increase the reliability of the results (Aiman-Smith et al., 2002). In addition, a separate coloured sheet provided quick definitions

of the variables to ensure consistent interpretation of the cues by participants. These trial profiles were not included in the regression analysis.

In step 2, participants provided quantitative information regarding voluntary or involuntary layoff decision functions. Step 2 was described as an extension of Step 1, and the corresponding envelope included 35 profiles (plus one duplicate to test for reliability).

In Step 3, a simple questionnaire collected basic demographic information about the participant. In a study with a larger sample size, individual participant differences could be controlled for. Statistical power is reduced when participant differences are controlled for when a sample size is small (this study has fourteen participants per group: management or employees). Therefore, I used this information to calculate summary statistics only.

The consent form and verbal communication from the researcher assured confidentiality of individual responses. All participation was voluntary. I included a draw for a $20 gift certificate to a local restaurant as an additional participation incentive in the pilot study. Similarly, I stapled a $5 gift certificate from Tim Hortons® to each package in the field study. I included a hand written note thanking people for their participation.

Chapter 6: Results – Pilot Study (Phase 1)

Methodology Unique to Phase 1

The purpose of the pilot study was to evaluate the impact of the variables, the clarity of the tasks, the interpretation of the profiles and areas of improvement. Many PC researchers suggest using individual interviews to identify variables that are salient in the decision making process, assess the realism of the decision process, and enhance the external validity of the study (Graves & Karren, 1992b; Rynes et al., 1983; Viswesvaran & Barrick, 1992a). A number of modifications were made to the field study based on the results of the pilot study.

In the pilot study, qualitative research identified the subject's interpretation of the study, the variables, the tasks and the processes used to collect information. After completion of profile assessment, one on one interviews with the researcher were scheduled. Subjects were asked a series of open ended semi-structured questions to evaluate the task and identify potential missing factors, which might be determinants in their decision function (See Appendix D for a list of semi-structured questions). I audio dubbed, transcribed, and analysed the qualitative information to identify themes or variables that were influential that might have been missed.

It is important to note that statistical inferences made from the pilot study are limited in realism, because I did not control for contextual information and group determination. Therefore, I provide only a summary of the quantitative results for the pilot study results section, with more detailed quantitative analysis completed for the field setting.

Procedures: Pilot Study

Using a matched pairs (dyadic) approach, managers and their respective employees completed the same subset of profiles. The dyads allowed for comparative evaluation of likelihood for voluntary versus involuntary layoffs. I provided a simulated scenario to each judge, as per Figure 5. For the pilot study, the scenario suggested that the subject worked for a company with 1,000 employees that recently announced 210 layoffs[12]. To provide additional contextual information, judges were told that they have 8 weeks to complete the headcount reductions[13]. The selection of profile sets was random as per other published policy-capturing studies (Allen et al., 1984; Klaas et al., 1991; Pablo, 1994; Viswesvaran et al., 1992a), however, I gave each dyad the same set of 35 profiles. (A sample profile is provided in Appendix K).

[12] The selection of 210 announced layoffs is aligned with the 2001 BLS Mass Layoffs Statistics which recorded 8,349 extended layoff events, resulting in 1,751,368 employee separations (Labour December 15, 2003). This translates to an average headcount reduction of 209.77 persons per layoff.

[13] This was designed to parallel research suggesting 94% of Human Resources Managers have less than two months to plan and implement layoffs McCune, J. T., Beatty, R. W., & Montagno, R. V. 1988. Downsizing: Practices in Manufacturing Firms. Human Resource Management, 27(2): 145..

Figure 5. Sample Instructions.

> Imagine that you are working for a company in the services sector with 1000 employees. Due to recent economic and financial constraints, this company recently realized that they would have to reduce headcount by 210 people. Management decided it would first attempt to solicit volunteers for layoffs (all volunteers would be given a predetermined layoff severance package).
>
> Unfortunately, the company also announced that if the volunteer population does not meet the projected headcount reductions, then employees will be involuntarily laid off until all the projected headcount reductions occur. All exits have to happen within the next 8 weeks.
>
> Attached are sample profiles of employees that currently work for the organization in a customer service capacity. Your task is to imagine that you are the employee in each profile provided, and determine how likely you would be to volunteer to leave the company.
>
> **Ask yourself**
> "If I was the employee in this profile, what is the likelihood that I would volunteer for a layoff?"

I asked management to identify the likelihood of selecting each employee profile for an involuntary layoff, assuming that the company was not executing voluntary layoffs. I used a seven point Likert scale to assess the dependent variable. This introduced variability in the results (Nunnally, 1978) while permitting a statistical comparison of cues.

I solicited participants from four main stratas: experts on HR from academe (e.g. senior HRM PhD students), experts on HR from industry (e.g. HRPAO certified professionals), full time practicing managers (i.e. manage more than three employees) and full time employees (i.e. do not manage any employees). The pilot study included representatives from all stratas (30% PhD's, 20% HRPAO certified, 20% managers, and 30% employees).

Of the ten subjects in the pilot study, there was an equal representation of males and females. The average age was 33.5 years (range: 26 to 48) and the average tenure with their current employer was 3.4 years (range: 1 to 6)[14]. I secured a response rate of 100%. One of the 340 profiles was missing evaluative data and was deleted from the analysis. On average, it took 29 minutes to complete the profile evaluation (based on self reported time evaluations). On average, participants in the pilot study suggested that 33 profiles was the ideal number of profiles to review. Given that no issues with the use of 35 profiles were encountered in the pilot study, I used the same number of profiles for the field study.

Qualitative Analysis

Job Satisfaction and Organizational Commitment

Numerous studies have investigated the relationship linking organizational commitment and job satisfaction (Currivan, 1999). However, the nature of the causal relationship between job satisfaction and organizational commitment remains unclear. The predominant view is that job satisfaction is an antecedent to organizational commitment (Mowday, Porter, & Steers, 1982; Mueller, Price, Boyer, & Iverson, 1994; Williams & Livingston, 1994). However, support for the reverse causal ordering also exists, where organizational commitment is an antecedent to job satisfaction (Vandenberg & Lance, 1992). More recently, a meta-analysis on turnover indicated that job satisfaction was a better predictor of turnover than organizational commitment and provided empirical evidence that the two are in fact separate constructs (Griffeth et al., 2000).

[14] In the pilot study, the focus was to secure participants from all four strata's, however potential for biases based on limited range in age or tenure might occur. Thus, it is advisable to secure a sample more indicative of the population for the mass study.

Given the level of debate in research, it is not surprising that almost half of the individuals in the pilot study mentioned some initial issues with the presentation and interpretation of these variables in the profile when they were not aligned. Subjects were asked if anything was unclear, inconsistent or otherwise confusing in the profiles. Almost half suggested that it took them time to understand the relationship between organizational commitment and job satisfaction. Only after such consideration, were the subjects confident with a profile possessing low job satisfaction, but high organizational commitment, or vice versa.

> *"It took me a minute to get around having low job satisfaction and high organizational commitment, but I can see the difference. I can see how someone who is very conscientious might be dissatisfied with the job, but still have high loyalty to the organization." Subject 1*

> *"About job satisfaction and organizational commitment..., I remember thinking that if one was high; it would affect the other one as well, maybe more with the commitment one. But, I am sure we see it everyday. I could be satisfied with the job but still want to work for another organization, or not like the organization." Subject 2*

Two subjects suggested that the term "organizational commitment" would be understood only by highly educated individuals. Both subjects suggested that the use of a term like "loyalty to the company" or "dedication to organizational goals" substitute the term "organizational commitment". Therefore, for the field setting the definition of organizational commitment was changed to "loyalty to the company" As one subject put it:

> *"The only thing for me was the definition of commitment to the organization, maybe because I know it. You define it as high commitment or low commitment to the organization, but you could say this person likes to continue with the organization, or give something (a definition) that makes it more meaningful. ... I am taking on the perspective that some employees might not understand it. For example, maybe a person with only a high school education who is working on a machine might not understand the term 'commitment'." Subject 7*

Age

The model developed hypothesized that age had a linear relationship with likelihood to be laid off, regardless of the layoff implementation technique used. In the 2000 meta-analysis on predictors of turnover, age was found to have a significant negative relationship suggesting that younger employees are more likely to engage in voluntary turnover than older employees (Griffeth et al., 2000). The results of the V-RIF data analysis parallel findings in voluntary turnover, demonstrating an increased awareness of age in the decision to volunteer for unemployment. Specifically, profiles of employees perceived to be pre-retirement were rated lower in their likelihood to volunteer for a layoff.

> *"As you get closer to retirement age... that was something that I looked at. If you are pretty close to retirement age, it's not like the workforce will hire you. It's been demonstrated that if you are in your fifties or above, it's harder to get a job so the higher you are in age, the less likely you are to want to be unemployed. Anyway, all I am saying is that where the information influences my decision, you only had age, but age and potential for retirement was important to me. That was it." Subject 1*

> *"When the ages approached 60, my dominating thought was that I want a pension, I want to bridge my pension and that seemed to take over my decision function. I'll be eligible for pensions and I just wanted to get my pension benefits, there is no way I would leave." Subject 4*

> *"One thing I really thought about was that if I am an older worker, does the firm have an early retirement option? When I worked for Company X (the subject referred to a company they had previously worked for), when the company initiated job loss, it was a good time for people to evaluate there future. Maybe identifying if the person qualifies for early retirement would help here." Subject 5*

Subjects identified a need to address qualification for an early retirement plan, specifically for employees older than 60. As mentioned by subject 5, early retirement options might vary from company to company. It is important to clearly state the mathematical formula for calculating potential for early retirement. Usually, a mix of age

and tenure determines eligibility for retirement. Thus, one alteration to the study can be to include the formula used to assess retirement eligibility. Initiation into unemployment via a layoff (voluntary or involuntary) will sever the employment relationship with the company. The individual will no longer be considered an employee and the option of retirement from the organization will cease to exist.

Management representatives also demonstrated concern over retirement benefits and how age affected decisions on which employees to involuntarily layoff.

> *"If a person's age was 62 or 57, then they're almost retired right? I was concerned about people close to retirement. I didn't want older pre-retirement people to get laid off. If my first decision was to let the employee go (say a 7 out of 7 on the rating scale) but then I noticed he was close to retirement I might bring the rating down from a 7 to a 5 or 6." Subject 6*

None of the organizations participating in the field study had a mix of age and tenure in their populations that would be indicative of employees eligible for early retirement. Thus, although a consideration for the Canadian population at large, the issue of retirement is not one that affected the field studies.

Job Performance

Based on the qualitative data collected, the assignment of job performance in the profiles was re-evaluated. The ratings provided were either high or low, with no average performers. Subjects suggested that the inclusion of a mean level rating would be desirable.

> *"The profiles themselves look very clear, but all of the people here are above or below average in performance...but when I think of real life and try to make a decision, I know some people are in the middle. Some people are average performers. Some people could be average in your groups too. What about the people who perform in the middle? Where are they shown? If the person's performance is below average, then this layoff might be an opportunity to let an employee go, but then I would look at salary and age to determine if they would be laid off." Subject 5*

"I thought, no wonder why the organization is laying off, they have so many poor performers! Where are the average performers? When I see only high performers or low performers it makes my decision easy." Subject 10

The rationale suggested above is sound and logical. Therefore, the profiles were modified in the field study to indicate a number of employees with average performance ratings in their last performance review. Given this change, the impact of performance (the beta weight) for involuntary layoffs might reduce. This information was very insightful and demonstrates benefits of the two phased approach of this thesis.

Gender and/or Family Size

Gender and family size were presented in a simple format. A single letter identified gender. 'M' represented male employees and 'F' represented female employees. A whole number represented family size, indicating the number of individuals who resided in the employee's household. Neither of these variables influenced nomothetic level analysis, but both were influential to at least one individual subject. Subjects were not specifically asked about which variables did *not* influence their decision. Still, some subjects felt they should explicitly state that gender or family size were not influential in their decision.

"I don't think gender or family size influence my decision, maybe the other factors influenced me more." Subject 3

"The issues of male or female, that is gender and I think this variable is totally useless. We don't need male or female (identifiers) because I think it is completely biased. But you have this criterion." Subject 7

"Family size was not very important because as management, I would be more focused on work attitudes as performance, but family size a personal thing that would not matter to me." Subject 5

It is possible that there is a hyper sensitivity around gender or family size as a determinant in workplace decisions. Perhaps, subjects wanted to ensure that their answers

were socially desirable. Perhaps these variables are really not significant antecedents of layoffs. To investigate the influence of gender and family size further, they were not excluded from the field study.

One subject found the family size variable to be confusing, but eventually developed a consistent and logical interpretation of the family size variable. This subject's results were highly reliable, and family size was not a significant factor in their decision making process. After discussions with this individual, I do not predict any problems with interpretation of the family size variable.

> *"In terms of size of family, I just didn't click in, but I am sure for others it did. You know, I just got a size, one, two, three but I don't know if it means how big the family is. I mean, after a while, I realized that if it was a family of six...yeah, it could mean it was one man and five wives, but after a while I thought probably it is a couple and four kids." Subject 2*

Severance Package

To the employees, severances packages were influential in their decision making processes. However, this variable was not influential for management, suggesting that different interpretation and use of severance package in the V-RIF and IV-RIF decisions could result in a mismatch. As per the earlier hypothesis, I expected employees to be more concerned with the size of the severance package. After reviewing comments made by the employee representatives, the basis for this hypothesis was supported.

> *"I didn't look at severance that much, unless I would say 'well the employee could go either way', and then I would look at the difference between salary and severance pay. I mean, if could get between three and six months, that gives me time to get a job. That would certainly make volunteering for a layoff slightly more attractive if there was a big severance package attached to it." Subject 1*

Trial Profiles

The purpose of trial profiles is to allow subjects to review the variables and become familiar with the study requirements. Reliability is generally low for the first five or six profiles reviewed, given that subjects are adapting their decisions and establishing patterns of cue interpretation (Aiman-Smith et al., 2002). When asked if the trial profiles were helpful, all subjects suggested that the trial profiles were valuable. As a result, the use of trial profiles was used in the field study also.

> *"I think I needed a dry run to wrap my head around the different fields, so I found the trial profiles helpful." Subject 2*

> *"I liked the six practice profiles. It really made me to think about what might be important to me when making this decision. Although there are too many variables for me to use each one, I found I had to prioritize them. I put myself in the organization's shoes." Subject 6*

> *"I found the trial profiles helpful, but I think you should exclude them from your data analysis, since I was only looking at them to understand what I should look for. When people start off, they don't have a chance to compare, but with the trial profiles, you do have a chance. The trials give you an indication about how to look at the profiles." Subject 7*

Contextual Information

A commonly cited disadvantage of the policy-capturing methodology is the lack of realism in the results. One aspect of realism is that, if the profiles themselves are not viewed as realistic, then the generalizability and potential for bias in the results can be challenged (Klaas et al., 1991; Lane, Murphy, & Marques, 1982; York, 1989). When subjects were asked if any profiles appeared illogical, unclear or otherwise confusing, no one suggested the profiles themselves were unrealistic.

The second aspect of realism is that the context and external conditions are representative of the subject's environments (Judge & Bretz, 1992; Rynes et al., 1983). The issue of context was mentioned repeatedly. Subjects were selected based on their areas of expertise and availability to participate in the study. There was minimal commonality in the subject's natural environments, so minimal contextual information was provided.

> *"My decisions were based a lot on what I thought my prospective for employment were post-layoff.... So I thought that having some information about what the labour market is doing might be helpful." Subject 8*

> *"It might help if this is industry specific... e.g. IT, regardless of your age, you might be more likely to jump ship when the opportunity comes around if the severance is good enough, but if you are in the supermarket industry, generally there are not as many jobs available so you do have the think twice." Subject 2*

In the field study, environmental information was included. General level variables that affected the subjects in a common way such as the size of the company, the industry and the types of jobs presented in the field study were provided. A strength of the PC method is that it allows for control of contextual differences through scenario development (Karren et al., 2002). External environment differences were excluded from the conceptual model since they applied to all employees in a company in a consistent manner. Organizational characteristics (size etc) should have the same effect on all employees. One subject clearly recognized that contextual differences should not affect the results, given that all employees work for the same company.

> *"I'm not sure if the labour market (context) makes a difference, because all of these employees work for the same company. Then the context is static. I'm not sure it would play a large role in the decisions." Subject 5*

Quantitative Analysis

The pilot study resulted in a number of changes that were adopted for the field study. Profiles were aligned to the environment, a larger sample size was secured and subjects from field settings were used. The statistics, reliability and regression analysis of the pilot study are briefly reviewed. A detailed quantitative analysis for the field setting is provided in Chapter 7.

The first five subjects in the pilot study assessed profiles from a voluntary layoff perspective (subjects numbered one through five inclusive). The next five assessed profiles from an involuntary layoff perspective (subjects numbered six through ten inclusive). In total, 339 profiles were assessed.

Table 3. Summary Statistics of Profile Assessment

	Subject	*M*	*N*	*SD*
Assessed Voluntary Layoffs	1	4.21	34	1.70
	2	3.71	34	2.24
	3	3.53	34	1.58
	4	4.71	34	1.83
	5	4.00	34	1.58
Assessed Involuntary Layoffs	6	3.91	34	2.15
	7	3.79	34	1.87
	8	4.39	33	2.22
	9	4.33	34	2.12
	10	3.29	34	2.08
	Total	3.99	339	1.97

The range of means was 3.29 to 4.71 (on a seven point Likert scale). The mean rating for voluntary layoffs was 4.03 and the mean rating for involuntary layoffs was 3.95. ANOVA analysis of the difference in means provides a p-value of 0.78. Thus, the average overall rating was not different in voluntary versus involuntary layoffs. This suggests that there is no difference in the number of individuals out of a given group selected to be laid off

when different layoff implementation techniques are used. However, the mix of employees laid off may not be the same. This topic is explored further in the field study results, where more detailed regression procedures are used.

Rating of likelihood to layoff an employee or volunteer for a layoff was completed on a seven point Likert scale. Less that 2% of the profiles assessed were evaluated at the 4th point in the 1-7 scale (4 represented 'do not know'). The 4th point was not a valuable mark, therefore I eliminated this point prior to the field study. Thus, there were six potential evaluations for each profile in the field setting as outlined below.

Table 4. Likert Scale used for Dependent Variable

Rating	V-RIF	IV-RIF
1	Definitely not likely to volunteer for a layoff	Definitely not likely to select for a layoff
2	Most likely not to volunteer for a layoff	Most likely not to select for a layoff
3	Slightly not likely to volunteer for a layoff	Slightly not likely to select for a layoff
4	Slightly likely to volunteer for a layoff	Slightly likely to select for a layoff
5	Most likely to volunteer for a layoff	Most likely to select for a layoff
6	Definitely volunteer for a layoff	Definitely select for a layoff

Reliability

Reliability in PC studies can be measured two ways; duplicate profiles and R^2. To directly estimate reliability, Cable and Judge (1994) and Crooker (1995) planted duplicate profiles in the profile set provided. Similarly, I planted one duplicate profile in the set of profiles provided. The duplicate profiles provided a reliability estimate of 92.51% (using techniques adopted by Crooker, 1995). Thus, subjects were very highly consistent in their profile assessment.

I calculated the R^2 of each subject's rating of their profiles. This identifies how consistently a decision maker weighs information provided. If a subject weighs a particular variable similarly across profiles, then the value of the R^2 will increase. If he or she ignores a

variable in one profile, then weighs it heavily in another, the value of the R^2 will decrease. Table 5 contains the R^2 for each subject. Individual reliability estimates are provided below in the following table, with an R^2 ranging from 0.61 to 0.96 (M=0.83, SD = 0.13).

Table 5. Individual Subject Reliability Estimates

Subject	R^2
1	0.61
2	0.82
3	0.89
4	0.61
5	0.94
6	0.96
7	0.94
8	0.94
9	0.76
10	0.88

Generally, PC studies average an R^2 of 0.40 (Aiman-Smith et al., 2002) with an exclusion criterion of 0.30 (Cox, 1996). The average reliability in the pilot study was 0.835. The high reliability of the results indicates that subjects were very consistent in their interpretation of information and cues available, and were reliable decision makers. This implies that subjects took the task seriously when making decisions and were motivated to complete the task.

Idiographic Regression Analysis

For each subject, I conducted multiple regression analysis using each of the eleven variables as predictors and the probability judgment (likelihood of voluntary or involuntary layoff) as the decision. Due to the orthogonal design, correlations between independent variables were set near zero and I calculated no interaction effect. The relevant statistics assessed were the mean, standard deviation, range, standardized regression coefficients (beta

weights = β), the p-value and the R^2, which were determined using logistic regression (See Appendix E for individual means, standard deviations and ranges).

The influence and relationship of each variable on each individual subject's layoff decision are reported in Table 6. The higher the absolute value of the beta weight, the more influence the factor had on the decision of which employee was selected for a layoff. The direction of the relationship is indicated by the positive or negative sign of the beta weight. The summary statistics of the eleven cues' beta weights for pilot study subjects were: Job Performance; range -4.09 to 1.49 (*M* = -1.73; *SD* = 0.61), Job Satisfaction; range -2.30 to 0.57 (*M* = -0.73; *SD* = 0.28), Organizational Commitment; range -3.15 to 1.14 (*M* = -0.72; *SD* = 0.38), Work Related Stress; range -0.97 to 0.33 (*M* = -0.20; *SD* = 0.14), Education; range -0.17 to 1.85 (*M* = 0.20; *SD* = 0.19), Gender; range -1.00 to 1.22 (*M* = -0.10; *SD* = 0.20), Age; range -1.01 to 1.32 (*M* = -0.06; *SD* = 0.22), Pay; range -0.96 to 0.48 (*M* = -0.03; *SD* = 0.14), Severance Package; range -0.59 to 0.72 (*M* = 0.09; *SD* = 0.11), Tenure; range -0.47 to 0.73 (*M* = -0.02; *SD* = 0.11) Family Size; range -1.25 to 0.57 (*M* = -0.18; *SD* = 0.16).

Table 6: Effect of Variables on Individual Subjects Decision Function

Sub	JobP	JobS	OrgC	Strs	Educ	Gend	Age	Pay	Svrc	Ten	FamS
1	**1.49****	0.19	0.39	-0.80	0.11	**1.22**†	-0.47	-0.05	0.26	0.00	-0.08
2	0.19	-0.74	-0.04	-0.56	**1.85****	-0.04	-1.01	0.12	-0.19	0.01	-0.75
3	-0.48	**-2.30****	**-1.33****	**-0.97****	-0.17	0.40	**0.99***	-0.26	-0.05	-0.14	0.01
4	-1.29	-0.82	1.14	0.09	-0.14	0.13	**1.32**†	0.39	0.72	-0.31	0.57
5	-0.25	**-0.96****	**-3.15****	0.17	**0.30**†	-0.29	-0.13	-0.38	-0.05	0.21	-0.18
6	**-4.09****	**-0.81***	**-0.92****	0.09	0.30	-0.36	-0.11	0.42	0.28	-0.36	0.24
7	**-2.83****	**-1.65****	**-1.67****	-0.05	0.02	-0.43	-0.26	0.16	**-0.59**†	-0.47	-0.06
8	**-3.93****	0.28	**-0.80***	-0.00	-0.10	0.04	-0.43	0.48	0.05	0.14	-0.28
9	**-2.71****	0.57	-0.88	-0.34	-0.10	-1.00	-0.43	-0.96	0.20	0.73	**-1.25**†
10	**-3.36****	**-1.07***	0.07	0.33	-0.11	-0.68	-0.09	-0.24	0.25	-0.05	-0.05

Note: Numbers in cells represent beta weights
† $p < .10$
* $p < .05$
** $p < .01$

LEGEND

Sub = Subjects
JobP = Job Performance
JobS = Job Satisfaction
OrgC = Organizational Commitment
Strs = Work-related Stress
Edu = Education
Gend = Gender
Svrc = Severance Package
FamS = Family Size

Nomothetic Regression Analysis

Although the beta weights at the individual respondent level provide an awareness of each the decision making conditions and assessments of each subject, a limitation of the confounded factorial approach is that the researcher cannot be confident that results are unaffected by the particular set of scenarios asked (Graham et al., 2001). Table 6 demonstrates that a limited number of the cues determined the voluntary or involuntary layoff decision. To allow for a more confident assessment of significant decisions cues, groupings of V-RIF and IV-RIF can be compared, as per Table 7.

Table 7. Effect of Variables on V-RIF versus IV-RIF Decision Function

Variable	V-RIF	IV-RIF	Aggregate
Constant (C)	4.437	6.572	5.506
	(.492)	*(.336)*	*(.345)*
JobP	0.020	-3.462**	-1.715**
	(.272)	(.187)	*(.191)*
JobS	-0.857**	-0.584**	-0.725**
	(.267)	*(.183)*	*(.187)*
OrgC	-0.797**	-0.738**	-0.771**
	(.267)	*(.183)*	*(.188)*
Strs	-0.417	0.016	-0.207
	(.270)	*(.185)*	*(.190)*
Educ	0.445**	-0.105	0.170
	(.169)	*(.115)*	*(.118)*
Gend	0.001	-0.103	-0.045
	(.278)	*(.190)*	*(.195)*
Age	-0.233	-0.129	-0.174
	(.274)	*(.188)*	*(.193)*
Pay	-0.017	-0.078	-0.044
	(.269)	*(.184)*	*(.189)*
Svrc	0.709**	-0.083	0.309†
	(.268)	*(.183)*	*(.188)*
Ten	-0.093	0.047	-0.030
	(.268)	*(.184)*	*(.189)*
FamS	-0.010	-0.177	-0.098
	(.275)	*(.188)*	*(.193)*

† $p < .10$
* $p < .05$
** $p < .01$

Note: Numbers in cells represent beta weights; numbers in parenthesis represent standardized error

Table 8. Main Cues Used by Decision Makers During Layoffs (in priority sequence)

Priority	V-RIF	IV-RIF
1	Job Satisfaction	Job Performance
2	Organizational Commitment	Organizational Commitment
3	Severance Package	Job Satisfaction
4	Education	

The aggregated results in table 8 suggest the decision criteria of determining which employee would most likely volunteer for a layoff (V-RIF) and which employee would most likely be selected for an involuntary layoff (IV-RIF) were slightly different. Management decisions of who to involuntarily layoff was influenced most by job performance, organizational commitment and job satisfaction. Employees' decisions regarding volunteering for a layoff were most influenced by their job satisfaction, organizational commitment, size of the severance package and level of education.

The value of the severance package was positively correlated with likelihood to volunteer for a layoff, as predicted in hypothesis 6b. Employees who might have been inclined to leave the company have a double benefit from getting laid off. One, they can exit the firm to pursue employment elsewhere. Two, employees who were already contemplating turnover can view the severance package as a bonus. If they quit, they would not have access to any additional financial compensation from the company.

Employees with lower levels of education were less likely to volunteer for a layoff (hypothesis 8b). The higher an individual's education, the broader and more general their skill set. Employees with high levels of education are probably the most likely to respond to a layoff option first, because the they can gain from the monetary value of the severance package today and find equal employment tomorrow.

Neither education nor severance package were influential in the involuntary layoff decision. Management appears to be highly influenced by job performance (which was not a

significant decision cue for employees). In fact, job performance was the single largest predictor used by management in determining which employees should remain with the organization and which employees should receive a layoff. This supports the hypothesized relationship between job performance and involuntary layoffs (hypothesis 1b).

Both organizational commitment and job satisfaction were antecedents used by management and employees in their decision function, although the influence and priority sequencing in the decision making process was slightly different between the two groups. The beta weights for organizational commitment were -0.797 for V-RIF and -0.738 for IV-RIF. The beta weights of job satisfaction were noticeably different, but both demonstrated a negative relationship (-0.857 for V-RIF and -0.584 for IV-RIF). Thus, job satisfaction was more important than organizational commitment in the decision to volunteer for a layoff. In the decision to select an employee for an involuntary layoff, organizational commitment was more important than job satisfaction. Thus, support was obtained for hypotheses 2a, 2b, 4a, and 4b.

To provide further support for the results, idiographic regression analysis was completed for the sample, using slightly different interpretations of the variables; age, tenure, salary, expected severance and family size were all treated as continuous variables rather than dichotomous (dichotomization is highly recommended for policy-capturing studies). In these slightly altered analyses, the same variables were significant. The dichotomization of the variables (rather than treating it as continuous) did not alter identification of significant variables.

The pilot study provided an opportunity to conduct a preliminary quantitative analysis of the relationships between the independent and dependant variables and suggest

changes for the field setting. Although support for a number of hypotheses was secured, a lack of realism threatens the generalizability of these results. Chapter 7 provides a detailed and more conclusive review of the field setting results.

Developmental Approach to the Pilot Study

The pilot study was exploratory in nature and it provided the researcher with an opportunity to assess the conceptual model in a meaningful way and adopt any changes needed to increase the validity and reliability of the field study. Both quantitative and qualitative information were examined to identify potential areas for modification. Overall, the reliability estimates are respectable, and all variables had some level of influence at the individual level. With only ten respondents, elimination of the variables (which are theoretically determined) would be unwise. Therefore, all variables remained in the profiles. Proposed changes are embedded in the analysis, and summarized in a synopsis form below.

- The definition for organizational commitment was reworded
- Performance was modified to include below average, average and above average performers (rather than only low and high performers)
- Contextual information specific to the field setting was included in the cover sheet
- Male and female identification included the full words, rather than the abbreviations "M" or "F"
- The Likert scale for dependant variable responses was reduced from a 7 point scale to a 6 point scale, eliminating the option of the mid value which represented "do not know"

Chapter 7: Results – Field Study (Phase 2)

Methodology Unique to Phase 2

The field study phase of this research involved 28 subjects from three organizations to assess the reliability of the responses, identify variables that were significant in the decision making process and compare the outcomes of the competing layoff implementation techniques. This chapter first addresses methodological issues that were specific to the field study setting. Next, a thorough review of the results, including hypotheses validation is presented.

Procedures: Field Study

Multiple sources were solicited for Phase two of this research (the field study component). I delivered a ten minute presentation to two continuing education classes at a southern Ontario university in March, 2006. The presentation involved describing the purpose of the study, distributing material regarding the study and soliciting participation. One class was composed of 42 students and the other of 45 students. The Lecturer estimated roughly 80% of students were working full time and taking the class as a prerequisite to a Certified Human Resources Professional (CHRP) designation. Additionally, alumni from a large, comprehensive and multidisciplinary university in the southern Ontario region were contacted to shortlist alumni employed in the field of Human Resources. The Alumni Officer brokered an e-mail communication soliciting participation in the study to the 51 alumni on the university alumni records (6 of which were returned due to incorrect e-mail addresses).

In total, seven representatives from seven companies demonstrated interest in the study. During discussions, one representative was promoted to a new department in her organization. She felt a turnover study would make her new employee group feel vulnerable or threatened. As a result, she opted out of the survey. Upon providing further information to a representative of another company, the organization decided that the topic was not of interest to them. This company also opted out of the survey. During the course of interaction with members from two organizations, both organizations announced layoffs within the next six months. The first organization aimed to reduce headcount using voluntary layoffs, while the second organization simply determined that they would be reducing employee headcount and had not yet determined how. Thus, two additional field settings dropped out of the study.

Representatives from the three remaining companies were asked preliminary questions regarding the average age, gender, tenure, salary and education of their employees. Table 9 summarizes the information collected from each company. Profiles and scenarios for each company were aligned with environmental norms (see Appendix A and L).

Table 9. Summary of Information for Field Setting Profiles

	Company 1	Company 2	Company 3
Age*	34 (23-47)	29 (21-45)	42 (35-53)
Gender	25% women	30% women	55% women
Tenure*	3 (1-8)	4 (1-12)	8 (1-15)
Salary*	$50,000 $45,000-$68,000)	$55,000 ($42,000-65,000)	$39,000 ($36,000-$42,000)
Education	• 5% college or less • 70% university bachelor degree • 25% university masters degree	• 15% college or less • 65% university bachelor degree • 20% university masters degree	• 5% high school or less • 45% college or trades school • 45% university bachelor degree • 45% university masters degree
Total Subjects	10	10	8
V-RIF identifiers	1-5	6-10	11-14
IV-RIF identifiers	15-19	20-24	25-28

**Values in cells represent averages, values in parentheses represent ranges*

Two companies asked that studies be mailed to a central person in the organization, who would then distribute these within the organization. These two organizations preferred not to give contact information about the respondents to the researcher directly. Accordingly, these organizations were mailed all materials. When completed, studies were returned in preaddressed and prestamped envelopes provided.

The third organization felt the topic of layoffs was so sensitive that introducing a researcher at the field setting might instigate layoff rumours at the workplace, or threaten the employees comfort level at work. The company did not want the researcher to interface with respondents. This organization asked that the researcher deal with one member of the human resources department team to deliver and collect all packages.

In total, 10 subjects were secured from each of the first two companies, resulting in 5 dyads per company (Companies 1 and 2). Company 3 allowed access to 8 individuals in the organization (4 dyads). All 28 response packages were completed. Two profiles appeared to be stuck together in two envelopes and the subject missed them. Therefore, these two profiles were eliminated entirely from the analysis. In total, 976 profiles were evaluated, 488 from each perspective (IV-RIF and V-RIF), which clearly exceeded the minimum of 110 profiles required for statistical interpretation of the results (Cooksey, 1996a).

A quarter of the respondents were female[15]. The average age of subjects was 38.7 years (range: 25 to 59) and the average tenure with their current employer was 5.1 years (range: 3 months to 17 years). In total, 21.4% of individuals had experienced a prior layoff and 14.3% had volunteered for a layoff in their past. On average, subjects took 29 minutes to

[15] However, given that the profiles themselves were based on labour force characteristics, the respondent's gender does not pose a threat to the generalizability of the results. Gender will be controlled for in later steps of the data analysis to ensure that it does not bias the results.

complete the profile evaluation and the time ranged from 20 minutes to 60 minutes (based on self reported time evaluations).

Reliability and Statistical Power Analysis

Similar to the pilot study, duplicate profiles were used only for reliability estimation and were excluded from regression and beta analysis. The duplicate profiles provided a reliability estimate of 0.89, suggesting that subjects were very consistent in their profile assessment and interpretation of available information. This demonstrates that subjects took the task seriously and consistently interpreted the available information when making decisions.

As mentioned in the methodology section, fatigue and self-learning might affect the decision model generated for each respondent and can alter the reliability of the coefficient estimates. The use of trial profiles minimized the threats associated with these issues. As well, information gathered from the pilot study helped determine the ideal number of profiles in the field study, reducing subject fatigue. However, these issues must be explicitly addressed in this thesis to demonstrate the reliability and consistency in the results.

In order to detect fatigue, the variance explained in the decision function is compared between the first 17 profiles and the last 18 profiles. If fatigue occurs, the variation in the dependant variables and the squared multiple correlations of the latter set of profiles would decrease (Crooker, 1995). Appendix F provides split half analysis results. The average difference in squared multiple correlations between the first half and the second half of the profiles was only 0.0358 (using techniques adopted by Crooker, 1995). Although the difference between split halves is statistically insignificant, on average it is positive. Subjects

were positively affected by a slight learning curve, which is desirable. Thus, the use of 35 profiles in the sample set provided to each subject is further validated.

The R^2 indicates how consistently a decision maker weighed the various pieces of information provided in the profiles. The value of R^2 (percentage of variance explained) will increase if the respondent weighs a particular cue similarly across situations (i.e., profiles). However, if he or she ignores a cue on one occasion, and then weighs it heavily in another situation (such that his or her decision process changed between profiles), then the value of R^2 will decrease. Table 10 contains the R^2 for each subject. Individual reliability estimates are provided in Table 10, with R^2 ranging from 0.41 to .091.

Table 10. Average Reliability and Variance Explained per Subject

Subject	*R*	R^2	*SE*
1	0.89	0.79	0.75
2	0.71	0.50	1.46
3	0.82	0.67	0.84
4	0.81	0.66	1.01
5	0.89	0.79	0.61
6	0.89	0.78	0.97
7	0.77	0.59	1.05
8	0.88	0.77	1.07
9	0.72	0.52	0.93
10	0.84	0.70	0.79
11	0.79	0.62	1.35
12	0.82	0.68	1.20
13	0.86	0.73	0.78
14	0.64	0.41	1.19
15	0.95	0.90	0.53
16	0.91	0.83	0.71
17	0.89	0.80	0.88
18	0.82	0.67	1.22
19	0.89	0.80	0.64
20	0.95	0.90	0.69
21	0.93	0.86	0.54
22	0.91	0.84	0.95
23	0.90	0.81	0.94
24	0.85	0.72	0.94
25	0.93	0.86	0.50
26	0.81	0.69	1.03
27	0.94	0.89	0.62
28	0.95	0.91	0.77

* Note: differences in R and R^2 are a result of rounding

When the policy-capturing approach is adopted, sample size is not as important as statistical power analysis. The R^2 indicates the degree to which the model captures an individual's decision making process. Policy-capturing studies average an R^2 of 0.40 (Hobson & Gibson, 1983). Cohen and Cohen's method for assessing R^2 power (1983: pg. 117) determined that an R^2 of 0.40 would result in a statistical power of 85% with $\alpha = 0.05$. The average R^2 of subjects assessing the voluntary layoff decision was 0.723 (resulting in a

statistical power of 99% when $\alpha = 0.01$) and average R^2 of subjects assessing the involuntary layoff decision was 0.82 (resulting in a statistical power of 99% when $\alpha = 0.01$). Therefore, the study had sufficient statistical power to conduct the desired regression analysis.

When the dependent variable is numeric, an important consideration in a policy-capturing study is the independence of residuals. In this case, the dependent variables were based on a 6-point Likert scale. To test independence of residuals, the Durbin Watson *d* statistic is employed (Pedhazur, 1982). In the hypothesis of no autocorrelation, the *d* statistic has an expected value under 2 (Crooker, 1995). The voluntary layoff group has a *d* statistic of 1.495 and the involuntary layoff group secured a *d* statistic of 1.744. Therefore independence of the residuals demonstrates that no autocorrelation occurred in the testing and that the applied regression techniques are valid.

The statistical data analysis used logistic regression techniques to identify beta weights and significance of cues used in the decision making process. These were reviewed at the individual subject level (idiographic) and at the management versus employee comparison level (nomothetic).

Idiographic Regression Analysis

Each subject's assessment of the profiles became a unique dataset. Due to the orthogonal design, correlations between independent variables were set near zero and no interaction effect was calculated (Aiman-Smith et al., 2002; Crooker, 1995; Hobson et al., 1983). This allowed for the evaluation of individual decision-making procedures, including an evaluation of cues on the explained variance in subject's overall decisions (Schwab, Rynes, & Aldag, 1987). The relevant statistics assessed are the standardized regression

coefficients (beta weights = β), the p-values and the R^2, which were determined using logistic regression.

Subjects numbered 1 through 14 inclusive assessed profiles from the voluntary layoff perspective. Those numbered 15 to 28 inclusive assessed profiles from the involuntary layoff perspective. The range of individual means (on a 6 point scale) was 2.03 to 4.39 (Appendix E). Mean rating for voluntary layoff decisions was 3.56 and mean rating for involuntary layoff decisions was 3.50. ANOVA analysis of the difference in means provides a p-value of 0.543; evidence that the average overall rating was not different for the two groups. Additionally, the results demonstrate that management (IV-RIF) and employees (V-RIF) generally lay off the same number of employees. Given the same context and group of employees, the use of voluntary layoffs strategy results in no different number of employees selected to exit the firm than the use of involuntary layoffs strategy. However, choices of who leaves are different between the two cases.

The beta values of each cue for individual subjects are reported in Table 11. The higher the absolute value beta weight, the more influence the factor had on the decision of which employee was selected for a layoff. However, beta weights can be positive or negative. A positive beta weight indicates that the higher the specified cue (independent variable) value, the higher the likelihood to be selected for a V-RIF or IV-RIF (dependant on the perspective the subjects assumed). A negative beta weight indicates that the higher the specified cue, the lower the likelihood to be selected for V-RIF or IV-RIF.

The summary statistics of the eleven cues' beta weights for field study subjects were: Family Size; range -0.59 to 0.15 (M = -0.09; SD = 0.03), Education; range -0.14 to 0.29 (M = -0.01; SD = 0.03), Age; range -0.33 to 0.22 (M = -0.01; SD = 0.02), Gender; range -0.16 to 0.18

(M = 0.01; SD = 0.02), Tenure; range –0.22 to 0.38 (M = 0.03; SD = 0.03), Job Performance; range -0.93 to 0.22 (M = -0.21; SD = 0.05), Job Satisfaction; range -0.66 to 0.48 (M = -0.21; SD = 0.05), Organizational Commitment; range -0.70 to 0.23 (M = 0.22; SD = 0.05), Work Related Stress; range -0.18 to 0.54 (M = 0.07; SD = 0.03) Pay; range -0.44 to 0.25 (M = 0.07; SD = 0.03), Severance Package; range -0.30 to 0.81 (M = 0.21; SD 0.06).

Table 11 demonstrates that respondents interpreted a varying number of cues to assess likelihood for a voluntary or involuntary layoff. For example, for some subjects, only one cue was statistically significant in their decision function (Subjects 8, 9, 11, 12, 14, 20 and 28). For other subjects, four or more cues were statistically significant in their decision function (Subjects 1, 5, 6, 10, 16, 21, 24, and 25).

Table 11. Idiographic Analysis: Beta Values of Work Related and Non-Work Related Cues

Subject	Constant	FamS	Educ	Age	Gend	Ten	JobP	JobS	OrgC	Strs	Pay	Svrc
					Voluntary Layoffs							
		Non-Work Related Variables					Work Related Variables					
1	3.677	-0.01	0.18	-0.06	0.01	**-0.22**†	-0.18	**-0.50****	**-0.47****	**0.26***	-0.07	0.09
2	3.555	**-0.55****	0.18	0.16	-0.10	0.12	-0.20	0.04	0.00	0.07	-0.05	**0.39***
3	4.461	0.08	-0.03	-0.19	-0.05	0.02	**-0.25**†	-0.07	-0.32	**0.25**†	0.22	**0.65****
4	3.981	0.09	0.20	0.10	0.01	-0.06	-0.29	**-0.66****	-0.16	-0.02	0.04	0.33
5	2.922	0.15	**0.29***	**0.22**†	0.15	-0.04	-0.12	-0.14	**-0.21**†	**0.54****	**-0.44****	0.15
6	3.354	0.09	**0.19**†	-0.03	-0.02	0.14	**-0.24**†	0.01	-0.09	-0.09	**0.25**	**0.76****
7	4.253	**-0.30**†	0.15	0.02	-0.15	-0.17	-0.21	-0.16	-0.07	**0.31**†	-0.16	**0.57****
8	3.564	0.07	0.03	0.07	0.18	0.09	-0.18	0.08	0.12	-0.10	0.19	**0.81****
9	3.149	-0.25	0.11	-0.08	0.02	0.22	0.22	-0.06	-0.23	0.19	0.03	**0.63****
10	3.852	-0.22	0.09	0.18	0.16	0.28	**-0.39***	**-0.34***	**-0.35***	0.10	-0.10	**0.47****
11	3.275	-0.22	-0.02	-0.02	0.02	0.38	-0.14	-0.07	0.07	0.01	0.10	**0.64****
12	2.696	**-0.59****	-0.05	0.07	-0.01	-0.00	-0.01	0.06	0.06	0.20	-0.08	**0.44****
13	3.558	-0.13	0.07	0.02	0.02	-0.06	-0.10	-0.23	-0.20	-0.02	0.08	**0.74****
14	2.110	0.07	0.24	**-0.33**†	-0.12	0.34	0.11	-0.06	0.23	-0.17	-0.25	0.07
					Involuntary Layoffs							
		Non-Work Related Variables					Work Related Variables					
15	3.249	0.06	0.02	-0.05	0.10	0.09	**-0.83****	**-0.178***	**-0.41****	-0.07	-0.03	0.10
16	4.000	-0.08	0.02	0.07	0.05	0.16†	**-0.53****	-0.32	**-0.57****	**0.32****	**0.19**†	-0.10
17	3.811	-0.05	-0.06	-0.11	-0.07	0.08	**-0.72****	**-0.36****	-0.19	-0.04	-0.20	-0.00
18	3.284	-0.21	0.14	0.03	-0.04	-0.16	**-0.71****	**-0.47****	**-0.35***	0.13	0.14	-0.16
19	3.743	-0.16	0.13	-0.01	0.07	-0.06	**-0.70****	**-0.58****	-0.02	-0.18	-0.11	-0.04
20	3.365	0.02	0.12	0.03	-0.10	0.03	**-0.93****	0.01	-0.08	0.02	0.04	-0.02
21	3.313	0.02	0.06	-0.03	**-0.16**†	-0.00	**-0.80****	**-0.50****	**-0.66****	0.06	-0.03	-0.00
22	3.956	-0.05	-0.09	-0.13	0.02	-0.09	**-0.70****	**-0.42****	**-0.60****	0.09	0.04	-0.04
23	3.160	-0.11	-0.04	-0.01	-0.06	0.06	**-0.79****	**-0.38****	-0.15	0.14	0.13	-0.13
24	3.609	-0.08	0.20	-0.24	-0.05	-0.07	**-0.57****	**-0.48****	**-0.30***	-0.07	0.14	**-0.30***
25	3.222	-0.02	0.01	-0.08	**-0.16**†	0.06	**-0.87****	**-0.21***	**-0.20***	-0.08	-0.06	-0.08
26	3.649	-0.23	0.02	0.04	-0.04	-0.12	**-0.41****	**-0.43***	**-0.44****	0.30	0.22	-0.14
27	3.188	-0.07	-0.14	0.08	-0.01	-0.06	**-0.64****	-0.32	**-0.70****	-0.10	0.03	0.18
28	3.035	0.04	0.01	0.12	-0.06	-0.01	**-0.92****	0.01	0.02	0.02	-0.07	-0.02

Nomothetic Regression Analysis

To allow for a more confident assessment of significant decisions cues, V-RIF and IV-RIF stratas can be compared. An important benefit of the PC approach is that researchers can address nomothetic questions. The voluntary versus involuntary layoff analysis directly assesses this thesis question: what are the differences between antecedents of employees volunteering for a layoff versus management selecting employees for an involuntary layoff?

Aligned with the approach adopted by Crooker (1995), Table 12 provides the percentage of standardized correlation coefficients that are statistically significant for each within-subject analysis. All variables are significant to at least one individual in their decision function, as per Table 12. The most significant variables affecting decisions during layoffs are job performance, job satisfaction, organizational commitment, and severance packages. The least influential variables are education, age, tenure and gender of the employee. The dependent variables (cues), which explained the most variance in the independent variable (decision of V-RIF or IV-RIF), are evident in the charts below.

Table 12. Percent of Influence by Factor (V-RIF versus IV-RIF)

Non Work Related Variables			
	V-RIF	**IV-RIF**	**Total**
FamS	21.43%	0.00%	10.71%
Educ	14.29%	0.00%	7.14%
Age	14.29%	0.00%	7.14%
Gend	0.00%	14.29%	7.14%
Ten	7.14%	7.14%	7.14%
Work Related Variables			
	V-RIF	**IV-RIF**	**Total**
JobP	21.43%	100.00%	60.71%
JobS	21.43%	85.71%	53.57%
OrgC	21.43%	64.29%	42.86%
Strs	28.57%	7.14%	17.86%
Pay	14.29%	7.14%	10.71%
Svrc	71.43%	7.14%	39.29%

For employees' decisions to volunteer for a layoff, 71% of subjects were significantly influenced by the value of the severance package. A modest influence was exerted by the level of work related stress, job performance, job satisfaction, organizational commitment and family size. Comparably, for management's decision of which employees to involuntarily layoff, 100% of subjects were significantly influenced by the job performance of the employee. Additionally, job satisfaction and organizational commitment had a strong influence in involuntary layoff decisions.

Table 13. Beta Values by V-RIF versus IV-RIF

	IV-RIF			V-RIF		
	Std. β	*t*	p-value	Std. β	*t*	p-value
(Constant)	3.323			4.911		
Gend	0.004	0.15	0.88	0.005	0.12	0.90
FamS	-0.022	-0.75	0.45	-0.128	-3.28	0.00
Educ	0.000	0.01	0.99	0.029	0.74	0.46
JobP	-0.698	-24.33	0.00	-0.136	-3.50	0.00
JobS	-0.261	-9.03	0.00	-0.144	-3.67	0.00
OrgC	-0.289	-10.08	0.00	-0.076	-1.95	0.05
Strs	0.050	1.75	0.08	0.061	1.57	0.12
Age	-0.001	-0.04	0.97	-0.005	-0.13	0.90
Ten	-0.005	-0.19	0.85	0.034	0.89	0.38
Pay	0.045	1.56	0.12	0.038	0.96	0.34
Svrc	-0.064	-2.22	0.03	0.459	11.71	0.00

The results of the nomothetic analysis in Table 13 provide empirical evidence that antecedents of involuntary layoff decisions were job performance (β = -0.698, $p < 0.001$), organizational commitment (β = -0.298, $p < 0.001$), job satisfaction (β = -0.261, $p < 0.001$), and severance package (β = -0.064, $p < 0.05$). Work related stress had a small influence on the decision function ($\beta = 0.050, p < 0.10$).

In contrast, the results demonstrate that the factors that significantly impacted employees' decision of volunteering for layoff were severance package (β = 0.459, $p <$ 0.001), job satisfaction (β = -0.144, $p < 0.001$), job performance (β -0.136, $p < 0.001$) and family size (β = -0.128, $p < 0.001$). Organizational commitment had a small influence on the decision function ($\beta = -0.076, p < 0.10$).

Additionally, gender, age, tenure, education, and pay were not significant factors in either the V-RIF or IV-RIF decision. Table 14 summarizes the main cues that were used involuntary compared with involuntary layoff decisions by priority sequence. Additionally,

the direction of influence for each variable is provided. Overall, the results suggest that the decision criteria used by management when determining which employees are involuntarily laid off are different than the decision criteria used by employees in the decision to volunteer for a layoff.

Table 14. Main Cues Used by Decision Makers During Layoffs (in priority sequence)

	V-RIF	Influence	IV-RIF	Influence
1	Severance Package	Positive	Job Performance	Negative
2	Job Satisfaction	Negative	Organizational Commitment	Negative
3	Job Performance	Negative	Job Satisfaction	Negative
4	Family Size	Negative	Severance Package	Negative
5	Organizational Commitment	Negative	Work Related Stress	Negative

Work Related Variables

According to logistic regression analysis, support for a number of hypotheses is obtained. The size of the severance package is an important variable for employees in their decision to volunteer for a layoff. At a time of layoff, employees who might have been inclined to leave the company to pursue other career options or employment offers now have a double benefit from getting laid off. One, they can exit the firm to pursue employment elsewhere. Two, employees already contemplating turnover can view the severance package as a bonus. The value of the severance package is statistically and positively related to likelihood to volunteer for a layoff for 71% of employees. The beta weight of the severance package for the employee group is 0.459 ($p < 0.001$). Therefore, the value of the severance package is influential in the decision to volunteer for V-RIF.

In comparison, the size of the severance package negatively influences management's decisions in an involuntary layoff situation. Management is more likely to select employees with lower severance packages than higher severance packages to exit the firm. The beta

weight of severance packages for the management group is -0.064 ($p < 0.05$). Severance packages were influential for 83% of management subjects, suggesting that the size of the severance package (as a percentage of salary) significantly and negatively affects involuntary layoff decisions. This supports the hypothesized relationship (Hypotheses 6a and 6b), confirming a mismatch in the interpretation and evaluation of severance packages when competing layoff implementation techniques are used.

Management appears to be highly influenced by job performance, more so than employees. In fact, job performance is the single largest predictor used by management in determining which employees are involuntarily laid off. At the idiographic level of analysis, job performance is a significant predictor in 100% of management decisions. In contrast, 21% of employees' decisions regarding voluntary layoffs are influenced by job performance. At the nomothetic level of analysis, management is almost 70% more likely to layoff an employee performing below average than an employee performing above average ($p < 0.001$). Employees are 13% more likely to volunteer for a layoff if their job performance is below average compared to the above average group ($p < 0.001$). When voluntary versus involuntary layoff implementation techniques are used, poor job performance increases likelihood to be selected for a layoff. However, the job performance is more influential in the involuntary layoff decision than the voluntary layoff decision. Therefore, support for hypothesis 1b is provided. There is a significant relationship between job performance and likelihood to volunteer for a layoff, but the nature of the relationship is the opposite of that hypothesized. Thus, hypothesis 1a is not supported.

Job satisfaction is the second most influential decision factor for employees, but the third most influential factor for management. Management is 26% more likely to select an

employee with perceived low job satisfaction for a layoff than an employee with high perceived job satisfaction. In comparison, employees dissatisfied with their jobs are 14% more likely to volunteer for a layoff than those satisfied with their jobs. It was predicted that employees with low job satisfaction would opt to leave an organization when the window of opportunity presents itself (Hypothesis 2a) while management would be interested in removing dissatisfied employees from the work environment when conducting an IV-RIF (Hypothesis 2b). Support for both of these hypotheses is secured. As a result, job satisfaction leads to a match between the V-RIF and IV-RIF layoff selection processes.

Organizational commitment is an influential factor in both V-RIF and IV-RIF decisions. The involuntary layoff decision is influenced more by employees' perceived levels of organizational commitment than the voluntary layoff decision. Employees with low organizational commitment are 29% more likely to be selected for an involuntary layoff than employees with high organizational commitment. Similarly, employees with low organizational commitment are almost 8% more likely to volunteer for a layoff. However, given that the relationship is negative in both cases, support for hypothesis 4a and 4b is obtained. Accordingly, organization commitment levels match in the V-RIF and IV-RIF decision functions.

Although work related stress is influential at the idiographic level for both employees and managers, at the nomothetic level only management is influenced by this variable. Employees with high work related stress levels are 5% more likely than employees with low work related stress levels to be selected for an involuntary layoff, supporting hypothesis 5b. At the nomothetic level, work related stress does not affect an employee's decisions regarding voluntary layoffs. At the idiographic level, however, the relationship between work

related stress and V-RIF intentions is consistently positive, which provides some support for hypothesis 5a. Therefore, work related stress creates a match between in V-RIF and IV-RIF selection.

Salary levels do not affect either the V-RIF or IV-RIF decisions as hypothesized in hypothesis 3a or 3b. In fact, at the idiographic level, mixed results for the effect of salary exist, which indicate that no common interpretation of salary exists in layoff decisions. No support for any influence of salary was found. Consequently, salary levels provide inconclusive evidence regarding match versus mismatch comparisons.

Non Work Related Variables

At the nomothetic level, of the non-work related variables, only family size is an influential factor. As hypothesized, employees with small family size are almost 13% more likely to volunteer for a layoff than employees with large family size. However, family size does not affect likelihood to be selected for an involuntary layoff. Therefore support for hypothesis 10a is obtained, while hypothesis 10b remains unsupported. Hence, family size affects one decision, but not the other, suggesting that family size results in different decisions (mismatch) of who was laid off, dependent on the layoff implementation techniques adopted.

At the nomothetic level, no additional non-work related variables are influential. At the idiographic level, some inferences can be made. Similar to salary, age also has mixed results. Thus, the results are inconclusive regarding the match or mismatch of decisions made during competing layoff implementation techniques. No support for hypotheses 9a or 9b is found.

Partial support is provided for the effects of tenure. A single subject from the

involuntary layoff perspective interpreted tenure positively (indicative of employees with high tenure are more likely to be laid off). A single subject from the voluntary layoff perspective viewed tenure negatively (indicative of an employee with high tenure as less likely to volunteer for a V-RIF). Subsequently, limited support for hypothesis 7a is provided. Hypothesis 7b predicted a positive relationship between tenure and likelihood to volunteer for a layoff, but the opposite of the hypothesized relationship is supported. The result is a mismatch, because the use of tenure in the decision functions during layoffs is positive for involuntary layoffs and negative for voluntary layoffs.

When reviewing idiographic results, education and gender affected two subjects each. There was no impact of gender on the voluntary layoff decision, but men are more likely than women to be selected for an involuntary layoff in 14% of the decisions. Similarly, there was no effect of education on likelihood to be selected for an involuntary layoff, but in 14% of the cases, employees with higher education are more likely to volunteer for a layoff than employees with low levels of education. Accordingly, partial support for hypothesis 8a is found. Although gender is an influential factor for involuntary layoff decisions, the relationship was the opposite of the one proposed in hypothesis 11b. No support is obtained for hypotheses 8b or 11a. Given that education and gender partially affected only one group's decision making process, the result is mismatch, because the selection decision of V-RIF versus IV-RIF on these variables is different.

A summary of the findings in relation to the hypothesis is provided in Table 15[16]. In total, 12 of the 22 main relationships hypothesized in hypotheses 1a-11b were supported. Three relationships proved to the opposite of the hypothesized relationship and the remaining seven relationships were insignificant.

Table 15. Summary of Results

Variable	Relationship with V-RIF	Relationship with IV-RIF	Outcome of V-RIF versus IV-RIF implementation?
	Work Related Variables		
1. Performance	*Negative* [b]	*Negative*	Match [b]
2. Job Satisfaction	*Negative*	*Negative*	Match
3. Salary	[c]	[c]	Inconclusive
4.Organizational Commitment	*Negative*	*Negative*	Match
5. Stress	*Positive*	*Positive*	Match
6.Severance Package	*Positive*	*Negative*	Mismatch
	Non-Work Related Variables		
7. Tenure [a]	*Negative*	*Positive* [b]	Mismatch
8. Education [a]	*Positive*	[c]	Mismatch
9. Age	[c]	[c]	Inconclusive
10.Family Size	*Negative*	[c]	Mismatch
11.Gender [a]	[c]	*Men* [b]	Mismatch

[a] indicates partial support provided from idiographic regression analysis
[b] indicates support for the opposite of the hypothesized relationship
[c] indicates no conclusive results

The last hypothesis involved identification of which variables are most influential to each decision (V-RIF versus IV-RIF) using the work related and non-work related variable divide. It was hypothesized that work related variables are more influential in the decisions regarding IV-RIF than non-work related variables in hypothesis 12b. Support for this hypothesis is obtained, because all of the variables that are significant at the nomothetic level

[16] To support the results, multiple regression analysis was completed for the sample using slightly different interpretations of the variables. Age, tenure, salary, expected severance and family size were all treated as continuous variables, rather than dichotomous (dichotomization is highly recommended for policy-capturing studies). In these slightly altered analyses, the same variables were significant. Thus, the dichotomization did not alter identification of significant variables.

for IV-RIF decisions are work related variables. In comparison, only one out of the five variables that is significant in the V-RIF decision at the nomothetic level is a non-work related variable. As a result, no support for hypothesis 12a is found.

Dyad Comparison

As outlined in Table 16, only 20.9% of profiles received the exact same rating in both the V-RIF and IV-RIF scenarios. Additionally, 35.04% of profiles assessed from the both perspectives were within one rating point of each other. For example, when reviewing the exact same profile, the employee judge selected '6' representing "if I was this employee I would definitely volunteer for a layoff" and the management judge who reviewed the exact same profile selected '5' representing "if I was this employees' manager, most likely I would select this employee to be laid off." In total 55.94% of choices for V-RIF and IV-RIF were within one point of each other (on the predetermined scale of 1-6). Thus, the use of different implementation techniques (in this case V-RIF versus IV-RIF) does result in some mismatches. Over 44% (almost half) of the profiles evaluated from the voluntary versus involuntary layoff perspective had a rating difference of two or more points.

Table 16. Comparing V-RIF versus IV-RIF Ratings of the Same Profile

		IV-RIF rating						Total
		1	2	3	4	5	6	
V-RIF Rating	1	16	14	5	4	7	7	53
	2	14	18	22	23	12	20	109
	3	9	16	9	10	9	2	55
	4	8	26	23	12	20	11	100
	5	8	22	16	29	37	11	123
	6	3	8	5	10	12	10	48
Total		58	104	80	88	97	61	488

In summary, 13 of the 24 hypothesized relationships were empirically supported when tested in the field setting. Three of the results provided support of the opposite of the hypothesized relationship, and eight relationships were insignificant. In the discussion chapter, potential rationale for any hypothesis not supported is addressed.

Chapter 8: Discussions, Contributions and Limitations

There is evidence that the cost reductions and increased efficiencies expected from layoffs have not materialized (Cascio, 1998; Cascio, Young, & Morris, 1997; Lehrer, 1997). One explanation for the lack of success from layoffs stems from the process of how an organization decides which employees to layoff (Iverson et al., 2000). Too often companies are focused on reducing headcount with no consideration for the employee mix that remains. As a result, the company's potential to recover is damaged, because the best people may leave the organization (Robert & Lyle, 1994).

This thesis evaluates competing layoff implementation techniques and provides evidence that if voluntary instead of involuntary layoffs are used, roughly half of the time, a different mix of employees exit the organization. Yet organizations use V-RIFs, because they are perceived as a more humane, efficient, legally defensible and timely method to execute layoffs than IV-RIFs (Dichter et al., 1991). This chapter addresses matches and mismatches when voluntary versus involuntary layoff implementation techniques are used. Plausible explanations for hypotheses not supported are discussed. The implications of the results are explored to instigate future research in this area. Limitations and contributions of the research are presented.

Matches or Mismatches

When evaluating decision made during layoffs, labour force movement matches in V-RIFs and IV-RIFs for over 55% of the employees, as per Figure 6. Specifically, 31.15% of employees are more likely to both volunteer for a layoff *and* be involuntarily laid off.

Additionally, 25.20% of employees are more likely to not volunteer *and* not be selected for a layoff. Combined, these results suggest that regardless of what layoff implementation technique is used, who stays and who leaves is similar for 56.35% of the employees.

Figure 6. Empirical Results Supporting Match or Mismatch

Involuntary Layoff (IV-RIF)	Voluntary Layoff (V-RIF): Leave (volunteer for a layoff)	Voluntary Layoff (V-RIF): Stay (don't volunteer for a layoff)
Leave (select for a layoff)	*31.15%*	*19.26%*
Stay (don't select for a layoff)	*24.39%*	*25.20%*

However, this also means that the decision of who stays and who leaves is different for 43.65% of employees. This finding is consistent with the basic theme presented in this thesis, that under V-RIFs, individuals maximize their own gains and under IV-RIFs, management maximize organizational gains. Differences in management versus employee decisions during layoffs are due to different decision antecedents. If individual gains and organizational gains are divergent, different employees will exit the firm under the opposing layoff implementation strategies. The result is a mismatch. If individual gains and organizational gains are similar, then the same mix of employees would exit the firm, regardless of which implementation technique is used. The result is a match. A slim majority of layoff decisions result in a match when voluntary versus involuntary layoff implementation techniques are evaluated.

In the following sections, a summary of results and the theoretical and practical implications that flow from them are provided for each variable separately.

Matches

In the regression analysis conducted, job performance, job satisfaction, organizational commitment and work related stress are identified as factors resulting in a match when V-RIF versus IV-RIF layoff implementation techniques are used.

Job Performance

Poor performers are more likely to be laid off, regardless of which layoff implementation technique is used. In previous research, organizations trying to downsize poor-performing employees found that employees working well were the ones leaving during layoffs (Knapp, 2001; Mone, 1994; Simone et al., 2004a). The results of this thesis suggest the opposite. The hypothesized positive relationship between job performance and voluntary layoffs is not supported. Instead, poor performers are found to be most likely to volunteer for a layoff.

From a theoretical perspective, the areas of impression management and work-load redistribution might be important to the V-RIF versus IV-RIF debate. There are two plausible explanations for the negative relationship between performance and the likelihood to volunteer for a layoff. One, the same amount of work is redistributed among less employees post-layoff (London, 1996). This results in higher performance demands on surviving employees. Perhaps employees with low job performance believe they cannot manage the post-layoff expectation for higher performance and, therefore opt to self-select out of the employment relationship through volunteering for a layoff. Two, if the voluntary population does not meet the layoff target, then management would involuntarily layoff employees. Poor

performers might think that they are likely candidates for IV-RIF. Volunteering for a layoff could help impression manage or save face for poor performers. These areas are relatively unexplored in the layoff realm. Both can be researched and validated in future research studies. Additionally, the negative relationship between performance and layoffs can contribute to the ongoing debate regarding the nature of the performance – turnover relationship in the turnover realm (as summarized when the performance hypothesis was presented).

From a policy perspective, it is in the organization's best interest for poor performers to exit the firm. Functional turnover is desirable since it results in the exit of substandard performers, which would have a positive effect on organizational performance and outcomes (Arthur, 1994; Dalton, Krackhardt, & Porter, 1981; Koys, 2001; McEvoy et al., 1987; Tsui, Pearce, Porter, & Thpoli, 1997). After layoffs, organizations rely on fewer employees to complete the same, if not more work. The results of this thesis suggest that, regardless of if voluntary or involuntary layoff implementation techniques were used, the layoff resulted in poor performers exiting the firm. Therefore, at a practical level, layoffs result in functional turnover, regardless of if the layoff was voluntary or involuntary.

Job Satisfaction

In a 2002 meta-analysis, job satisfaction was positively correlated with desirable organization outcomes such as customer satisfaction, productivity, profit, and negatively correlated with accidents (Harter, Schmidt, & Washington, 2002). In this thesis, employees who are dissatisfied with their jobs are more likely to volunteer for a layoff and be involuntarily laid off. Therefore, a layoff provides an opportunity for employees who are not

happy with their job to exit the firm, as well as an opportunity for management to eliminate employees with low job satisfaction.

From a theory perspective, similarities between layoff behaviour and turnover behaviour become evident. Job satisfaction is known to decrease turnover intentions (Carnicer, Sanchez, Perez, & Jimenez, 2004; Currivan, 1999; Griffeth et al., 2000; Koys, 2001) and, this thesis provides support for a parallel relationship in the layoff realm. Therefore, the influence of job satisfaction is possibly more universal than expected and spans all forms of turnover (dismissals, quits, layoffs and retirement).

From a policy perspective, organizations must recognize that job satisfaction is dynamic. A unique study on early retirements and job satisfaction was conducted at Bell Systems using a 25-year time span (Howard, 1988). The sample was male employees at the middle management level at Bell Systems. The researcher used simulations at assessment centers to test for motivation, attitudes and personal characteristics of the sample in relation to the desire for voluntary early retirement. Early retirees showed greater discontent with their current jobs and less satisfaction with their careers as a whole, as compared with those who did not retire early. More importantly, job satisfaction was not stable over time, but decreased for the volunteers closer to their voluntary retirement acceptance event. For an organization to gain the benefits associated with the exit of less satisfied employees, it must differentiate between low job satisfaction that is long-lasting (e.g. as a result of a work environment or poor person-job fit) and low job satisfaction that is short-lived (e.g. as a result of the announcement to layoff employees). While it is desirable for dissatisfied employees to exit the firm, efforts to minimize the exit of short-lived dissatisfaction must be considered. This is an area for future exploration.

Organizational Commitment

As hypothesized, employees with high organizational commitment are less likely to volunteer for a layoff and be involuntarily laid off. Employees with high organizational commitment are concerned about the organization's ability to recover from the downsizing, and want to contribute their share to accomplish the organization's goals. They are less likely to volunteer for a layoff. Similarly, it benefits management to retain employees who are willing to go above and beyond their job requirements.

Theoretically, this thesis further validates existing research that organizational commitment and job satisfaction are two distinct constructs (Koys, 2001; Tett et al., 1993). In design, the variables were orthogonally developed and presented. As a result, in half of the profiles, organization commitment and job satisfaction was the same for the employees, and in the other half of the profiles, the two were different. Yet, both have a negative relationship with layoff decisions. In addition, the qualitative data provided in the pilot study identify the distinct interpretation of the two variables. Similar to the turnover realm, job satisfaction and organizational commitment are viewed as distinct concepts in the layoff realm. Therefore, future models developed for the layoff realm should include both constructs.

From a policy perspective, the effect of organizational commitment on layoffs results in desirable exits from the company, under either implementation technique. Therefore, for management, the fear of losing employees who are committed to the company should not be a contributing factor when deciding which layoff implementation technique will be adopted.

Unfortunately, only 56.35% of V-RIF versus IV-RIF decisions result in a match.

Unexpectedly, matches are limited to work related variables only. Perhaps this is one of the reasons why organizations practice and promote voluntary layoffs. Regardless of which layoff implementation technique is used, employees with low job performance, low job satisfaction, and low organizational commitment are the most likely to leave the organization. The result is functional turnover, where substandard performers leave the organization while effective, committed and productive employees remain with the organization (Dalton et al., 1981). This should have positive effects on organizational performance and outcomes (Arthur, 1994; Koys, 2001; Tsui et al., 1997).

Mismatches

Although voluntary and involuntary layoffs have a number of matching decision antecedents, 43.65% of volunteers for layoffs still differ from those in the involuntary layoff population. The resulting mismatch is due to dissimilar interpretation and use of variables such as severance package, work related stress, family size, gender, tenure and education. Thus, a discussion and evaluation of mismatches is pertinent.

Severance Package

Severance pay has a positive relationship with likelihood to volunteer for a layoff and a negative relationship with likelihood to select an employee for a layoff. Additionally, severance pay is the most important antecedent to employee's V-RIF decisions. Specifically, employees who were offered a high severance package are 46% more inclined to volunteer for a layoff. In contrast, management is 6% less likely to select an employee for an involuntary layoff if a high severance package is available to the employee.

In theory, employees are significantly influenced by the amount of their severance package regardless of any other factors like; how happy they are with their jobs, how stressed they are, how well they perform, or what family pressures they have. These results suggest that the notion in turnover research that decision makers are self-interested and attempt to maximize their own gain when making decisions is applicable in layoff research. Thus, the theory of self-interest is applicable across turnover and layoff research, further solidifying the need for an integration of the two research realms. With severance packages significantly influencing 71.43% of the V-RIF decisions, this area needs to be explored further.

In practice, the results suggest that offering different levels of severance package throughout the company results in a mismatch of employee layoffs if voluntary layoffs are used. The Employment Standards Act outlines minimum severance values, but most organizations exceed the minimum required severance payout at a time of layoffs. In fact, professional services firms are promoting employees to negotiate their severance package (Grosman, Nov 15, 2001; Levchuck, 2006). Organizations need to realize that the value of the severance package may be instigating departures that otherwise would not be considered. To minimize mismatches, organizations should consider elimination of the variability in severance packages, by offering a standard formula for calculation of severance package to all employees and attempting to minimize the negotiated variance.

Additionally, from a policy perspective, the minimums determined by ESA standards need to be expanded on to provide employers with a more concrete way to determine severance packages. For example, in Ontario, severance package minimums only apply to layoffs of 50 or more employees within a four week span. If an organization lays off 49 employees, there are no laws determining even a minimum value of the severance packages.

Therefore, stronger legal policies may drive the regulation of severance packages, which in turn, would reduce the variance in severances and the resulting mismatch of V-RIF and IV-RIF decisions.

Work Related Stress

Work related stress has a small but positively correlation with layoff decisions in involuntary layoffs. From a theory perspective, stress increases involuntary layoff intentions, but the relationship may be cyclical. Layoffs are a considered a major work related stressor. The framework examined in this thesis provided an employee's work related stress level as an independent variable and the decision for a voluntary or involuntary layoff as the dependant variable. For the purpose of the match versus mismatch analysis, this evaluation is appropriate. However, theoretically, the causal relationship between work related stress and turnover needs to be examined in layoff setting. Do layoffs cause work related stress? Or does work related stress cause turnover (reminder: layoffs are a form of turnover)? Is this relationship cyclical? Based on the result of this thesis, a number of significant theoretic questions on work related stress can be addressed in the future.

From a policy perspective, stress causes physical, social and psychological problems, which significantly decreases productivity at the workplace. The estimated annual cost of work related stress in the Canadian workplace exceeds $12 billion dollars a year (ILO, 2001). Involuntary layoffs remove highly stressed individuals from the working environment. In contrast, employees experiencing a high level of work related stress are not more likely to volunteer for a layoff. Although the exit of highly stressed employees is desirable for the organization, the use of voluntary layoffs does not eliminate these employees from the workforce.

Family Size

Family size is a significant antecedent for voluntary layoff decisions at the idiographic level for three subjects. The larger the family size, the less likely the employee would volunteer for a layoff. In contrast, there is no influence of the employee's family size in the involuntary layoff decision.

Traditionally, the belief was that management was interested in minimizing interrole conflict, therefore family size would be an influential variable in turnover decisions (Burke, 1988; Greenhaus et al., 1985). Theoretically, there are three potential explanations for the lack of relationship between family size and involuntary layoff decisions that could be researched in the future. First, perhaps management views that employee's obligations to the family and the employer are not in conflict at a time of layoffs. Theoretically, we need to explore why interrole conflict is a predictor of turnover, but not involuntary layoffs. Second, perhaps management is not influenced by family size, since it generally does not affect the employer-employee relationship. In theory, the results suggest that only work related variables are significant predictors of the involuntary layoff decision. Therefore, models of involuntary layoffs can be focused on work related variables only. Last, perhaps management is making assumptions about the family dynamics. For the purpose of this study, family size was identified as a whole number only. If additional information such as family dynamics (dual income, number and ages of dependants, location, mortgage size etc) were provided, the explanations for

the effect of family size on voluntary versus involuntary layoff decisions could change. The relationship between turnover and family size can be explored with these results.

From a practical point of view, organizations adopting the voluntary layoff implementation strategy can expect employees with a large family size to be less likely to volunteer for a layoff, perhaps to reduce the stress levels in their personal lives. Employees could be aware that job loss and consequent unemployment puts strain on a marriage. As a result, the employee desires to remain with the organization for personal security reasons. On the opposite side of the coin, regardless of any other factors, employees with small family sizes are more likely to exit the organization via a voluntary layoff, perhaps because the risks associated with unemployment are isolated to the individual employee. Although management is not influenced by family size in their involuntary layoff decision, the impact of the employee's family size on the layoff decision is partially responsible for a mismatch between V-RIF and IV-RIF outcomes.

Gender

In the idiographic level analysis, this thesis found that two managers were more likely to layoff men than women (the opposite of the hypothesized relationship). A mix of human resource legislation prevents management from utilizing gender as a decision factor when the employee's gender is not a bona fide occupational requirement. Layoff decisions cannot be made on the basis of a protected trait, including an employee's gender (Grossman, 2002). The threat of legal action, as well as stringent employment equity laws might result in reverse discrimination in terms of V-RIF versus IV-RIF.

In the pilot study, gender had no effect on the layoff decision. For the field setting it did. There are two potential explanations for this, and both need to be explored. Firstly, pilot

study participants were Subject Matter Experts (SMEs) educated and experienced in the field of human resources management. It is possible that education and experience reduce gender biases in a layoff environment. Secondly, the format of the gender variable on the profiles was changed. For the pilot study, a single letter identified the employee's gender (M or F), whereas for the field study the entire gender was written out (Male or Female). From a theory perspective, we should explore whether presentation of variables alters their value in the layoff decision making process.

From a policy point of view, it appears that management might be trying to overcompensate for gender in their selection of which employees to layoff when conducting IV-RIFs. Majority groups, such as men, are not in the four protected groups in Canada[17]. The results suggest the possibility of reverse discrimination. Therefore, management might be overcompensating for the risk of laying off more females (who are among the protected groups) at the cost of male employees. The overcompensation and interpretation, as well as training of managers on human resources legislation are all areas that need to be addressed in the V-RIF versus IV-RIF typology.

Education

Education is positively correlated with likelihood to volunteer for a layoff for two subjects at the idiographic level. As a result, when an organization undertakes voluntary layoffs, the most educated employees have a slightly higher probability of volunteering for the layoff. Although this is parallel to the traditionally negative relationship between education and turnover (Cotton et al., 1986; Griffeth et al., 2000; Michaels et al., 1982), education does not affect an organization's involuntary layoff decision.

[17] The four protected groups are: women, people of visible minority, people with disability, and aboriginal peoples

The practical implications of education as an antecedent to the V-RIF decisions, but not the IV-RIF decision are critical. Organizations generally initiate layoffs as a response to changing environmental demands. Thus, the organization experiences a highly dynamic period, where not only human resources are in change, but also product lines, processes, markets etc. may all be in flux. During this change, if the employees with high education are most likely to leave under a V-RIF program, then the organization is left with a mix of human resources that has a lower average education level than the group prior to the layoff. As a whole, the generalizable talent pool in the organization would be reduced under the V-RIF program. In practice, this would reduce the organizations ability to succeed post layoff.

Tenure

In 14% of the profiles reviewed, employees with high tenure are more likely to be selected for IV-RIF than employees with low tenure at the idiographic level; a result opposite to the relationship hypothesized. As a component of human capital, employees with high tenure have high firm specific skillset that is not easily replaceable by the firm. Therefore, on the surface it seems unnatural for an organization to eliminate such talent. However, as per the opening paragraph in this thesis, organizations are increasingly utilizing layoffs as a means to react to dynamic and competitive environments. In this environment, organizations might be more interested in changing the processes or products of the firm, thus might not value the firm specific talent as much as highly generalizable talent. Additionally, employees with high tenure in the organization have more years of experience with the products, processes, norms and culture of the organization than those with low tenure. It might be the products, processes, norms and culture that the layoff was intended to change. Therefore, employees with high tenure might be perceived as lacking the adaptability required for

organizational success post-layoff. Both of these reasons might be valid in assessing the tenure and involuntary layoff relationship and should be explored further.

Theoretically, the results suggest that human capital theory (as measured by education and tenure) may not be influential in layoff decisions. Traditionally, human capital theory measures firm specific knowledge through education and tenure. Tenure is only significant at the idiographic level for involuntary layoff decisions and education is only significant at the idiographic level for voluntary layoff decisions. There is no consistent use or interpretation of education and tenure in the layoff decision. Thus, human capital may not be a consideration during layoffs. With over half of organizations not gaining the desired benefits associated with layoffs (Lehrer, 1997), perhaps the entire notion and value of human capital retention is void during the layoff process. Researchers need to find a way to integrate concepts of human capital into the decision making process.

Inconclusive Results

Pay

Pay is insignificant in the decision making process during layoffs, regardless of how the layoff is implemented. There are two possible explanations for this. One, annual income might be at true labour market value. As a result, change in employment would not change the individual's salary. Two, salary may not have a main effect on layoff decisions, but have an indirect (moderated, mediated or interacting) relationship to the V-RIF versus IV-RIF decisions. Future research can examine the nature of the relationship between salary and the various decision functions that occur at a time of layoffs.

Age

Similar to salary, age also received mixed, thus inconclusive results. The two factors expected to influence the effect of age on V-RIFs were the nature of the employment contract and perceptions of reemployment. While the rationale for the hypotheses was strong, the results remain inconclusive. Rather than testing for main effect of age, there might be an interaction between age and another variable (e.g. salary), or age might moderate the relationship between other variables (e.g. tenure, education) and the decision function. Given the seminal nature of this thesis, it is limited to testing main effects of the model. Future research can be directed to examine non-direct or orthogonal relationships between age and other factors.

Contributions

This thesis provides a strong theoretical argument and supporting empirical evidence that models from turnover research can be adopted into the layoff realm. Traditionally, the distinction between voluntary and involuntary turnover helped researchers and managers alike understand the turnover process (Cotton et al., 1986; Dalton et al., 1981; Griffeth et al., 2000; Hom et al., 1984; Leana et al., 1987; Lee et al., 1999; McElroy et al., 2001; McLaughlin, 1991; Michaels et al., 1982; Mobley, 1982; Price, 1977; Roderick & Jacqueline, 2000). Mobley's Simplified Model of the Causes and Correlates of Turnover (1982) model provided significant predictors of an employee's intentions to stay or leave in the voluntary turnover realm. My dissertation hypothesized and provided strong evidence that with some modification, this model can explain and predict layoffs.

Traditionally, layoffs were considered a form of involuntary turnover; therefore Mobley's model (1982) was never explored in the context of layoffs. Today, layoffs are

implemented in one of two ways. With involuntary layoffs, management selects employees to be laid off, without any input from the employee. With voluntary layoffs, employees are given a choice to volunteer for a layoff. The use of voluntary and involuntary layoff implementation options opens up the opportunity to adopt turnover models into the layoff realm.

I introduced 11 variables proven to affect the voluntary turnover decision (quit, resign) and hypothesized that these same variables also affect the intentions to stay/leave during a time of V-RIF or IV-RIF. The variance explained by the model ranged from 49.8% to 95.4%, suggesting that the modified turnover model incorporates variables that significantly influence the decision functions of employees and management at a time of layoffs. Hence, a bridge between the relatively isolated spheres of turnover and layoffs is established.

Additionally, the results from this thesis demonstrate a need for evaluating layoffs based on implementation techniques. The limited research that exists on voluntary versus involuntary implementation of layoffs was expanded in three ways (Cravotta et al., 2001; Crooker, 1995; Legatski, 1997; Miller, 2002; Simone & Kleiner, 2004b). First, although researchers continue to define laid off employees as "involuntarily" unemployed (Iverson et al., 2000; Latack & Dozier, 1986; Spera et al., 1994), layoff decisions are not all involuntary. As organizations increasingly use voluntary and involuntary layoff implementation strategies, they must realize that these alternative strategies can produce potentially varying outcomes. This thesis provides a comparative analysis of the outcomes associated with voluntary versus involuntary layoff strategies.

Second, layoff research remained focused on organizational antecedents to or individual/organizational outcomes of layoffs (Barrick et al., 1994; Cascio, 1993; Kozlowski et al., 1993; Thornhill et al., 1998). By introducing a composite view of layoffs, this thesis initiates exploration into *individual level* antecedents to the voluntary versus involuntary layoff decision.

Third, our understanding of layoff antecedents, processes and outcomes is largely driven by media or professional literature, with limited studies in academic journals (De Meuse et al., 2004). This thesis adopted a theoretical model and applied controlled and rigorous empirical analysis techniques to evaluate the results. Thus, we can begin to gain an understanding of the effectiveness of voluntary and involuntary layoff implementation techniques and develop theoretical models accordingly.

A reason for scarcity of research in the layoff process is the very nature of layoffs, and the methodology presented in this thesis can assist in overcoming this issue. Ethically, one cannot design a true experiment involving laying off employees for research purposes. Additionally, when a layoff announcement is made, 94% of organizations execute all layoffs within eight weeks (McCune at al, 1988). Given the tight time constraints under which layoff decisions are made and the lack of policy guiding these decisions, gaining access to an environment undergoing layoffs is extremely difficult. Legatski's (1997) attempt to contact organization a few years after the layoff occurred was also unsuccessful, securing a response rate of only 3.2% after multiple contacts with each company were made. Organizations vehemently denied that layoffs or downsizing had occurred and multiple organizations opted out of the study due their involvement with legal battles around their layoff selection decisions. In addition to the time constraints and ethical issues that significantly reduce the

likelihood of studying layoffs in a field setting, the legal aspect adds an additional constraint. If an organization does participate in a study of layoff decisions and the results demonstrate that a variable (e.g. age, gender, education, family size, etc.) is a significant predictor of layoff decisions, organizations might face legal problems as a result of the research itself. If direct estimation techniques are utilized to assess decision functions during a time of layoffs, legal pressures significantly increase the risk of social desirability of the results.

Thus, this thesis overcomes issues with true experimentation and data collection in the layoff realm, since the policy-capturing approach was demonstrated to be applicable in assessing decision functions during a time of layoffs. The methodology allowed for evaluation of 976 profiles, to assess influential factors in the decision making process. This amount of data would be very difficult to obtain using any other methodology. Subjects did not demonstrate any fatigue or exhaustion from reviewing 35 profiles. Additionally, a primary benefit of the use of policy-capturing techniques is that the requirement of a holistic response significantly reduces social desirability response bias. For example, 14.3% of management representatives were significantly influenced by the employee's gender in their IV-RIF decision (i.e., for 2 managers, men were 16% more likely than women to be selected for an IV-RIF). If direct estimation techniques were used to assess the same data it is highly unlikely that management would identify employee gender as a significant factor influencing their decision of who to layoff, given the social desirability and legal implications of such a statement.

A significant policy contribution of this thesis is the empirical support provided for an area that lacks both theory and evidence. Slightly less than half of layoffs result in mismatches when V-RIF is used instead of an IV-RIF (43.65%). When the competing layoff

implementation techniques are used, only 56.35% of the stay versus leave decision match. The statistics demonstrate that organizations do not secure the desired mix of employees who stay versus leave when they introduce V-RIFs. Thereby the match versus mismatch model presented in the introduction is accurate. Although the odds are almost equivalent to a random coin toss, organizations continue to promote V-RIF. The resulting mismatch could likely be a significant contributor to the lack of success organizations experience post-layoff (Cascio et al., 1997; Lehrer, 1997).

Organizations should consider managing voluntary layoff to ensure that the mix of labour movement during a layoff is aligned with organizational expectations and antecedents. Only 36% of companies have a layoff policy to determine selection of who gets the pink slip (Smith & Walker, 2000). Furthermore, 94% of organizations plan and implement layoffs in less than 2 months (McCune et al., 1988). This suggests that a majority of organizations execute layoffs with no policy in place and under severe time constraints. Companies realize that they must make intelligent and legal decisions about which employees to keep and which to let go when facing layoffs, yet, too often, companies are unsure or unaware of the criteria that they utilize for making these decisions (Connell, 2001).

Although there is a need to maintain control of labour force movement, organizations must manage the social desirability of voluntary layoffs, given that voluntary layoffs are seen as a more humane, legally defensible and timely means to implement layoffs (Dichter et al., 1991). The results can be interpreted to suggest two possible actions for organizations undergoing layoffs.

One option is to continue using voluntary layoffs, but develop rules and procedures around employee exits during layoffs. Rather than using voluntary layoffs as a default (because no layoff policy is in place), layoff policies can explicitly outline the rules and regulations around eligibility, severance packages and targets in respect to voluntary layoff decisions. These rules could also involve an awareness of action to be taken if too many or too few employees opt for the voluntary layoff option. This would reduce unexpected or mismatched human resource results of the layoff.

As a second option, if an organization does not develop layoff policies to manage their employee movement during layoffs, is that the use of voluntary layoffs be abolished (given the high mismatch level found in this thesis). By retaining control, the organization adopts a perspective that the result justifies the means to ensure that their internal workforce remains aligned with organization expectations. In lieu of a layoff policy, as per option one, organizations that do not have a means to manage voluntary layoffs should abort the practice entirely. Instead, involuntary layoffs will retain control of employee exits and minimize potential mismatches.

Limitations

Although this thesis is instrumental in developing an understanding of layoff implementation techniques from a practical and theoretical focus, there are certain limitations of the research.

Due to the lack of existing theoretic foundations and the treatment of all layoffs as involuntary, this thesis includes aspects that can be considered exploratory or seminal in

nature. Thus, the framework developed examined hypothesized main effects but, in reality, there might be indirect (moderating, mediating, interacting) effects. Further refinement of the model is desirable.

Given the PC approach to data collection, the number of variables tested had to be limited to ensure respondent overload did not occur. As a result, only 11 variables were assessed. These provided evidence of 72.3% of the variance explained. Additional variables such as those mentioned in the discussion section should be examined.

Any simulated setting is criticized for the lack of realism. I used managers and employees in their field setting and aligned profile development with the norms of the participant's natural environment as active attempt to manage the realism of the task. Additionally, pilot study participants indicated that realism was not a challenge of the study. However, it would be desirable to gain access to an organization undergoing a layoff and evaluate the decision functions used in a real layoff environment when V-RIFs and IV-RIFs are being used, to increase the realism in the results.

The field study was limited to 3 companies. Access to more companies would provide enough data to evaluate if organizational factors (size, revenue, etc) affect decision of V-RIF versus IV-RIF. In the future, duplicating the same research in additional settings would allow for evaluation of macro level factors that influence layoff decisions. This thesis examined V-RIF versus IV-RIF *intentions*, rather than *actual* turnover as a result of either activity. If possible, the measurement of actual turnover as a result of competing layoff implementation techniques should be evaluated.

The wide variance between minimum and maximum values of the standardized correlation coefficients and mixed results for a number of the variables suggests that, to some

extent, decision antecedents vary. An extension of this research in the future can include an evaluation of why these differences exists using a between-subjects analysis. However, for the purpose of this thesis, the reason why subjects might use different decision functions is not as important as the overall recognition of influential variables in voluntary versus involuntary layoff decisions.

Conclusion

By avoiding development of an objective decision rule in determining who gets laid off, the organization is actually forcing others to subjectively control the process (individual managers or human resource department personnel during Involuntary Reduction in Force, or the actual employee during Voluntary Reduction in Force). In the absence of a policy in place, management and human resource departments are developing their own sets of rules and guidelines in determining who to select for a layoff. This thesis introduced a composite view of layoffs, by examining layoffs from both the V-RIF and IV-RIF perspectives. Through focusing on the layoff realm, tactics used to implement layoffs and the results were examined. By contrasting voluntary and involuntary layoff implementation techniques, we begin to judge the effectiveness of different layoff implementation techniques. This evaluation is pertinent to our understanding of layoffs, since research to date has not factored in the V-RIF versus IV-RIF comparison.

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Appendixes

Appendix A – Development of Independent Variables

With policy-capturing, researchers often use two or three values per variable, dependent on their hypothesis. One value is a standard deviation higher than the mean, the second value is a standard deviation lower than the mean, and in cases where a third value is required, the third value is at the mean. The variables outlined in the hypothesis were used orthogonally in the profiles based on the following predetermined rules. Since there are slight alterations in the development of profiles between Phase 1 and Phase 2, first a review of independent variable rules applicable only to Phase 1 are presented. Following that, an outline of rules to develop independent variables that apply only to Phase 2 are provided. Last is a discussion of independent variables created similarly for both phases.

Phase 1 - Pilot study

To combat potential problems of a fully orthogonal design and introduce realism into the profiles created, population data from the 2001 Canadian Census was analysed to develop rules around possible profile assignments. This approach is aligned with the one used by Beatty, McCune and Beatty (1988) where "real world" correlations were used in the profile creation prior to manipulation of variables. After real world correlations were accounted for, manipulations as detailed in each variable still occurred. The assignment of values to random numbers for the variables of age, salary, education and gender followed Appendix G.

For age, gender and education, a single random number generator was used. By identifying what percent of the population belonged to a certain age – gender – education bracket, values were assigned to each profile using a random number generator. The column entitled "random # intervals" identified the range of randomly generated numbers corresponding with a specified age-gender-education mix. For example, any random number generated between 0 and 0.0038 identified a female with less than a high school education in the age range of 20-24 (age was more clearly assigned based on the information provided on the page about the age variable). Similarly, a random number between 0.0038 and 0.0143 represented a female with a high school diploma between the ages of 20-24. Details regarding the assignment of values or categories within each independent are outlined below.

Gender. This was a dichotomous variable, in which 'M' identified male employees and 'F' identified female employees. Men were dummy coded 0, while women were dummy coded 1. Thus, this factor had two potential loadings. However, the population statistics demonstrate a relationship between age and gender in the Canadian population. This correlation was used to create profiles that are within the population parameters as per Appendix G.

Education. This variable appeared to have five values to reduce potential boredom of participants, but was dummy coded into three potential classifications; High school or less (below average education), undergraduate studies or college diplomas (average education), university, including bachelors, masters or doctorates (above average education). The 2001 population census identified the highest educational attainment of the population. 16.8% of the population possessed no degree, certificate or diploma. Additionally, 25% of the population had a high school graduation certificate. Comparatively, 13.7% of the population

have a trade certificate and 19.8% possess college diploma. The remaining 24.6% secured a university degree. The assignment of education to randomly generated numbers was aligned with these population figures. Those profiles below average were dummy coded as -1, average were dummy coded 0, above average were dummy coded 1 for this variable.

Age. Age was represented as a whole number with multiple values. Statistics Canada classifies employees in five main categories when assessing labour force characteristics by age; 20-24, 25-34, 35-44, 45-54, and 55-65. Due to mandatory retirement at the age of 65, no classification for full-time workers above the age of 65 is defined. A random number *(rn)* generator was used within age brackets to develop a mathematical means to change the random number to a whole number within each range. By using ranges, I hoped to reduce boredom and make the age categories less obvious. For the youngest age category, 20+ (*rn* *4) provided a range of ages 20-24. For the remaining ages, the mathematical equation of 25+ (*rn* *9), 35+ (*rn* *9), 45+ (*rn* *9), 55+ (*rn* *9) provided ranges of 25-34, 35-44, 45-54, 55-64 respectively. Thus, the average in each range was 22, 29.5, 39.5, 49.5 and 59.5. Any profile assigned an age below average on the age range was dummy coded -1, while any profile assigned an age higher than the average on the age range was dummy coded 1

Tenure. This was expressed in terms of years of experience in the company. Similar to the variables already discussed, there are some practical limitations within the tenure variable that must be considered. For example, it is impossible for a 23 year old to have 24 years of tenure within a company. Additionally, tenure and age are highly correlated, so there had to be some practical alignment of these variables to increase the realism of the profiles (Groot and Vernbernie, 1997; OECD 1993). Since the Census did not measure tenure, the Labour Force Survey was mined for this information. The Labour Force Survey estimates employment and unemployment data on a monthly basis via a questionnaire that samples approximately 100,000 individuals in Canada. This represents roughly 2% of the labour force population. To calculate average age and tenure, labour force data from 2003 was reviewed (Appendix H).

Each age group had a mean job tenure and standard deviation as calculated using descriptive statistical analysis in SPSS. A numerical value to represent 'below average tenure' rating in the profiles was obtained by calculating the average tenure and reducing it by half of the standard deviation in the age range. Similarly, 'above average tenure' was determined by calculating the average tenure and increasing it by half the standard deviation for the age bracket. To complete this, another column of randomly generated numbers between 0 and 1 was added to the database. A random number less than 0.5 resulted in the profile being assigned the low tenure value in their age bracket and the assignment of dummy code -1. A random number greater than 0.5 resulted in the assignment of the high tenure value in their age bracket and the assignment of dummy code 1. Tenure was presented as an integer identifying years of experience in the company.

Salary. There are certain conditions that salary assignment must abide by. One, the Employment Standards Act's (ESA) in Canada is provincially mandated and covers a wide range of subjects affecting the employee-employer relationship. These include minimum wages, hours of work, equal pay etc. In Ontario in July 2005, minimum wage was $7.15 an hour. This suggests a minimum annual salary of $13,942.50.

Two, salary is highly correlated with education levels, gender, and age. As per Appendix G average salary per person is established. Given that the hypothesis is based around high versus low salary differences, this variable is dichotomous within each range. This use of ranges might also prevent the variable from being perceived as too obvious. Within each assignment of Age-Gender-Education a random number generated was used to assign a high or low pay classification within the pay ranges. A randomly generated number of less than 0.5 resulted in an assignment one standard deviation below average the average salary level and was dummy coded -1. Similarly, a randomly generated number of greater than 0.5 resulted in an assignment one standard deviation higher than the average salary level and was dummy coded 1. For the sake of visual simplicity within the profiles, the annual salary determined was rounded to the nearest $100.

Phase 2 - Field Setting

The five variables deemed to be intercorrelated in a natural environment as manipulated in Phase 1 are age, gender, salary, tenure and education. In order to create profiles that were realistic for Phase 2 (field study) a Human Resources person within each company was asked to provide an awareness about the average and range of salary, tenure, education and age of the employees for each organization participating in the study. These were used to develop the profiles as per the criteria outlined below. The only independent variables not manipulated based on field specific data was that of gender.

Gender. This was a dichotomously coded variable where "Male" represented a male employee and "Female" represented a female employee. Although the pilot study included intercorrelations in Canadian population statistics between gender, education, salary and age, respondents from field settings indicated that gender was not correlated to salary, age or education of employees in their organization.

All organizations in the study suggested their company employed a ratio of men to women representative of the labour market dynamics. According to Statistics Canada in 2005 (Statistics Canada, CANSIM, Table 282-0002), roughly 5.0 million females were in the full time labour force as compared to 7.2 million males. Thus, the labour force dynamics in Canada suggest that 41% of participants in the labour force are women and 59% are men. Therefore when calculating the ratio of males versus females in the policy-capturing profiles, a random number generator was used. Any random number less than 0.41 resulted in the assignment of a "Female" profile (dummy coded 1), while a random number generated greater than 0.41 resulted in the assignment of a "Male" profile (dummy coded -1).

Salary. Each participating company was asked the average annual salary and the range of salaries in their organization. Respondents provided this information rounded to the nearest thousand dollars (Canadian currency). To prevent the variable from being perceived as obvious, ranges of the variable were used (Aiman-Smith, 2002). Similar to techniques employed in the pilot study, a random number generator was used within salary brackets to develop a mathematical means to change the random number to a whole number within each organization. The mathematically calculated random assigned salary was then rounded to the nearest hundred dollars for visual simplicity. By using ranges, I hope to reduce boredom and

make the salary categories less obvious. Any profile assigned a salary below average on the salary range was dummy coded -1, while any profile assigned a salary above average was dummy coded 1. Thus, this factor had two potential loadings, one below average and one above.

Education. Education levels vary by job and organizational requirements. Thus, each organization was asked to provide information regarding the percent of employees that fall into each education level; high school or less, trades, college, university undergraduate or university graduate categories. A random number generator allowed for assignment of education levels in an orthogonal means that was still realistic for each organization. Values lower than the average education level were dummy coded as -1, values at the average education level of employees in the organization were dummy coded as 0 and values greater than the average level of education of employees in the organization were dummy coded as 1.

Tenure. Average tenure levels vary from organization to organization. For example, McDonalds might have very low tenure on average versus NASA which might have very high tenure due to the nature of the business and the employment structures of the company. Therefore, representative from each organization were asked to indicate the average tenure of employees as well as the range of tenure of employees in their firms.

A random number generator was used to create a range of tenure values aligned with each organizations average and ranges. A random number less than 0.5 resulted in the profile being assigned the low tenure value in their age bracket and the assignment of dummy code -1. A random number greater than 0.5 resulted in the assignment of the high tenure value in their age bracket and the assignment of dummy code 1. Tenure was presented as an integer identifying years of experience in the company.

Phase 1 & 2 Common Independent Variable Development

The remaining variables do not have readily associated information in the population or field settings available, therefore were developed in a purely random and orthogonal manner for both the pilot study (phase 1) and the field study (phase 2) as per the rules outlined below.

Family Size. To determine what family size should be provided in the profile, data from Statistics Canada was evaluated. Based on the most recent information I could find, the average family size in Canada in the year 2000 was 3.0 persons (Catalogue no. 91-213-XPB). Using a random number generator each profile was assigned a random number (0-1). To manipulate that random number into a meaningful family size, each quarter increment (0.25) in the random number generator resulted in the assignment of a value 1,2,4 and 5 respectively, resulting in a range of family size from 1-5, while maintaining an average of 3.0 persons per family. Any value less than 3 was dummy coded -1 to represent a small family size. Any value greater than 3 was dummy coded 1 to represent a large family size. Due to the complexity of assessing 35 profiles, only the mandatory information (such as family size) was provided. This was presented as an integer. There was no clarification provided of the mix of spouse and children in the number provided.

Severance Package. Given that the hypothesis is based around high versus low severance

package differences, this variable is dichotomous. Severance pay might range from a minimum ESA mandate of 2 weeks pay (representing 3.8462% of annual salary) to a high of six months pay or more (over 50% of annual salary). The Employment Standards Legislation ties severance pay with tenure as per Appendix J.

As a result, payment for the minimum notice period given the profiles tenure and salary, multiplied by an additional 5% of the salary identified a low severance package payout. A random number generated less than 0.5 resulted in the calculation of a low severance package payout and was dummy coded -1. Payment for the minimum notice period given the profiles tenure and salary, multiplied by an additional 25% of the salary identified a high severance package payout. A random number generated greater than 0.5 resulted in the calculation of a high severance package payout and was dummy coded 1. Severance payout was presented as a real dollar value for each profile.

Job Performance. Only the last performance review rating was provided to isolate the decision function to the most current employment situation. This was presented in a dichotomous form during the pilot study, with the option of the employee either performing above average, or below average on their last performance review. Any value less than 0.5 in the random number generation resulted in an assignment of a below average last performance review (dummy coded -1), whereas any value more than 0.5 resulted in an above average rating (dummy coded 1).

Based on the results of the pilot study, Subject Matter Experts suggested that the use of a dichotomous coding for job performance was unrealistic (see Qualitative Analysis section of the Pilot Study Results). Therefore, this variable was modified from a dichotomous variable to polynomial variable. Using a random number generator, any value less than 0.25 resulted in the assignment of low job performance (dummy coded -1), any value greater than 0.75 resulted in the assignment of high job performance (dummy coded 1), while any value between 0.25 and 0.75 was deemed average performance for the field settings (dummy coded 0).

Job satisfaction. Using Johns and Saks (2001) concept of overall job satisfaction, profiles included either a satisfied or dissatisfied overall feeling that the employee has towards their job. For management profiles this was described as a perceived feeling, for example: "overall, this employee seems pretty satisfied with the job", whereas employee profiles was more definitive, for example: "Overall, you are pretty satisfied with your job". Any value less than 0.5 in the random number generation resulted in an assignment of a low job satisfaction (dummy coded -1), whereas any value more than 0.5 resulted in high job satisfaction (dummy coded 1).

Organizational Commitment. This was presented as a dichotomous variable. Employees were identified as demonstrating high or low commitment to the company, as a global measure of organizational commitment. Any value less than 0.5 in the random number generation resulted in an assignment of a low level of organizational commitment (dummy coded -1), whereas any value more than 0.5 resulted in a high level of organizational commitment (dummy coded 1).

Stress. This was also presented as a dichotomous variable. Employees were identified as

demonstrating high or low work related stress, as a global measure of work related stress. Any value less than 0.5 in the random number generation resulted in an assignment of a low level of stress (dummy coded -1), whereas any value more than 0.5 resulted in a high level of stress (dummy coded 1).

Dependent Variables

For both dependant variables, a Likert-style scale was adopted instead of a dichotomous yes/no scale. The use of a scale to assess likelihood to volunteer for a V-RIF as compared with likelihood to be selected for an IV-RIF allows for neutral judgements, introduces variability in the results and permits analysis of relatively fine distinctions between profiles (York 1989).

Employee decision to volunteer for a V-RIF. This was asked in the form of a question at the end of each profile. "If you were the person in this profile, what is the likelihood that you would contact either management or the human resource department to volunteer for a layoff?" The participant then answered this question using a Likert scale, with a series of options (1-6). 1 was identified with "definitely would not want to volunteer for a layoff", 6 was identified with "definitely would volunteer for a layoff".

Management decision of who to select for an IV-RIF. This was asked in the form of a question at the end of each profile. "If you were the manager of the person in this profile, what is the likelihood that you would select them for a layoff?" The participant then selected an answer using a Likert scale, with a series of options (1-6). 1 was identified with "definitely would not want to layoff", 6 was identified with "definitely would want to layoff".

Control Variables

Personal experience with a layoff. Participants (judges) were asked if they have been laid off in the past, and if so, they were asked to list the years that they experienced a layoff. Beside each layoff, they were asked to identify if the layoff was voluntary or involuntary. This will help control for experience with layoffs, and the frequency of layoffs. No change is expected with layoff experience.

Decision making during layoffs. Participants (judges) controls also included experience executing layoffs themselves in the past, to identify if the judges are introducing historical or past experience judgements into their decision. This will be controlled for during the data analysis phase if a sizeable number of participants have actually had to execute layoffs in the past. No change is expected with layoff experience.

Judge demographics. Participants (judges) were asked basic demographic questions (e.g. age, gender, tenure, family size, education) and these demographics will later be controlled to determine if the judges' demographics are influential in their interpretation and decisions made during this exercise. No influence is expected because each profile is allocated an age, gender, tenure, family size and education. Thus, no interference of judges' demographics is

probable. Controlling for these variables is simply a means to qualify that the judge's variables do not impact the results of a policy-capturing approach.

Appendix B – Field Study: Near Zero Correlations for the Field Study Correlations of Dummy Variables

	Gend	FamS	Educ	JobP	JobS	Strs	Age	Ten	Pay	Svrc	OrgC
Gend	1.00										
FamS	-0.08	1.00									
Educ	0.06	0.04	1.00								
JobP	0.04	-0.01	-0.03	1.00							
JobS	0.06	-0.12	0.03	-0.01	1.00						
Strs	-0.04	-0.01	-0.02	0.07	-0.03	1.00					
Age	0.01	-0.02	0.02	0.01	-0.04	-0.04	1.00				
Ten	-0.01	-0.00	-0.02	-0.03	-0.07	0.03	-0.02	1.00			
Pay	-0.04	-0.06	0.13	-0.04	-0.02	-0.00	0.04	-0.01	1.00		
Svrc	-0.07	-0.03	0.09	-0.04	0.01	0.08	0.03	-0.02	0.09	1.00	
OrgC	0.02	0.04	-0.03	-0.04	-0.06	-0.06	-0.05	0.00	-0.02	-0.01	1.00

Appendix C – Sample Consent Form

Evaluating Predictors of Turnover

Your organization has selected you to participate in a study by Nita Chhinzer as part of her PhD thesis requirement (specialization: Human Resources Management). Your participation in this study will help determine factors that influence employee's decisions or management's decisions regarding employment.

This study is being conducted across multiple locations, with three major firms involved. Therefore, the decisions and situations provided in the study are simulated to represent standards in the business world, and are not explicitly linked to your organization in any meaningful way. The information you provide for this project will be kept completely anonymous. Only aggregate level data will be reported (averages and percentages across groups of participants). No information that might identify you is required.

By completing the profile assessment and responding to the questions you are giving consent to your participation in this project. You have the right to withdraw at any time and have the right to refuse answering any questions you like.

This research project requires 3 steps and takes an average of 25 minutes to complete.

Step 1. *Read the simulated company description and assess 6 trial employee profiles. You must complete this step to ensure that your evaluation of the full employee profiles is statistically reliable and valid.*

Step 2. *Complete the full employee profile assessment*

Step 3. *Complete the single page demographic questionnaire*

Once the profile assessment is complete, simply place the results in the envelope attached, seal it and return it to the appropriate contact person in your organization (Mr/Mrs. XXX: 416.###.####).

If you have any questions on the study, content or delivery process of the project, please contact Nita Chhinzer. The study is approved by McMaster Research Ethics Board (MREB). Questions or issues with the ethics of the study can be directed to the researcher, or the Office of Research Ethics (905.525.9140). Thank you for participating in this project.

Regards,

Researcher: Nita Chhinzer (MBA, PhD*)
Human Resource Management
DeGroote School of Business, McMaster University
Phone: 416.857.3570 Email: chhinznn@mcmaster.ca
** (PhD status is ABD = All But Dissertation)*

Appendix D – Semi-Structured Interview Questions (Phase 1)

Questions for qualitative component – Structured Interview

1. How long did the forms take you to fill out?
2. Did you have any hesitancy in answering these questions?
3. Did the cover page help convince you that this was a scientific study, not a management study?
4. Do you think the number of profiles was too high, too low, just right?
5. Do you think the profiles gave you enough information to make your decision?
6. Is there anything that would have helped you make your decision that you would like to add to the profiles?
7. Was anything unclear or inconsistent?
8. Is there anything you would like to add?

Appendix E – Individual Participant Summary Statistics

Individual Participant Mean, Standard Deviation and Range

Participant	Mean	Std. Deviation	Minimum	Maximum
1	3.97	1.361	1	6
2	3.20	1.694	1	6
3	4.34	1.211	2	6
4	3.83	1.424	1	6
5	3.14	1.089	1	5
6	3.83	1.723	1	6
7	4.39	1.358	2	6
8	3.56	1.812	2	6
9	3.32	1.093	1	5
10	4.17	1.175	2	6
11	3.66	1.798	1	6
12	2.65	1.721	1	6
13	3.74	1.245	2	5
14	2.03	1.272	1	4
15	3.29	1.384	1	6
16	4.23	1.416	1	6
17	3.69	1.605	1	6
18	3.20	1.762	1	6
19	3.43	1.170	1	6
20	3.51	1.772	1	6
21	3.44	1.182	1	6
22	4.32	1.918	1	6
23	3.12	1.771	1	6
24	3.89	1.451	1	6
25	3.06	1.083	2	5
26	3.65	1.412	1	6
27	3.29	1.506	1	6
28	2.94	2.114	1	6

Appendix F – Split Half Reliability

Participant	Split half	R	R^2	Std. Error of the Estimate	Difference in R Sq.
1	1	.954	0.910	0.662	
	2	.946	0.895	0.806	0.015
2	1	.892	0.795	1.304	
	2	.876	0.767	1.364	0.028
3	1	.980	0.961	0.376	
	2	.839	0.703	1.228	0.258
4	1	.871	0.758	1.359	
	2	.910	0.828	0.892	-0.07
5	1	.921	0.849	0.727	
	2	.962	0.925	0.525	-0.076
6	1	.947	0.896	1.143	
	2	.983	0.966	0.462	-0.07
7	1	.993	0.987	0.281	
	2	.837	0.700	1.182	0.287
8	1	.923	0.852	1.343	
	2	.854	0.729	1.311	0.123
9	1	.953	0.908	0.577	
	2	.919	0.844	0.798	0.064
10	1	.888	0.789	0.985	
	2	.917	0.840	0.779	-0.051
11	1	.919	0.844	1.081	
	2	.855	0.731	1.271	0.113
12	1	.906	0.821	1.330	
	2	.871	0.758	1.527	0.063
13	1	.931	0.867	0.865	
	2	.918	0.843	0.775	0.024
14	1	.892	0.795	1.035	
	2	.748	0.560	1.327	0.235
15	1	.985	0.970	0.462	
	2	.993	0.986	0.243	-0.016
16	1	.973	0.947	0.688	
	2	.989	0.977	0.299	-0.03
17	1	.965	0.931	0.850	
	2	.856	0.733	1.249	0.198
18	1	.969	0.940	0.874	
	2	.919	0.844	1.042	0.096
19	1	.864	0.746	1.051	
	2	.963	0.928	0.509	-0.182
20	1	.981	0.963	0.614	
	2	.957	0.916	0.828	0.047
21	1	.963	0.927	0.673	
	2	.966	0.934	0.399	-0.007
22	1	.961	0.924	0.927	
	2	.940	0.884	1.206	0.04
23	1	.985	0.971	0.611	
	2	.971	0.943	0.697	0.028
24	1	.838	0.703	1.237	
	2	.912	0.832	1.152	-0.129
25	1	.989	0.979	0.244	
	2	.979	0.958	0.424	0.021
26	1	.857	0.734	1.498	
	2	.873	0.762	1.048	-0.028
27	1	.966	0.933	0.745	
	2	.978	0.956	0.512	-0.023
28	1	.987	0.973	0.584	
	2	.977	0.954	0.799	0.045

Appendix G – Population Correlations Uses to Develop Phase 1 Profiles

Population Correlations between Age, Gender, Education, and Salary of Full Time workers, Census 2001 *Modified from Statistics Canada Census 2001, 97F0019XCB2001002*

Age	Gender	Highest Level of Schooling Completed	% of sample	Random # interval	Low Salary	High Salary
20-24	F	Less than high school	0.0038	0.0038	13048	19572
		High school grad or some post secondary	0.0105	0.0143	14608	21911
		Trades certificate	0.0026	0.0169	15666	23498
		College	0.0067	0.0236	18110	27165
		University	0.003	0.0266	21217	31825
	M	Less than high school	0.0088	0.0355	16633	24950
		High school grad or some post secondary	0.0157	0.0512	17943	26914
		Trades certificate	0.0046	0.0557	21327	31990
		College	0.0049	0.0606	21820	32731
		University	0.0019	0.0625	25329	37993
25-34	F	Less than high school	0.0079	0.0704	18374	27560
		High school grad or some post secondary	0.0203	0.0907	22232	33347
		Trades certificate	0.009	0.0997	21195	31793
		College	0.0267	0.1264	25020	37530
		University	0.0345	0.1609	33370	50055
	M	Less than high school	0.018	0.1789	25206	37809
		High school grad or some post secondary	0.0339	0.2128	28454	42681
		Trades certificate	0.0204	0.2331	31315	46972
		College	0.0265	0.2597	33205	49808
		University	0.0339	0.2935	43795	65693
35-44	F	Less than high school	0.0181	0.3116	21134	31702
		High school grad or some post secondary	0.0364	0.3481	25837	38755
		Trades certificate	0.0131	0.3612	24533	36800
		College	0.0337	0.3949	30242	45362
		University	0.0337	0.4286	42910	64365
	M	Less than high school	0.0322	0.4608	30233	45349
		High school grad or some post secondary	0.0438	0.5046	35334	53001
		Trades certificate	0.0337	0.5383	37187	55781
		College	0.0347	0.573	42302	63453
		University	0.0445	0.6175	61444	92165
45-54	F	Less than high school	0.0195	0.637	22014	33021
		High school grad or some post secondary	0.0325	0.6695	27200	40800
		Trades certificate	0.0107	0.6802	25632	38448
		College	0.0253	0.7055	31361	47042
		University	0.0304	0.7358	43399	65099
	M	Less than high school	0.0302	0.766	32245	48367
		High school grad or some post secondary	0.036	0.802	38421	57631
		Trades certificate	0.0279	0.8299	39457	59186
		College	0.0246	0.8545	45253	67879
		University	0.042	0.8965	65759	98639
55-64	F	Less than high school	0.0102	0.9068	20992	31487
		High school grad or some post secondary	0.0091	0.9159	26024	39036
		Trades certificate	0.0035	0.9194	24637	36956
		College	0.0071	0.9265	29859	44789
		University	0.0074	0.9339	41859	62788
	M	Less than high school	0.0195	0.9534	30952	46427
		High school grad or some post secondary	0.012	0.9654	37562	56343
		Trades certificate	0.0118	0.9772	37885	56827
		College	0.0075	0.9848	44387	66580
		University	0.0152	1	70571	105856

Appendix H – Labour Force Survey Results

Average Tenure Information, Mined and Modified from the Labour Force Survey

	Job tenure (years)				
Age group of respondent	N	SD	Mean Job Tenure	High Tenure	Low Tenure
20 to 24	5230	1.75	1.81	2.68	0.93
25 to 34	5725	3.69	3.23	5.07	1.38
35 to 44	7785	6.52	7.18	10.44	3.91
45 to 54	8554	7.48	10.76	14.50	7.02
55 to 64	4587	7.46	11.98	15.71	8.25

Appendix I – Pilot Study: Near Zero Correlations Between Dummy Variables

Intercorrelations of Dummy Coded Variables

	JobP	JobS	OrgC	Strs	Educ	Gend	Age	Pay	Svrc	Tenure
JobS	0.01									
OrgC	-0.07	0.01								
Strs	0.01	0.04	0.01							
Educ	-0.05	-0.05	-0.04	0.03						
Gend	0.12	0.01	0.03	0.01	-0.11					
Age	-0.04	-0.02	0.03	0.02	-0.12	0.06				
Pay	0.03	-0.05	-0.07	-0.06	-0.06	0.05	-0.02			
Svrc	-0.08	0.08	-0.02	-0.05	-0.05	-0.02	0.09	-0.06		
Tenure	0.03	0.02	-0.03	-0.02	-0.05	-0.10	0.00	0.00	0.03	
FamS	-0.02	0.02	0.06	0.01	-0.04	0.11	-0.02	-0.03	0.00	0.05

Appendix J – Employment Standards Act

Employer notice period

57. The notice of termination under section 54 shall be given,

(a) at least one week before the termination, if the employee's period of employment is less than one year;

(b) at least two weeks before the termination, if the employee's period of employment is one year or more and fewer than three years;

(c) at least three weeks before the termination, if the employee's period of employment is three years or more and fewer than four years;

(d) at least four weeks before the termination, if the employee's period of employment is four years or more and fewer than five years;

(e) at least five weeks before the termination, if the employee's period of employment is five years or more and fewer than six years;

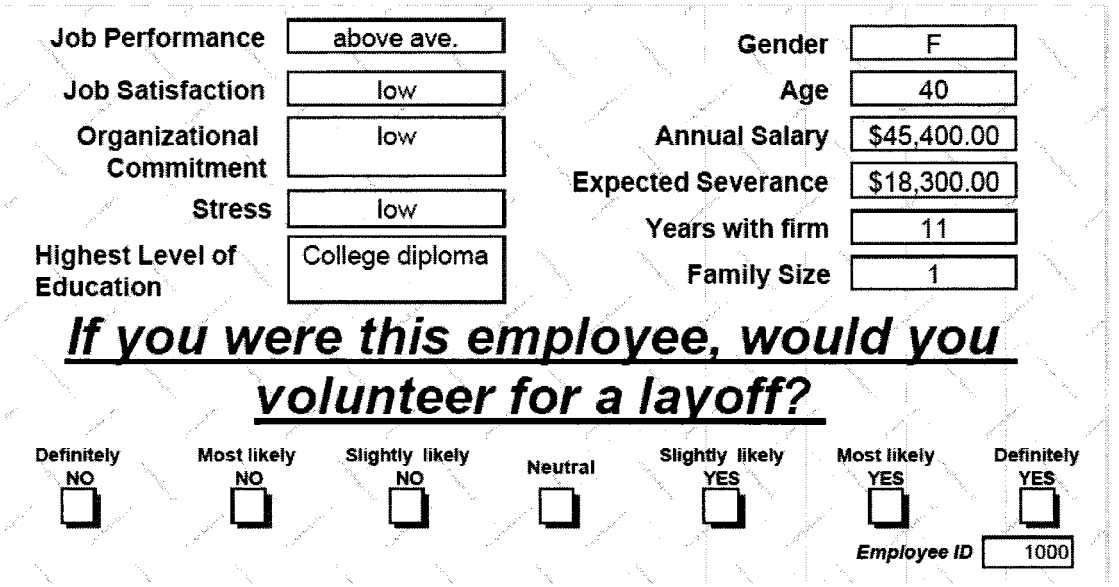
(f) at least six weeks before the termination, if the employee's period of employment is six years or more and fewer than seven years;

(g) at least seven weeks before the termination, if the employee's period of employment is seven years or more and fewer than eight years; or

(h) at least eight weeks before the termination, if the employee's period of employment is eight years or more.

2000, c. 41, s. 57.

Appendix K – Sample Profile (Pilot Study)



Appendix L – Sample Instructions to Field Study

Imagine that you are working for a company in the <XYZ> sector with <XXX> employees. Due to recent economic and financial constraints, this company recently realized that they would have to reduce headcount by <XXX * 0.21) people. To be fair, management has decided it would first allow people to volunteer for a layoff.

Unfortunately, the company also announced that if the volunteer population does not meet the projected headcount reductions, than employees will be involuntarily let go (with the exit incentive paid out) until the projected reductions occur.
All exits have to happen within the next 8 weeks.

Attached are sample profiles of employees that currently work for the organization in a consultant capacity. Your task is to imagine you are the person in each profile and try to determine what the likelihood each employee profile volunteering for a voluntary exit package would be.

ASK YOURSELF: If you were the person in this profile, what is the likelihood that you would contact either management or the human resource department to volunteer to leave the company?