LAID OFF. . .THEN WHAT?: A STUDY OF FACTORS

PREDICTING REEMPLOYMENT FOR

DISPLACED WORKERS

by

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B.Ed., University of British Columbia, 1977

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Faculty

of

Education

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SIMON FRASER UNIVERSITY

April 1995

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Laid off...then what?: A study of factors predicting

reemployment for displaced workers

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ABSTRACT

This study was conducted to identify factors predicting the employment status of displaced workers two months after the closing of a food-processing plant where they worked. Questionnaire packages were completed by 75 workers (49% male, 51% female) the day prior to the plant closure. Seventy-three of these participants (97%) were successfully contacted two months later for a follow-up telephone interview. The questionnaire packages included a standardized personality inventory (the NEO Five-Factor Inventory) as well as measures of financial and social coping resources, work-role saliency, job search self-efficacy, and contextual-demographic variables. At follow-up, 47% of the participants were reemployed; 33% were involved in or registered for retraining (including 11% who were also working); 14% were unemployed, but actively seeking work; and 18% had removed themselves from the labour market for a variety of reasons including pregnancy, health problems, and early retirement. A significant canonical function was derived using discriminant analysis. Work-role saliency, openness to experience, conscientiousness, extraversion, tenure, and ethnicity, were identified as the most significant predictors of employment status at follow-up. Further research with a larger number of participants is recommended to determine whether these are reliable predictors of employment outcome for displaced workers.

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Reemployment for Displaced Workers

Involuntary job loss is an urgent problem, on the increase, and costly both

financially and psychologically. It affects individuals, families, organizations,

communities, and our national economy. Research has shown that shorter

periods of unemployment correlate with decreased psychological distress

(Leana & Ivancevich, 1987). Reducing the length of unemployment for

displaced workers is also desirable from the financial perspective of both

individuals and society.

Several theories have been used in discussions of employment, involving

work adjustment, person-environment fit, values and needs, life roles,

developmental stages, and personality types. Such theories have developed out

of clinical and experimental work in diverse specialties including counselling,

clinical, industrial, and organizational psychology. These theories have seldom

benefitted from interdisciplinary comparisons or collaboration, and have often

been exclusively concerned with new career entrants or voluntary career

changers.

Recently, due to changes in the economy and labour market conditions,

many adults in midcareer have been laid off or forced to move to a different job within their organizations (Magiera-Planey, 1990). Some of these adults apparently adjust more satisfactorily than others to such a career change (Gottschalk & Maloney, 1985; Kanfer & Hulin, 1985; Kinicki & Latack, 1990; Latack & Dozier, 1986).

Not all involuntary terminations result in unemployment--some workers use their notification period to secure new work. Displaced workers, however, often experience longer periods of unemployment than workers who voluntarily leave their jobs and are less likely to report being "better off" in a new job (Gottschalk & Maloney, 1985). Career counsellors, educators, government program developers, union representatives, and human resource managers share the responsibility for facilitating expedient, successful career transitions for these displaced workers (Bowman, Couchman, & Cole, 1994; Leana & Ivancevich, 1987).

In this study the following question was addressed: What are some significant predictors of reemployment for adults after an involuntary job loss in midcareer? I proposed to identify some of these factors by surveying a group of food-processing workers affected by the closing of their plant. By considering personality, work-role saliency, job search self-efficacy, coping resources, and contextual-demographic variables, it was hoped that a contribution could be made to the limited body of literature that currently exists regarding the

reemployment of displaced workers.

<u>Literature Review</u>

Choosing appropriate literature to review for this study was not a straightforward task. To gain an adequate understanding of the plight of displaced workers, I consulted journals and books from such diverse fields as applied psychology, career counselling, economics, family counselling, gerontology, human resources management, labour relations, organizational behaviour, the psychology of personality and individual differences, and social psychology. Each of these fields is typically concerned with separate aspects of the experience of unemployment or job displacement.

For example, career counsellors often assess interests, values, personality characteristics, and the relative importance of various life-roles, as they help their displaced clients to formulate appropriate new career goals. Clinical and counselling psychologists, on the other hand, are often concerned with the changes in psychological well-being that result from major life events such as job loss. Industrial and organizational psychologists, in their work with displaced workers, recognize the contribution of demographic, contextual, and economic factors to successful reemployment. Outplacement counsellors and job club facilitators provide programs and services to equip displaced workers with effective job search strategies to expedite their reemployment.

The literature review, and this author's experience as a career counsellor,

led to the identification of five key factors which would potentially influence the reemployment of displaced workers: personality characteristics, work-role saliency, job search self-efficacy, coping resources, and contextual/demographic variables (such as age and tenure). A brief summary of the recent literature regarding each of these factors follows.

Personality (The five-factor model). There has been ongoing controversy about the relevance of personality characteristics to employment issues. However, ample evidence exists that both formal and informal assessments of personality are widely used in employee selection and performance ratings (Day & Silverman, 1989). Individual differences and personality characteristics form the basis of both Holland's (1985) vocational theory of person-environment fit and the Myers-Briggs typology (Myers & McCaulley, 1985). Personality also contributes to needs (Costa & McCrae, 1988), motivation (Kinicki, 1989), interpersonal skills (Hogan, Hogan, & Gregory, 1992), social support (Latack & Dozier, 1986), coping styles (Kinicki & Latack, 1990), self esteem (Kanfer & Hulin, 1985; Rynes & Lawler, 1983), and locus of control (Prichard, Brown, & Kelly, 1986), all of which have implications for displaced workers (Leana & Ivancevich, 1987).

It seems, then, that personality is a common thread connecting many variables associated with satisfactory career transition. To the extent that personality characteristics are stable lifelong traits (McCrae & Costa, 1990), the

experience of layoff should not affect them. Identifying some key personality

traits of displaced workers, therefore, should help to predict what those workers

will do after their jobs end.

In recent years there has been increasing support for a five-factor model

of personality (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991). The

five dimensions of the model are neuroticism, extraversion, openness,

agreeableness, and conscientiousness. People high in neuroticism may

experience more negative emotions such as anxiety and depression; low

neuroticism is associated with emotional stability. High extraversion, in the five-

factor model, is typical of high-spirited, socially-active people who thrive on

excitement and stimulation. Those high in openness are creative, intellectually

curious, and unconventional; they are open to new experiences.

Agreeableness, like extraversion, is a dimension primarily concerned with

interpersonal orientation. Highly agreeable people are usually cooperative and

altruistic. Conscientiousness can encompass self-control and determination and

has been associated with academic and occupational achievement (Costa &

McCrae, 1992).

McCrae and Costa (1990), in longitudinal research with adults, have

located both the Holland and Myers-Briggs typologies, both of which are

commonly used in career counselling, within the five-factor model of personality.

Neither the Holland nor Myers-Briggs typologies, however, measure

emotionality, so a five-factor assessment was expected to provide a more comprehensive picture of personality as it affects employment (Costa, McCrae, & Holland, 1984).

In a meta-analytic review of personality-based job performance and employee selection literature, Barrick and Mount (1991) found conscientiousness to be a valid predictor of performance across all occupational categories. Extraversion was a significant performance predictor in occupations requiring interpersonal skills. Both extraversion and openness were good predictors of training proficiency. Other studies, as well, have linked the five-factor model to job performance (Cortina, Doherty, Schmitt, Kaufman, & Smith, 1992; Tett, Jackson, & Rothstein, 1991).

McCrae and Costa (1991), through their clinical experience and research studies, confirmed that the five-factor model helps with understanding emotional, interpersonal, and motivational styles. For instance, a high Neuroticism score could place career dissatisfaction within a context of chronic unhappiness in all areas of life; a low score on the Conscientiousness scale could alert a counsellor to potential carelessness in filling out assessments or application forms, or a general lack of diligence in pursuing reemployment.

Research has also linked the five-factor model to assertiveness and psychopathology, both of which may have an impact on responses to layoff and job search behaviour. Ramanaiah and Deniston (1993), in a study involving 259

undergraduates (46% male, 54% female), found that assertive students were more extraverted, open to experience, and conscientious, but less neurotic than their less assertive peers. In a study involving 64 undergraduates, Holden (1992) found a positive correlation between neuroticism and psychiatric symptomatology, and a negative correlation between extraversion and depression. Mongrain (1993) located self-efficacy and key depressive characteristics within the five-factor model. She reported that high neuroticism, combined with low extraversion, is associated with depression, and that high conscientiousness correlates with self-efficacy.

To the extent that all these personality characteristics influence job search behaviour and/or employability, the five-factor model was expected to be useful in predicting reemployment for displaced workers. It appeared from the literature review that four of the five factors (neuroticism, extraversion, openness, and conscientiousness) correlated with characteristics known to influence employability.

Neuroticism is associated with psychological distress and depressive symptomatology, both of which are likely to negatively affect displaced workers' motivation and ability to pursue energetic and effective job searches or retraining (Kanfer & Hulin, 1985; Mallinckrodt & Bennett, 1992; Warr, 1987). By contrast, the correlates of extraversion (i.e., better job performance, training proficiency, assertiveness, and psychological well-being) are likely to facilitate

adjustment to job loss and subsequent job search behaviour or retraining

(Barrick & Mount, 1991; Mongrain, 1993; Ramanaiah & Deniston, 1993; Warr,

1987). The correlation of openness with training proficiency and assertiveness

suggests similar predictions about job search behaviour and retraining (Barrick &

Mount, 1991; Howland & Peterson, 1988; Ramanaiah & Deniston, 1993).

Because conscientiousness is associated with job performance, diligence, self-

efficacy, and assertiveness, it too should facilitate speedy reemployment for

displaced workers (Barrick & Mount, 1991; Kanfer & Hulin, 1985; Mongrain,

1993; Rife, 1989). In light of these findings, neuroticism, extraversion,

openness, and conscientiousness were considered as potential predictors of

reemployment for this study.

Work-role saliency. Work-role saliency (or work ethic) can be defined as

the relative importance of the role of work in a person's life compared to other

major life roles such as study, homemaking, community service, and leisure

(Nevill & Super, 1986). Because job loss potentially affects all life roles, an

assessment of work-role saliency should assist prediction of employment

outcome for displaced workers.

Kinicki (1989) investigated the relationship between work-role saliency

and reemployment in a longitudinal study of 126 manufacturing workers. The

sample consisted of older workers ($\underline{M}$ = 51), most of whom (95%) were male.

Kinicki found a significant positive association between saliency (assessed one

month before layoff) and speed of reemployment, but was surprised to find that saliency was uncorrelated with expectation of finding another job.

Ezzy (1993), in his comprehensive review of recent literature on unemployment and mental health, provided one explanation of why saliency might be particularly important to displaced workers. Defining employment as a process, with job loss acting as a status passage into a different social structure, he proposed that workers with high work-role saliency might be prone to psychological distress if they remained unemployed. Those who did not experience psychological distress after displacement, Ezzy suggested, had found satisfying nonwork roles on which to base their identity and were therefore less motivated to seek reemployment.

Research involving mid-life career changers has found that traditional person-environment fit theory does not adequately explain their reemployment behaviour. In a study involving middle-aged, ex-managerial or professional males ($\underline{N}$ = 61), Thomas and Robbins (1979) identified personality type by using the Strong-Campbell Interest Inventory and then coded job titles (pre/post career change) into Holland work-environment types. Because most of the participants neither changed to careers more congruent with their Holland type, nor reported more satisfaction in congruent careers, the researchers concluded that work salience (personal values and goals, and attitude toward the work role itself) may be a better predictor of reemployment status than personality-environment

congruence. Apparently, the developmental stage of mid-life influenced career decisions differently than traditional career theories had proposed. Although Thomas and Robbins' study involved voluntary career changers, work-role saliency is a factor worthy of further exploration with displaced workers because they are commonly middle-aged.

Job search self-efficacy. Some studies have identified the importance of expectancies and job search self-efficacy to the successful reemployment of displaced workers (Kanfer & Hulin, 1985; Kinicki, 1989; Rynes & Lawler, 1983). It appears that a belief in one's ability to find another job (job search self-efficacy) affects the expectancy that one will become successfully reemployed, which in turn positively influences job search efforts.

Job search self-efficacy was the focus of Kanfer and Hulin's (1985) study of a small group of displaced hospital workers. Of 89 employees laid off, 35 attended outplacement meetings where they completed questionnaires regarding demographic characteristics, attitudes toward termination, job search self-efficacy, and intentions to apply for new positions. Twenty-three of those who had attended the outplacement meetings were successfully contacted for a telephone interview one month later. Because the hospital had laid off employees based on reverse seniority, median length of employment was only 2 months and many participants were young (mean age = 25 years). Results showed that job search self-efficacy accounted for 74% of the total variance in

reemployment success, with reemployed participants reporting significantly higher confidence in their job search skills and significantly more behavioural actions related to job search. Kanfer and Hulin concluded that significant results, even with such a small sample size, provided a rigorous test of their hypotheses. They did recommend, however, that further research studies be attempted to replicate their findings using other, larger samples.

Kanfer and Hulin (1985) also reported a negative correlation between self-efficacy and depression, and found, not surprisingly, that depressed subjects were more likely to remain unemployed as well. Rife (1989), in a study involving older unemployed workers, also reported that participants with lower job search self-efficacy were more likely to suffer from depressive symptomatology and longer periods of unemployment.

Prussia, Kinicki, and Bracker's (1993) study of displaced manufacturing workers replicated the connection between job-search self-efficacy, motivation, improved mental health, and subsequent reemployment of displaced workers, suggesting that effective intervention programs should focus on increasing self-efficacy. Vinokur, Price, and Caplan (1991) provided an interesting analysis of the effects of a program focussed on offering job search skills and social support to the unemployed. They commented that, although most studies report effects based on total participants, the reality of social programs is that nonparticipation (absenteeism or dropping out) is commonplace. In reanalyzing an earlier study

by Caplan, Vinokur, Price, and van Ryn (1989), Vinokur et al. (1991) found effect sizes (regarding job search self-efficacy and motivation to seek work) two to three times higher for actual participants than for the total experimental group. Perhaps more surprising was the revelation that the nonparticipants were more likely to be reemployed! Results of this study suggest that dropping out or nonparticipation could be a result of a self-selection process according to perceived need--that those who withdrew did not really need the intervention.

There are currently many programs and services available to help displaced workers. These include: outplacement services; job finding clubs; pre-employment, skill development, and retraining programs; self-help groups; and personal and career counselling services. Eden and Aviram (1993), in studying the impact of training designed to boost general self-efficacy, reported that participants with high initial self-efficacy were likely to become reemployed with or without the help of a program; those with low initial self-efficacy, however, were more likely to find work after attending a job search self-efficacy workshop. They recommended prescreening for low self-efficacy before selecting program participants, thus reducing the dropout rate and maximizing the cost effectiveness of such programs. Because job search self-efficacy has been associated with psychological well-being, motivation, number of job search behaviours, and quicker reemployment of displaced workers, it was a factor considered worthy of inclusion as a potential predictor in this study.

Coping resources. In summarizing the literature regarding the influence

of unemployment on mental health, Ezzy (1993) noted that a common theme

across many theoretical perspectives has been the importance of coping

resources. Borgen and Amundson (1984) compared the experience of job loss

to an emotional roller-coaster, with early reactions being similar to the stages of

grieving. They described the moderating effect of financial and social resources

on coping with unemployment. Warr's (1987) vitamin analogy also emphasized

the importance of coping resources to mental health during times of

unemployment. Warr suggested that many external factors influence an

individual's mental health much as vitamins (or lack of them) affect physical well-

being. He considered the influence of nine environmental factors or "vitamins:"

opportunity for control, opportunity for skill use, externally generated goals,

variety, environmental clarity, availability of money, physical security, opportunity

for interpersonal contact, and valued social position. His review of the literature

regarding the effect of unemployment on psychological well-being revealed

decreased mental and physical health, and increased likelihood of divorce and

mortality (including suicide), after job loss. However, Warr suggested two ways

to buffer the detrimental effect of unemployment--shortening the period of

unemployment or providing a nonwork environment sufficiently rich in the nine

"vitamins."

Other models of the effect of unemployment on mental health have

focussed more specifically on the importance of financial resources and social

support. Latack and Dozier (1986) presented a career growth model in which it

is postulated that financial resources and social support are significant factors in

determining whether a job loss is psychologically damaging. Many research

findings have supported the hypothesis that these coping resources are

important predictors of responses to unemployment. Rife and Belcher (1993),

for example, measured financial need and social support among unemployed

older workers ($\underline{N}$ = 54, 44% male). Their multiple regression analysis identified

both financial need and perceived social support for job search activity (vs.

retirement) to be significant predictors of job search intensity.

Caplan and his colleagues (1989) conducted a randomized field

experiment involving 928 recently unemployed workers, representing a broad

range of demographic characteristics and work experience. The displaced

workers in their experiment, in groups of 16 to 20, attended a series of eight 3-

hour workshops in which social support, and training in problem-solving and job-

search skills, were offered. Follow-ups conducted at 4 weeks and 4 months after

the intervention determined employment status and job search motivation.

Results showed that, not only did the short program help move participants

toward successful reemployment, but social support resulted in higher motivation

to seek work even for participants who remained unemployed.

Displaced workers, in particular, are at risk of experiencing psychological

distress due to decreased social support and financial concerns. Commonly

they have lost not only a job, but "a family tradition, a community bond, and a

culture, which their work represented" (Mallinckrodt & Bennett, 1992, p. 482).

These authors studied a sample of displaced timber workers ($\underline{N}$ = 41), most of

whom were White (90%) males (88%). They found that social support that

bolstered the displaced worker's self-worth appeared to buffer the negative

psychological effect of increased financial concerns. Similarly, Viinamäki,

Koskela, Niskanen, and Arnkill (1993), assessed the mental health of workers ($\underline{N}$

= 155) displaced from a Finnish wood-processing factory who remained

unemployed 6 months after the closure. They found that participants who

reported a poor financial situation and insufficient social support were more

likely to experience impaired mental well-being.

Many measures of social support have asked questions about whether

satisfying time is spent with friends and family or if sufficient resources are

available to help with problems. It can be difficult to tell from questions like

these, however, whether the social support encourages reemployment. In a

culture where women often receive conflicting messages about their roles as

workers and homemakers, some social support messages from family and

friends may be hostile or indifferent to reemployment. A woman could identify,

for example, an extensive network of supportive family and friends, but further

investigation might reveal they were encouraging her to remain at home with her

children, suggesting that her job loss is a "blessing in disguise." In a study of

unemployed women ($\underline{N}$ = 89), Ratcliff and Bogdan (1988) found that women with

a strong commitment to employment, but who received influential social support

to remain unemployed, reported the greatest dissatisfaction with the

unemployment experience.

Most of the unemployment literature has identified psychological distress

as a common byproduct of job loss. However, because it is also reported in the

literature that sufficient coping resources reduce the negative psychological

impact of unemployment, it seemed likely that adequate financial resources and

appropriate social support might be useful predictors of reemployment for

displaced workers.

Contextual, demographic, and economic factors. Other factors known to

influence reemployment include personal demographic qualities (i.e., gender,

age, and ethnicity), educational background, employment history (including

tenure and recall expectations), economic disincentives (i.e., unemployment

insurance and severance pay), and local labour market conditions (Anderson,

1992; Howland & Peterson, 1988; Leana & Ivancevich, 1987, Rynes & Lawler,

1983).

The literature is unclear regarding gender-specific reactions to

displacement. Shamir (1985) conducted a study of highly educated, Israeli

workers ($\underline{N}$ = 432) who had recently experienced unemployment during mid-

career. He found that women (n = 233) tended to remain unemployed for a

longer period than men, but that they experienced less financial change due to

unemployment. Howland and Peterson (1988) also found that women suffered

smaller financial losses than men. Ensminger and Celentano (1990), however,

in a cross-sectional survey of unemployed adults, did not find gender differences

in psychological distress during periods of unemployment. They had

hypothesized that the traditional centrality of the work role for men (and of the

family role for women) would result in different levels of distress. They found,

instead, that they could more appropriately attribute differences to role

configurations than to intrinsic gender differences.

Because involuntary displacement interrupts the normal process of career

development (Nevill & Super, 1989), variables such as age and tenure should

have varying degrees of importance depending on the developmental stage of

the displaced worker. Research concerning the role of age and tenure in the

adjustment of displaced workers has provided support for this hypothesis.

In many studies involving displaced workers, age correlated positively

with length of unemployment and degree of financial loss (Howland & Peterson,

1988; Kinicki, 1989; Rife, 1989). Bowman and her colleagues (1994), in

interpreting the results of a survey of displaced workers (N = 755), speculated

that the large number of mid-life and older workers who did not report new

earnings after displacement included some workers who had become

discouraged and dropped out of the labour force. They suggested that early retirement may become a face-saving choice for older workers who are unable to recover their predisplacement earnings, or level of employment.

In the same study, the results suggested that tenure could also present a problem to displaced workers. Longer tenure was associated with extended periods of unemployment and with lower reemployment wages. Workers with longer tenure may have had less exposure to new technologies, and less job search experience than workers with shorter tenure.

Bowman et al. (1994) also found that displaced workers with lower levels of education experienced longer periods of unemployment. Often the skills that these workers had developed on-the-job were not sufficient to qualify for new employment in a competitive economy. Employment counsellors often encourage displaced workers to compensate for their lack of formal education by enrolling in academic upgrading or specific skills training to prepare for a career change. Howland and Peterson (1988) found, however, in a national survey of displaced workers, that choosing to return to school after a layoff was more likely for white-collar than for blue-collar workers. Because white-collar workers are usually more highly educated to begin with, these results implied that a lower level of education might predict not only extended unemployment, but also the likelihood that the displaced worker would not return to school.

In the same study, Howland and Peterson (1988) also found ethnicity to

be a significant predictor of longer unemployment for blue-collar workers but not

for their white-collar counterparts, suggesting that discrimination may be more

prevalent in blue-collar manufacturing trades. Similarly, Bowman and her

colleagues (1994) reported that non-White workers tended to experience longer

periods of joblessness.

So, too, the local economy has affected the reemployment of displaced

workers. Howland and Peterson's (1988) survey of displaced workers revealed

that employment growth specifically within their predisplacement industry

influenced the reemployment success of blue-collar workers. In contrast, the

reemployment of white collar workers was less influenced by specific industry

and more by the broader local economy. All workers suffered large financial

losses in a depressed economy and could be unemployed for almost twice as

long under those conditions. Anderson (1992), in a very large study involving

newly qualified unemployment insurance (UI) applicants ($\underline{N}$ = 11,060),

demonstrated that high initial recall expectations and receipt of UI also

negatively affected reemployment.

Evaluation of the literature concerning displaced workers led me to focus

on three contextual/demographic predictors: education, ethnicity, and tenure. I

chose not to assess the impact of economic disincentives and the local economy

because all of the displaced workers in this study were eligible for a severance

package that was to be followed by UI. They were all laid off from the same

food-processing plant in a small British Columbia community which was suffering

from a depressed local and national economy. There would, therefore, have

been little variation in economic factors among the workers on which to base any

conclusions. The literature review did not provide solid support for the inclusion

of gender as a suitable predictor of reemployment. Because age appeared to

overlap with tenure to a large extent, I excluded it as a predictor variable. Many

of the age-related results reported in the literature involved older workers who

had high wage expectations, and who lacked relevant job search skills and

technical expertise. It seemed logical that workers with longer tenure would

share these characteristics.

Summary and Rationales for the Present Study

The negative effect of unemployment on psychological well-being has

been well documented (Kanfer & Hulin, 1985; Latack & Dozier, 1986;

Mallinckrodt & Bennett, 1992; Viinamäki et al., 1993; Warr, 1987). Given such

strong evidence regarding the impact of prolonged unemployment, facilitating

speedy reemployment for displaced workers is clearly a desirable goal. Most

career decision-making literature to date has involved youth or voluntary career

changers, although "it is involuntary termination, and not the experience of

unemployment, that reduces the probability that a successful job transition will

be made" (Gottschalk & Maloney, 1985, p. 122). It seemed important, therefore,

to become better informed about the characteristics common to displaced

workers. Identifying factors predicting reemployment could help, not only with early recognition of those workers who would likely need the most assistance, but also with refining programs designed to facilitate career transitions. This review of the literature on displaced workers, unemployment, and reemployment resulted in selection of several variables which seemed promising in this regard.

Tett, Jackson, and Rothstein (1991) emphasized, in their meta-analytic review of personality factors as predictors of job performance, that research should be theory-driven. Although the present study was exploratory, it met this criterion (selecting potential predictors of reemployment for displaced workers based on theoretical perspectives from the fields of psychology and organizational behaviour). The intent in this study was to assess personality, work-role saliency, job search self-efficacy, coping resources, and contextual-demographic variables, in order to discover key combinations of factors useful in predicting employment status after layoffs.

It is expected that the results of this study will add to the limited research literature in this field, at a time when the needs of displaced workers are of concern from individual to global levels. Investigating variables identified by researchers from a variety of disciplines, thus developing a more comprehensive picture of factors to predict the reemployment of displaced workers, will facilitate improved understanding of this growing client population.

Hypotheses

1.   Participants with high openness to experience will be more likely to

change careers or choose to pursue education.

2.   Participants with high conscientiousness will be more likely to become

reemployed.

3.   High extraversion will be associated with reemployment.

4.   Participants with high neuroticism will be more likely to remain

unemployed.

5.   Participants with high job search self-efficacy will be more likely to

become reemployed.

6.   Participants with more coping resources (financial and social support)

should have better mental health, which will facilitate reemployment,

career change, or retraining.

7.   Participants who identify the work role as less salient will be more likely to

return to school, retire early, or prolong unemployment.

8.   Participants with more tenure and less education will be more likely to

remain unemployed.

9.   Ethnic minorities will be more likely to remain unemployed.

Method

<u>Participants and Procedure</u>

Participants were recruited from among 182 employees of a food-processing plant that was closing. To maximize participation, I distributed questionnaire packages at large group meetings coordinated for submitting unemployment insurance (UI) applications the day before the closure. At the end of the UI session, while the UI clerks were reviewing applications for accuracy, I described my research, invited participation, and distributed questionnaire packages and pencils. I presented the Informed Consent form (Appendix A) and explained confidentiality and the voluntary nature of participation. Once interested participants had signed the consent form, they then completed a two-page questionnaire (Appendix B). Finally, the NEO Five-Factor Inventory (NEO-FFI, Costa & McCrae, 1991), a standardized personality inventory, was presented with specific instructions about how to complete the answer sheet and make corrections. Subjects were instructed orally and encouraged to read the directions on the outside of the test booklet.

For participants who struggled with written English, I offered to read the questions aloud and complete the forms for them, as suggested in the NEO PI-R professional manual (Costa and McCrae, 1992). Only two people chose to participate in this manner. Eight participants acknowledged a language other than English as the one with which they were most comfortable although it was

clear in the group sessions that many more were not fluent in English.

Of the 112 employees who attended the two group sessions, 83 (74%) consented to participate. Seventy-five questionnaire packages (90%) were completed to some degree, and I included those in my study. Eight participants took the packages home and did not return them. All eight of those participants were Indo-Canadians with noticeable language difficulties.

The participants were almost equally divided in terms of gender, with 49% females and 51% males. On average, participants were in their late 30's ($\underline{M}$ = 38.2, $\underline{SD}$ = 8.4). Most participants ($\underline{n}$ = 48, 64%) described their ethnic background as Canadian. Twenty percent reported Indo-Canadian heritage and 16% reported other ethnic roots that included First Nations, Vietnamese, Asian, British, and European.

Together, the participants represented 20 different types of jobs. Thirty-seven percent of the participants had been employed in skilled trades or management/professional positions, 24% were semiskilled or clerical workers, and 39% were labourers. The mean tenure was almost eleven years ($\underline{M}$ = 10.9, $\underline{SD}$ = 5.7). Other participant characteristics are reported in Table 1.

Insert Table 1 about here

A follow-up telephone interview (Appendix C), used primarily to determine

employment status, was conducted two months after the closure. Two months, according to Kaufman (1982), was a reasonable time for contact as participants should be involved in an optimistic, concerted job search effort at that stage. To maximize participation, a telephone interview seemed more appropriate than group sessions or mail-in responses.

Measures

Questionnaire packages contained informed consent forms, the NEO-FFI, and a questionnaire that included demographic items, and four groups of questions assessing: (a) intentions regarding reemployment; (b) financial and social coping resources; (c) job search self-efficacy; and (d) work-role saliency. Data concerning intentions regarding reemployment were not examined in the present study. The questions were developed based on research (described in the introduction) conducted with displaced workers.

NEO-FFI. (Costa & McCrae, 1991). The NEO-FFI is a brief measure of five major personality factors: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. The NEO inventories are based on decades of factor analytic research on the five-factor model of personality, involving both clinical and normal adult populations. A short version of the NEO PI-R, the NEO-FFI was designed and normed for use with adults with a sixth grade reading level. Internal consistency values range from .68 to .86. Validity of the NEO-FFI was tested by comparing it to the NEO PI-R and a five-

factor adjective checklist, with the resulting converging correlations ranging from .56 to .62 (Costa & McCrae, 1992).

The five personality factors were assessed by statements such as "I often feel helpless and want someone else to solve my problems" (Neuroticism), "I like to have a lot of people around me" (Extraversion), "I often enjoy playing with theories or abstract ideas" (Openness), "I would rather cooperate with others than compete with them" (Agreeableness), and "I work hard to accomplish my goals" (Conscientiousness). Many statements were reverse-scored, and responses ranging from strongly disagree to strongly agree were endorsed on a five-point Likert scale.

Work-role saliency. The four work-role saliency questions were modified (with permission) from scales developed by Warr, Cook, and Wall (1979). Relevant questions were selected from their scales, and the British phrases were modified to reflect Canadian English usage. The original scales had been developed using male blue-collar workers and reported good internal reliability. Questions including "Even if I won a huge lottery, I would still want to have a job" and "Having a job is very important to me" were answered by circling responses on a five-point Likert scale ranging from (1) disagree very much to (5) agree very much. The scale demonstrated moderate internal consistency (coefficient alpha = .61).

Coping resources. Social support and sufficient money are both

recognized as resources that reduce psychological distress and maximize the likelihood of reemployment for displaced workers. Two four-item scales measuring social support and financial resources were modified (in similar ways as for the work-role saliency questions previously described) from scales developed by Warr et al. (1979).

Participants indicated the extent to which they agreed with statements such as "I often spend pleasurable social time with family and friends" and "I will be OK financially even if I'm unemployed for several months" by circling numbers on a five-point Likert scale ranging from (1) disagree very much to (5) agree very much. The eight items were combined to form a coping resources scale that had moderate internal consistency (coefficient alpha = .57). Items for these scales and the work-role saliency scale were intermingled and some were reverse-scored to reduce response pattern bias.

Job search self-efficacy. Unlike the other scales, the job search self-efficacy items were grouped together. Their shared sentence stem, "I am confident that I can successfully," was followed by items about finding job vacancies, filling out applications, making career decisions, following-up job leads, and performing well in job interviews. Answers again required circling a value on a Likert scale ranging from (1) disagree very much to (5) agree very much. Internal consistency for was good (coefficient alpha = .84). Items comprising this scale were closely modelled after the "Self-Efficacy Expectations

for Job Search" section of an inventory developed by Kanfer and Hulin (1985).

Follow-up telephone interview. Follow-up was conducted during the third month following plant closure. The telephone interview followed a semi-structured format. Part I consisted of a reminder about the study and two questions about the convenience of this time to participate in a short interview. Part II identified employment status at follow-up. The major status categories consisted of employed in a similar job, employed in a new occupation, involved in retraining, and seeking job search assistance or career counselling.

Part III consisted of a repetition of the work-role saliency, coping resources, and job search self-efficacy questions from the initial questionnaire. In Part IV, participants were asked which specific job search/training resources they had accessed (i.e., union, UI, CEC, job club, career exploration, academic upgrading, computer literacy course). In Part V, information was gathered about specific job search behaviours, including resume writing, networking, submitting applications, phoning prospective employers, interviewing, and reading job advertisements. In the current study, only the employment status information (Part II) was used.

Length of telephone calls ranged from one to twenty minutes ($\underline{M}$ = 6). Although I was unable to contact 11% ($\underline{n}$ = 8) of the 75 participants, for most of these ($\underline{n}$ = 6), someone who answered the telephone volunteered information about employment status. I assigned those participants into appropriate status

groups based on that information.

Statistical Analysis

The purpose of this research was to predict employment status after a
layoff using a combination of personality characteristics and contextual-
demographic variables. Due to the exploratory nature of this study, many
predictors were under consideration with a small number of subjects. It
appeared that a two-group discriminant analysis would be the most appropriate
statistical treatment under these circumstances (Hair, Anderson, Tatham, &
Black, 1992).

The outcome variable, employment status, had ten categories: (1)
employed in a similar job, (2) employed in a different occupation, (3) self-
employed, (4) in training, (5) registered for training, (6) employed and in, or
registered for, training, (7) unemployed, but actively seeking work, (8)
unemployed for health reasons, (9) early retirement, and (10) unemployed for
other reasons. To perform the two-group discriminant analysis, participants from
groups 1 to 6 were assigned to the Employed/Retraining Group and participants
from groups 7 to 10 were assigned to the Unemployed Group. These groupings
matched placement categories for most federally and provincially funded
reemployment programs for displaced workers and other unemployed clients.

The predictor variables included in the discriminant analysis were four of
the five NEO factors (Neuroticism, Extraversion, Openness to Experience, and

Conscientiousness), work-role saliency, job search self-efficacy, coping

resources (a combination of social support and financial resources), tenure,

education, and ethnicity. Ethnicity was recoded to convert the raw categorical

data into meaningful groupings (Indo-Canadian, Canadian, and other). Then,

because a discriminant analysis requires metric independent variables, ethnicity

was "effect coded" to transform it into a suitable predictor variable.

Multi-collinearity among the independent variables can affect the results

of a discriminant analysis, particularly when using step-wise procedures.

Because all of the independent variables under consideration (except total

saliency) correlated significantly with one or more of the other predictor

variables, a direct method was chosen for this discriminant analysis.

Results

Employment Status at Follow-up

At follow-up, two months after the plant closed, I contacted 73 of the

participants. Of these, 47% identified themselves as reemployed, representing

14% who were in similar jobs, 21% who had changed careers, 11% who were

working and also attending (or registered for) retraining, and 1% who had

become self-employed. Five percent said that they were not working but

currently involved in a training program, and 16% were not working but

registered for training that had not yet started. Fourteen percent identified

themselves as unemployed but actively seeking work, and the remaining 18%

had removed themselves from the labour market for a variety of reasons,

including pregnancy, health concerns, and early retirement.

<u>Discriminant Analysis</u>

The goal of the discriminant analysis was to determine a combination of

variables which could predict employment status two months after a layoff. Fifty-

seven participants were included in the analysis (missing data excluded the

other 18). Seventy percent of the participants ($\underline{n}$ = 40) comprised the

Employed/Retraining Group, which included those who were in similar jobs, had

changed careers, were self-employed, were combining employment with

retraining, or were attending (or registered for) a training program. The others ($\underline{n}$

= 17) comprised the Unemployed Group.

Ten predictor variables were entered into the discriminant analysis:

Neuroticism, Extraversion, Openness, and Conscientiousness (NEO factors);

work-role saliency, job search self-efficacy, coping resources, tenure, education,

and ethnicity. The analysis produced a significant canonical discriminant

function, $\underline{X}^2$ (10, $\underline{N}$ = 57) = 20.79, $\underline{p}$ < .05. This function had a canonical

correlation of .58, which, when squared, permits the conclusion that 34% of the

variance in employment status was explained by the function. Table 2 reports

means and standard deviations for each of the predictor variables according to

employment status at follow-up. Discriminant analysis results are included in

Appendix D.

Insert Table 2 about here

A variable is usually considered a significant predictor if it correlates at least .30 with the discriminant function (Hair et al., 1992). In this analysis, however, six of the ten predictor variables had correlations with the function of between ± .32 and .23. Because the seventh predictor variable dropped to a correlation of .13, it appeared sensible to consider the six variables with the highest correlations as significant predictors. These variables (with pooled within-groups correlations in parentheses) were: work-role saliency (-.32), Openness (.31), Conscientiousness (.27), Extraversion (.26), tenure (.25), and ethnicity (.23).

The classification results (Appendix D) indicated that 80.7% of the grouped cases were correctly classified. This was considerably better than the proportional chance criterion of 58%. A slightly higher percentage of the Unemployed Group (82.4%) was correctly classified than the Employed/ Retraining Group (80%).

For three of the personality variables, results were in direct contrast to the hypotheses. Rather than predicting reemployment or retraining, openness, conscientiousness, and extraversion all predicted unemployment. The close group means and high standard deviations for each of these variables, however,

made any interpretation of these results questionable. The discriminant analysis

did not support the hypotheses that higher neuroticism and lower education

would predict unemployment. The hypotheses that higher job search self-

efficacy and higher coping resources would predict reemployment were not

supported either.

Three of the variables selected by the discriminant analysis did predict

employment status as hypothesized. Low work-role saliency, ethnic minority

status, and longer tenure all contributed significantly to prediction of

unemployment. Due to the close group means and high standard deviations,

however, these results must also be interpreted cautiously.

Discussion

Predicting Employment Outcome

Results of the discriminant analysis suggested that a combination of

variables (bridging diverse theoretical perspectives) collectively predicted

whether or not a displaced worker would become quickly reemployed. Variables

significant in predicting employment outcome included individual differences in

personality (openness, conscientiousness, and extraversion), contextual-

demographic factors (tenure and ethnicity), and attitude (work-role saliency).

Except for work-role saliency, all of the variables included in the discriminant

function were positively correlated with unemployment at follow-up.

Displaced workers who remained unemployed two months after the closure reported longer tenure and less commitment to the work-role, and were more likely to belong to an ethnic minority group. The profile to this point is consistent with other research (e.g., Bowman et al., 1994; Howland & Peterson, 1988; Kinicki, 1989). Those who remained unemployed, however, were also more conscientious, more open, and more extraverted than those who became reemployed or entered retraining. Personality characteristics, then, did not predict employment status at all as hypothesized.

Personality. Post hoc analyses revealed that the more conscientious workers did not express the intention to take a break from work ($\underline{r} = -.25$, $\underline{p} <$ .05). This fits the hypothesis that conscientiousness would predict reemployment. There were, however, significant ($\underline{p} < .01$) correlations between conscientiousness and openness ($\underline{r} = .62$) and conscientiousness and extraversion ($\underline{r} = .44$). Looking at these three personality factors in combination, then, may help to explain the unexpected findings. Ramanaiah and Deniston (1993) reported that a combination of high conscientiousness, extraversion, and openness is characteristic of assertive students. It is conceivable that displaced workers who are more assertive may be less inclined to rush into jobs or training programs that are not ideal, and more likely to exercise their "rights" to collect UI. With this explanation in mind, it seems less surprising that a profile that includes high conscientiousness, openness, and extraversion, predicted

unemployment two months after displacement.

Neuroticism was not significantly correlated with the discriminant function. Personality traits can be masked by short term mental states (Fergusson, Horwood, & Lawton, 1989) and the feelings associated with job loss have been likened to an emotional roller coaster (Borgen & Amundson, 1982). It is possible that the NEO-FFI did not provide an adequate measure of trait neuroticism for this study because it was contaminated by the emotional state common to most of the displaced workers the day before plant closure. It was the personality trait of neuroticism, rather than the emotional state associated with displacement, that I had hypothesized to be significant in predicting employment status at follow-up.

In my extensive review of the literature about displaced workers, I did not find any other studies in which the impact of personality factors on reemployment was addressed. This was surprising, considering that personality and individual differences have traditionally been considered important to career planning (Holland, 1985), job performance (Cortina et al., 1992), and employee selection (Barrick & Mount, 1991). Although results in this study regarding the effects of personality on reemployment may have been contrary to my hypotheses, the inclusion of personality variables in the study offered a unique contribution to the literature.

Work-role saliency. Low work-role saliency was predictive of

unemployment, as hypothesized, supporting the results from Kinicki's (1989)

study of displaced manufacturing workers (primarily a sample of older men).

The present study, because it was more gender-balanced and included workers

who were on average 13 years younger than Kinicki's sample, extends the

generalizability of previous research regarding the significance of work-role

saliency to the employment outcome of displaced workers.

Job search self-efficacy. Job search self-efficacy was the variable least

correlated with the discriminant function in this study. This is puzzling, given

that Kanfer and Hulin (1985) reported that this variable accounted for 74% of the

total variance in reemployment success one month post-layoff for their group of

displaced workers. There are several differences between the two studies,

which may explain this apparent contradiction.

Kanfer and Hulin's sample consisted of much younger participants ($\underline{M}$ =

25) whose average tenure was only 2 months. One explanation for the poor

predictive performance of self-efficacy with the present sample may involve

inaccurate self-assessment of job search skills. Given that the average

participant in the current study had worked at one job for the past 11 years, there

had been limited opportunity to practice or develop job search skills, or to

explore the current labour market. The average score for self-efficacy was high

($\underline{M}$ = 19.5 out of a possible 25), suggesting that, at the time of the layoff, most

participants felt quite comfortable with their job search skills. The restricted

range of this measure may have reflected self-assessment based on traditional

job search methods, which are less effective for finding jobs in the new economy.

Kanfer and Hulin's participants also received a short (2 hour) intervention

that discussed local employment possibilities. It is conceivable that participants

who had already identified themselves as having higher job search self-efficacy

followed-up more effectively on the leads they received at the outplacement

meeting, which resulted in quicker reemployment. Finally, Kanfer and Hulin

found a negative correlation between self-efficacy and depression, with

depressed subjects more likely to remain unemployed. Although the present

study did not specifically measure depression, there was a significant ($p < .01$)

negative correlation between neuroticism and job search self-efficacy ($r = -.39$).

Given that correlation, and the fact that my participants were older and had

achieved longer tenure, it seems reasonable that they may have experienced

more post-layoff depression than Kanfer and Hulin's subjects. Depression, then,

could have had a moderating effect on the job search self-efficacy they had

identified prior to the closure.

Another possible explanation for the low correlations between job search

self-efficacy and employment status in this study could be that collinearity with

many other predictor variables weakened its significance as a predictor. As

previously discussed, neuroticism was a variable that correlated significantly

with total efficacy and was also minimally correlated with employment outcome.

Job search self-efficacy was also significantly correlated with total financial

resources ($r = .32$, $p < .01$) which was one of two variables combined to form

coping resources. The coping resources variable was also surprisingly

insignificant as a predictor of employment outcome. Ethnicity correlated

significantly, as well, with total efficacy ($r = -.24$, $p < .05$). Although ethnicity was

a significant predictor in the discriminant function, it ranked lowest on the list.

Because results of the current study appear to contradict previous findings

regarding job search self-efficacy, further investigation is warranted.

Coping resources. The coping resources variable was not a significant

predictor of employment status (two months post-layoff) in the present study.

This was unexpected, given that much of the unemployment literature, including

research specific to displaced workers, emphasized the importance of social

support and financial resources to psychological well-being during periods of

unemployment (Caplan et al., 1989; Ezzy, 1993; Latack & Dozier, 1986;

Mallinckrodt & Bennett, 1992; Rife & Belcher, 1993; Viinamäki et al., 1993).

Warr (1987) also suggested that sufficient coping resources should

reduce psychological distress and expedite a successful return to employment.

Based on his vitamin analogy, however, Warr hypothesized that some "vitamins"

(including valued social position and availability of money) have a constant

effect on psychological well-being once a minimum level is achieved. Perhaps,

then, because all of the workers displaced in the present study received a

severance package and were eligible to collect UI, the threshold had been

achieved for financial resources. Beyond that threshold, as Anderson (1992)

suggests, receiving UI and expecting union recall may act as economic

disincentives to return to work.

The social support measure used in the present study did not permit

clarification about whether the available support encouraged reemployment

goals. Ratcliff and Bogdan's (1988) contention that some social support may be

hostile or indifferent to employment may, therefore, offer another explanation for

the surprisingly poor performance of coping resources as a predictor. Finally,

because this study consisted of exploratory field research that did not involve a

specific social support intervention, it may also have differentiated between the

structured group support typically provided within a pre-employment program,

and the general perceived social support which displaced workers receive from

friends and family.

Contextual-demographic factors. Of the three contextual-demographic

variables considered in this study, tenure and ethnicity were useful in improving

prediction in the hypothesized direction. Education, however, was not selected

as a significant predictor by the discriminant analysis. The findings of Bowman

and her colleagues' (1994), that older workers with more tenure are more likely

to either remain unemployed, or to withdraw from the workforce, appear to be

supported in this study. Ethnic minority status is also correlated with extended

unemployment, particularly for blue-collar workers (Bowman et al., 1994; Howland & Peterson, 1988). Those results were replicated in the present study but, because this sample was Canadian, a substantially different combination of ethnic minorities (i.e., Indo-Canadian, Asian, First Nations, Vietnamese, and British/European) are represented than in the previous American studies (i.e., Black and Hispanic).

Education did not significantly discriminate between groups in this study, perhaps because of a restricted range of educational levels with this group of participants (75% completed Grades 10 - 12). It is also possible that ethnicity confounded the education variable here. Thirty-six percent of the participants did not identify their ethnic/cultural background as Canadian. Although many members of those ethnic minorities may have reported higher educational levels, it is possible that their education, due to language difficulties or foreign credentials, did not predict reemployment for them in the same way as it might for nonimmigrant workers.

Limitations

Because the present study had several limitations, results must be interpreted cautiously. The choice to focus on one plant closure rather than a cross-section of displaced workers limited both the sample size (which was small) and the generalizability of the results to other occupational groups, ethnic mixes, and geographical locations.

The exploratory nature of the study required consideration of many predictor variables. However, because data had to be collected within less than 30 minutes in large group sessions, and because many participants had low literacy or struggled with English as a second language, broad constructs had to be measured with a few simple questions. Due to these constraints, and limited prior research of this kind, some measures were developed specifically for this study (the validities and reliabilities of which were not established). Even the NEO-FFI, to the best of my knowledge, had not been previously used in a study of displaced workers, so specific norms were not available. The relatively low internal consistencies for the measures of saliency and coping resources may have limited their validity and, therefore, results based on these two measures should be interpreted with caution.

Another factor that may have affected the outcome of this study was the timing of the closure. This plant shut down at the end of April. Severance pay and unemployment insurance benefits potentially carried most of the displaced workers through the summer. Because the food-processing industry is generally at its busiest over the summer, some of the displaced workers welcomed the layoff as an opportunity to take an extended vacation. As one participant stated, "This is my first summer off in 17 years!" Because the follow-up (2 months post-layoff) coincided with the beginning of school vacation, it is quite conceivable that many members of the Unemployed Group were not seeking work as

diligently as they indicated, but needed to appear actively involved in job search

activities to preserve their eligibility for UI.

Despite these limitations, however, this study represents the real world of

displaced workers--a world where multiple factors influence the likelihood of

reemployment and where many service providers have limited prior knowledge

regarding the specific needs of this client group. Although the study constitutes

a detailed description of only one group of displaced workers, it will be a useful

guide for future research aimed at informing program development and

counselling interventions.

Implications

A major goal of this exploratory research was to provide current,

theoretically-sound guidance to career counsellors and developers of

employment programs serving the growing population of displaced workers in

Canada. Although this study clearly needs to be replicated with other groups of

displaced workers, the findings, in combination with the extensive multi-

disciplinary literature review, should have practical implications for further study

and intervention. If future research supports the predictive validity of the

discriminant function, prescreening of workers prior to their layoff dates should

include assessments of personality characteristics, work-role saliency, coping

resources, and job search self-efficacy, as well as the collection of data

regarding ethnicity, previous education, and tenure. Results of prescreening

could predict the likelihood of reemployment and be useful to outplacement counsellors and program managers as they attempt to provide suitable interventions for displaced workers.

Although results regarding neuroticism and job search self-efficacy were ambiguous, it is recommended by both this author and Rife (1989), that programs for displaced older workers include assessments for depression and job search self-efficacy, and provide appropriate support groups and job clubs to clients, based on their identified needs. Because members of ethnic minorities, and workers with longer tenure, are at risk of prolonged unemployment, early interventions targeting these subgroups of displaced workers should be encouraged.

Exploration of low work-role saliency might also be helpful as participants are being selected for job clubs and reemployment programs. Because workers who express low commitment to the work role are less likely to become reemployed, program resources and counselling interventions might be better directed to other participants who are more motivated to return to work. An alternate intervention for displaced workers with lower work-role saliency might include helping them develop satisfying activities in their other life roles to reduce psychological distress during transitional periods as they leave the world of work. Warr (1987) draws from his vitamin analogy to suggest some simple interventions to improve the unemployment experience for displaced workers.

He recommends that existing institutions such as churches, clubs, and nonprofit

societies provide subsidized leisure activities, and encourage unemployed

members of the community to fill volunteer roles. This involvement would in turn

create opportunities for interpersonal contact, social position, personal control,

skill utilization, externally generated goals, environmental clarity, and variety--

most of the 'vitamins' essential for psychological well-being.

Although in the present study the coping resources variable was not

found to predict employment outcome, it is worth noting that social support

specifically directed toward employment goals can be an important determinant

of reemployment (Caplan et al., 1989; Latack & Dozier, 1986; Rife & Belcher,

1993). In programs and counselling interventions for displaced workers,

therefore, it seems important to not only assess for existing general social

support but to provide specific social support which encourages effective job

search activities. Anderson (1992) suggests that counselling that entails setting

realistic job goals, developing specific action plans, and providing

encouragement, might be the most cost-effective method to encourage quick

reemployment for displaced workers, especially those receiving UI and initially

expecting recall.

The finding that tenure was a significant predictor of extended

unemployment is consistent with Bowman et al.'s (1994) observation that older

workers with longer tenure have neglected ongoing education and are not up-to-

date with technology or job search skills. Career counsellors and employment agencies can help prevent this problem by actively encouraging employers to provide and/or financially support "lifelong learning" opportunities for current employees. Such a preventive intervention could better prepare workers to cope with job displacement in the future.

As Vinokur and his colleagues (1991) reported in their self-efficacy study, and as Warr (1987) described regarding his vitamin model, there appears to be a ceiling effect for some personality and environmental characteristics. Excellent interventions, therefore, might have minimal impact on the reemployment of displayed workers who come into programs with sufficient coping resources and job search self-efficacy in place. It is important, both for expediting reemployment and efficiently making use of available funding and resources, to select appropriate participants who can benefit most from the programs offered. Training programs and support services, however, need to be flexible, supportive, non-threatening, and immediately accessible to displaced workers if they are to effectively facilitate reemployment. Perhaps, following a needs assessment, counsellors could assign displaced workers to appropriate modules of programs rather than "all-or-nothing" services which are currently provided most often. Shorter, focussed interventions might be most effective in moving displaced workers toward speedy reemployment.

Future Research

Although this study resulted in significant findings regarding the prediction of employment outcomes for displaced workers, the resulting discriminant function accounted for only 34% of the variance in employment status. Further research involving other, preferably larger, groups would be required before firm conclusions can be drawn about the contributions of individual variables. It would be useful to replicate this study with either a larger plant closure, or a large group of participants displaced from a variety of employment settings. One can only speculate whether the discriminant analysis would result in selection of the same predictors, and whether their means and standard deviations would allow stronger interpretations than results for the present study.

Because the sample size in this study was small, permitting a division into only two employment status groups, it is conceivable that group differences were diluted to the point that the hypothesized results were not apparent. Replicating this study with more participants could determine whether finer definitions of employment status groups would be beneficial.

Although neither neuroticism nor job search self-efficacy were good predictors in this study, it seems reasonable to suggest that assessing specifically for depression (vs. neuroticism which encompasses other kinds of emotionality) and more thoroughly for job search self-efficacy (with more specific questions on longer scales) might be appropriate in a future study involving

displaced workers. Further research is recommended to develop and validate

reliable tools to use in needs assessments and longitudinal follow-up of this

client group.

This study did not include measures of the impact of the local economy

upon employment outcome, but follow-up research could test Howland &

Peterson's (1988) suggestion that target groups should be adjusted according to

the context of the local labour market. In a strong economy, they recommended

providing limited services only to high-risk clients, but in a depressed economy,

they suggested that services should be offered to all displaced workers. With

our current national focus on decreasing the government deficit, trimming

budgets, and providing cost-effective services, research that leads to provision

of programs and services that minimize cost per participant, and expedite the

reemployment of displaced workers, should be well received.

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Table 1
Demographic Characteristics of Participants

Variable	n	%
Dependents (N = 70)		
None	34	49
One or more	36	51
Marital Status (N = 72)		
Single	30	42
Married	42	58
Education Completed (N = 72)		
Less than Grade 10	8	11
Grade 10 - 12	54	75
College/Technical/University	10	14
Income from Work in Previous Year (N = 73)		
Less Than 25%	3	4
25 - 75%	21	29
More Than 75%	49	67
Layoff Date (N = 72)		
Prior to Closure	8	11
Day of Closure	62	86
After Closure	2	3

Table 2

Descriptive Statistics for the Employed/Retraining and Unemployed Groups

| | Status | | | |
| | Employed/Retraining | | Unemployed | |
Independent Variable	M	SD	M	SD
Coping Resources	24.93	4.96	24.06	4.13
Education[a]	2.3	1.24	2.24	0.75
Ethnic Status[b]	-0.58	0.71	-0.29	.0.92
Job Search Self-efficacy	19.48	3.97	19.53	4.39
NEO Conscientiousness	53.18	11.19	58.59	17.17
NEO Extraversion	53.35	11.34	58.71	16.82
NEO Neuroticism	53.53	11.43	56.41	19.65
NEO Openness	48.6	11.43	55.24	18.74
Tenure	10.45	5.26	12.64	6.61
Work-role Saliency	16.43	2.35	15.06	3.53

Note. Maximum score for Coping Resources = 40; Job Search Self-efficacy = 25; Work-role Saliency = 20. NEO scores are T-scores according to gender.

[a]1 = < Grade 10; 2 = Grade 10 - 12; 3 = College or Technical Certificate; 4 = University Degree

[b]-1 = Canadian; 0 = Other; 1 = Indo-Canadian

Appendix A

ROBERTA NEAULT
GRADUATE STUDIES, FACULTY OF EDUCATION
SIMON FRASER UNIVERSITY
BURNABY, B.C. V5A 1S6 604-291-4787

CONSENT FORM

This research about factors relating to the reemployment of displaced workers is being conducted as part of a master's thesis. Written consent is required from all participants to ensure that they are aware of the nature of the study, and that they are fully informed about their rights as research participants.

Roberta Neault, a graduate student in Counselling Psychology in the Faculty of Education at Simon Fraser University is conducting this study. Participation consists of two components.
1   Completing the two questionnaires included in this package should take twenty to thirty minutes of your time.
2   Approximately two months after the layoff, you will be contacted by telephone. The short follow-up interview (five minutes or less) will consist of questions about your job search to that point and your current employment status. Questions will also be included about job satisfaction and coping resources.

All information provided by you will be held in strict confidence and kept in locked file cabinets. The only reason that your name and phone number are requested is to allow the follow-up interview to be conducted. Only Roberta Neault and the Simon Fraser faculty members directly supervising this research will have access to this information. Your name will not be disclosed, nor will you be identified in connection with the results of this study. Research results will be reported only in a statistical format, representing group rather than individual data.

Your participation in this research is completely voluntary. You may withdraw from the study at any time, or refuse to complete any part of it.

If you have any questions or concerns about this research at any time during the study, please contact Roberta Neault, her supervisor, Dr. Janny Thompson, or Dr. Robin Barrow, Dean, Faculty of Education, Simon Fraser University, Burnaby, B.C. V5A 1S6 (291-3395). A summary of the results of the study will be made available to anyone who requests it by contacting Roberta Neault at the above address.

Thank you for your time and cooperation.

I, _____, agree to participate in the study described above.
   (Print your name)

Phone #:_____ Signature:_____

Date:_____ Witness:_____

Appendix B

QUESTIONNAIRE

Thank you for agreeing to participate in this research project. The information from this questionnaire will be kept strictly confidential. Your name is required only so that we can conduct a very brief telephone follow-up two months after you are laid off. All of the results will be reported in statistical form only, with no names or other individual identifying information used.

Name:

Address:

Phone:

Circle the best times of day to contact you by phone:

| 7-9 AM | 9-11 AM | 11AM-3 PM | 3-5 PM | 5-7 PM | 7-9 PM |

The next few questions provide background information about you:

1. Age:_____ 2. Marital Status: (circle one) Single   Common-Law   Married

3. # of people other than yourself that you support at home:_____

4. # of children at home requiring daycare / babysitting:_____

5. What is your cultural / ethnic background?
    (i.e. Native/First Nation, IndoCanadian, Asian, etc.)_____

6. What language are you most comfortable speaking, reading, and writing?
    _____

7. To what extent will your unemployment create economic hardship:
    (circle one)

    | Not at all | Very little | Some | Very Much | Extreme |

8. Job Title:_____

9. Amount of time in current position: _____ months or _____ years

10. Last date of employment with this company: *(month/day/year)*_____

    During the past twelve months what portion of your income came from:

11. Work for this company:

	0-24%	25-49%	50-74%	75-100%
(circle one)	*(less than 1/4)*	*(1/4 to 1/2)*	*(1/2 to 3/4)*	*(3/4 or more)*

12. Unemployment Insurance (UI):

	0-24%	25-49%	50-74%	75-100%
(circle one)	*(less than 1/4)*	*(1/4 to 1/2)*	*(1/2 to 3/4)*	*(3/4 or more)*

13. Education Completed: *(circle one)*

    | Less than Grade 10 | Grade 10 - 12 | College or Technical | University |

14. As soon as possible I intend to: (tick all that apply)
- ☐ Get another job similar to this one.
- ☐ Change to a new occupation.
- ☐ Register in a training / education program.
- ☐ Get some help with Job Search Skills.
- ☐ Get some help with career decision making.
- ☐ Take a break from work.
- ☐ Move out of this area.
- ☐ I already have another job lined up.

The following questions are to gather information about your ideas about work in general. Please answer them by circling the number that best describes how much you agree with each statement:

1	2	3	4	5
Disagree very much	Disagree slightly	Don't know	Agree slightly	Agree very much

		1	2	3	4	5
1.	Even if I won a huge lottery, I would still want to have a job.	1	2	3	4	5
2.	I often spend pleasurable social time with family and friends.	1	2	3	4	5
3.	If I don't take care of myself, nobody else will.	1	2	3	4	5
4.	I would hate to be on social assistance.	1	2	3	4	5
5.	I would soon get bored if I didn't have a job.	1	2	3	4	5
6.	I will be OK financially even if I'm unemployed for several months.	1	2	3	4	5
7.	I don't know who I would turn to if I needed help with a problem.	1	2	3	4	5
8.	I feel satisfied with the time that I spend with friends and family.	1	2	3	4	5
9.	I'm worried about not having enough money for basic daily expenses.	1	2	3	4	5
10.	It is important that my next job pays me at least as much as this one.	1	2	3	4	5
11.	Having a job is very important to me.	1	2	3	4	5

I am confident that I can successfully:

		1	2	3	4	5
12.	Find out about job vacancies.	1	2	3	4	5
13.	Fill out applications for employment in a complete and effective way.	1	2	3	4	5
14.	Decide what kind of job to apply for.	1	2	3	4	5
15.	Follow-up job leads quickly and effectively.	1	2	3	4	5
16.	Perform well in job interviews.	1	2	3	4	5

FOLLOW-UP TELEPHONE INTERVIEW

Appendix C

Name:

Phone: Date:

PART I - INTRODUCTION
- Reminder about study.
- Introduction of interviewer.
- Query whether this is a convenient time to talk for five or ten minutes.
- Query whether interviewee has adequate privacy to talk.

PART II - IDENTIFYING GROUP MEMBERSHIP

1   Are you currently employed? (If yes, go to 2; if no, go to 4)

2   **Employed in a similar job**
      Job Title:
      Date Started:
      Hours / week:
      Salary:
      Satisfied?

3   **Employed in a new occupation**
      Job Title:
      Date Started:
      Hours / week:
      Salary:
      Satisfied?

4   Involved in retraining
      Type of training:
      Length of course:
      Source of funding:

5   **Seeking Job Search Assistance**
      What kind of help?
      Where?

6   **Seeking Career Counselling**
      What kind?
      Where?

PART III

The following questions are to gather information about your ideas about work in general. Please answer them by telling me the number that best describes how much you agree with each statement:

1 Disagree very much	2 Disagree slightly	3 Don't know	4 Agree slightly	5 Agree very much

1.	Even if I won a huge lottery, I would still want to have a job.	1	2	3	4	5
2.	I often spend pleasurable social time with family and friends.	1	2	3	4	5
3.	If I don't take care of myself, nobody else will.	1	2	3	4	5
4.	I would hate to be on social assistance.	1	2	3	4	5
5.	I would soon get bored if I didn't have a job.	1	2	3	4	5
6.	I will be OK financially even if I'm unemployed for several months.	1	2	3	4	5
7.	I don't know who I would turn to if I needed help with a problem.	1	2	3	4	5
8.	I feel satisfied with the time that I spend with friends and family.	1	2	3	4	5
9.	I'm worried about not having enough money for basic daily expenses.	1	2	3	4	5
10.	It is important that my next job pays me at least as much as this one.	1	2	3	4	5
11.	Having a job is very important to me.	1	2	3	4	5

17. To what extent has your employment created economic hardship?

Not at all	Very little	Some	Very Much	Extreme

I am confident that I can successfully:

12.	Find out about job vacancies.	1	2	3	4	5
13.	Fill out applications for employment in a complete and effective way.	1	2	3	4	5
14.	Decide what kind of job to apply for.	1	2	3	4	5
15.	Follow-up job leads quickly and effectively.	1	2	3	4	5
16.	Perform well in job interviews.	1	2	3	4	5

PART IV - Checklist of resources accessed:

☐ Union
☐ UI
☐ CEC
☐ Job Club
☐ Career Exploration - Counselling. Group program
☒ Academic Upgrading
☐ Computer Literacy Courses
☐ Other: (specify)

PART V - Checklist of Job Search Behaviours:

☒ Prepared a Resume
☐ How many resumes sent out?
☐ Spoke to friends, relatives, acquaintances about job leads
☐ Completed application forms (How many?)
☐ Telephoned prospective employers (How many times?)
☐ Arranged interviews (How many attended?)
☐ Looked at newspaper ads and other job listings. (How often?)
☐ Other (specify):

☐ Very few or no job search behaviours. (Why?)

PART VI - PERMISSION FOR FURTHER FOLLOW-UP IF NECESSARY

It is possible that this research project would benefit from a further follow-up after a few more months. Would it be OK for me to phone you again in a couple of months to conduct an interview similar to this one?
Yes   No

Thank you for your assistance with this study.

Appendix D

Data Analysis

```
->    RECODE STATUS (1 THRU 6=1) (7 THRU 10=2).
->    discriminant
->        /groups status (1,2)
->        /variables neoo neoc neoe neon efft copres1 salt tenur educ ethno1
->        /method direct
->        /statistics means stddev univf table
->        /missing include.
```
SINCE ANALYSIS= WAS OMITTED FOR THE FIRST ANALYSIS ALL VARIABLES
ON THE VARIABLES= LIST WILL BE ENTERED AT LEVEL 1.

- - - - - - - - -   D I S C R I M I N A N T   A N A L Y S I S   - - - - - - - - -

ON GROUPS DEFINED BY STATUS

        75 (UNWEIGHTED) CASES WERE PROCESSED.
        18 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
            2 HAD MISSING OR OUT-OF-RANGE GROUP CODES.
           16 HAD AT LEAST ONE MISSING DISCRIMINATING VARIABLE.
        57 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

                NUMBER OF CASES
    STATUS   UNWEIGHTED   WEIGHTED   LABEL

        1   40   40.0
        2   17   17.0

    TOTAL   57   57.0

WILKS' LAMBDA (U-STATISTIC) AND UNIVARIATE F-RATIO
WITH   1 AND   55 DEGREES OF FREEDOM

VARIABLE	WILKS' LAMBDA	F	SIGNIFICANCE
NEOO	0.95326	2.697	0.1063
NEOC	0.96486	2.003	0.1626
NEOE	0.96537	1.973	0.1657
NEON	0.99126	0.4852	0.4890
EFFT	0.99996	0.2106E-02	0.9636
COPRES1	0.99279	0.3997	0.5299
SALT	0.94905	2.953	0.0913
TENUR	0.96892	1.764	0.1896
EDUC	0.99928	0.3955E-01	0.8431
ETHNO1	0.97252	1.554	0.2178

27-Mar-95 Roberta s data

- - - - - - - - D I S C R I M I N A N T   A N A L Y S I S - - - - - - - - -

ON GROUPS DEFINED BY STATUS

ANALYSIS NUMBER   1

DIRECT METHOD: ALL VARIABLES PASSING THE TOLERANCE TEST ARE ENTERED.

        MINIMUM TOLERANCE LEVEL.................. 0.00100

CANONICAL DISCRIMINANT FUNCTIONS

        MAXIMUM NUMBER OF FUNCTIONS..............   1
        MINIMUM CUMULATIVE PERCENT OF VARIANCE... 100.00
        MAXIMUM SIGNIFICANCE OF WILKS' LAMBDA....   1.0000

PRIOR PROBABILITY FOR EACH GROUP IS 0.50000

                    CANONICAL DISCRIMINANT FUNCTIONS

                  PCT OF   CUM CANONICAL AFTER WILKS'
    FCN EIGENVALUE VARIANCE PCT   CORR   FCN   LAMBDA CHISQUARE   DF SIG

                                          :   0   0.6598   20.788   10 0.0226
     1*   0.5155   100.00 100.00   0.5832 :

      * MARKS THE   1 CANONICAL DISCRIMINANT FUNCTIONS REMAINING IN THE ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

              FUNC   1

NEOO   0.93009
NEOC   -0.34633
NEOE   0.51835
NEON   -0.23976
EFFT   0.54769
COPRES1   -0.81711
SALT   -0.65767
TENUR   0.69185
EDUC   -0.18189
ETHNO1   0.88182

27-Mar-95 Roberta s data

STRUCTURE MATRIX:

POOLED WITHIN-GROUPS CORRELATIONS BETWEEN DISCRIMINATING VARIABLES
                                    AND CANONICAL DISCRIMINANT FUNCTIONS
(VARIABLES ORDERED BY SIZE OF CORRELATION WITHIN FUNCTION)

              FUNC   1

SALT   -0.32272
NEOO   0.30840
NEOC   0.26578
NEOE   0.26381
TENUR   0.24946
ETHNO1   0.23414
NEON   0.13081
COPRES1   -0.11873
EDUC   -0.03735
EFFT   0.00862

CANONICAL DISCRIMINANT FUNCTIONS EVALUATED AT GROUP MEANS (GROUP CENTROIDS)

    GROUP   FUNC   1

      1   -0.45979
      2   1.08185

CLASSIFICATION RESULTS -

| | NO. OF | PREDICTED GROUP MEMBERSHIP | |
ACTUAL GROUP	CASES	1	2
GROUP 1	40	32	8
		80.0%	20.0%
GROUP 2	17	3	14
		17.6%	82.4%
UNGROUPED CASES	2	1	1
		50.0%	50.0%

PERCENT OF "GROUPED" CASES CORRECTLY CLASSIFIED: 80.70%

CLASSIFICATION PROCESSING SUMMARY

        75 CASES WERE PROCESSED.
         0 CASES WERE EXCLUDED FOR MISSING OR OUT-OF-RANGE GROUP CODES.
        59 CASES WERE USED FOR PRINTED OUTPUT.