

Employment Status and Emotional Health

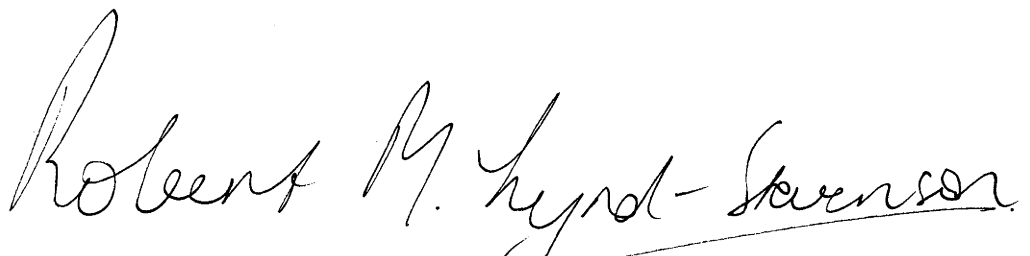


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I declare that this thesis is my original work and that no part has been accepted or submitted for a degree or diploma at any University. To the best of my knowledge, no published or written material has been included without due citation.


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Abstract

Social psychologists have consistently reported that the unemployed are lower in emotional health than the employed, but have failed to explore the processes associated with unemployment that generate the differences in emotional health between the employed and unemployed groups. Moreover, the emotional impact of unemployment is not uniform, and satisfactory explanations for the individual variation in responses have not been developed. The present study was designed to overcome the absence of process explanations in the unemployment literature by developing social theory in a causal-process form that accounts for the detrimental and differential impact of unemployment. Two strategies were used: first, a causal modelling approach to evaluate causal-process explanations; second, a social-cognition perspective in the form of learned-helplessness and frustrated-motivation theory to specify the processes that generate emotional health.

A cross-sectional study with 200 young unemployed people was conducted to investigate the impact of unemployment upon emotional health. The data recorded the differences between individuals at one point-in-time and provided the foundation for a *causal analysis of interindividual differences*. The learned-helplessness theory was used to predict variation in general depression, and frustrated-motivation theory to predict situation-specific levels of anger, frustration and disappointment ('unemployment frustration'). The causal model specified by learned-helplessness theory was initially rejected, although *post-hoc* modifications consistent with the theory provided an acceptable model. In contrast, variables nominated by frustration-motivation theory were good predictors of unemployment frustration, but the initial causal structure specifying behavior as a mediating variable failed to match the data. A major amendment with cognition as a mediating variable was proposed and found to be successful.

A longitudinal study was also conducted. The longitudinal data recorded the change within individuals over time and provided the opportunity to conduct a *causal analysis of intraindividual change* that examines the dynamic processes that generate human behaviour. Of the 166 respondents interviewed at follow-up, 100 were employed and 43 were unemployed. The employed and unemployed groups enabled two investigations regarding the relationship between employment status and emotional health. The first was confined to the unemployed group and examined the impact unemployment had upon emotional health. Although the size of the unemployed group at follow-up restricted conclusions, learned-helplessness theory did provide a limited account for the variation in general depression, as did the frustrated-motivation theory for unemployment frustration. The second investigation evaluated learned-helplessness theory, originally proposed as an explanation for the negative impact of unemployment, to account for the improvements in emotional health associated with the transition from unemployment to employment. The learned-helplessness theory did not, however, explain the changes in emotional health for the newly employed.

Two conclusions were drawn. The first was that a causal modelling approach is useful as a means to evaluate social theory in a causal-process form. The second was that the social-cognition perspective, as represented by learned-helplessness and frustrated-motivation theory, provides a viable account for the processes that generate depression and frustration in the unemployed. Learned-helplessness theory failed, however, to account for the variation in depression associated with the transition from unemployment to employment. The benefits of using the social-cognition perspective to provide a focus for preventative and therapeutic programmes are also discussed, along with recommendations for future research.

Contents

	Pg
Title Page	i
Declaration	ii
Acknowledgements	iii
Abstract	iv
Contents	v
Overview: Employment Status and Emotional Health	1
Chapter I (Introduction to Cross-Sectional Study): Unemployment and Emotional Health	3
Descriptive Research	3
Psychological Research	6
Theoretical Perspectives	10
The Stage Perspective	11
The Social-Cognition Perspective	13
Learned-Helplessness Theory	14
Application to Unemployment	18
Learned-Helplessness Theory in a Causal-Process Form	20
Frustrated-Motivation Theory	23
Application to Unemployment	24
Frustrated-Motivation Theory in a Causal-Process Form	26
Conclusion	28
Background Factors and Psychological Theory	28
Biographic and Demographic Factors	29
Aspects of Job Search	30
Financial Status	31
Social Comparison with Friends and Family	31
Past and Present Employment Details	32
Summary of Background Factors	32
Conclusion	32
Chapter II (Cross-Sectional Method): Research Strategies and Procedures to Interview the Unemployed	34
Causal Analysis in Nonexperimental Social Research	34
Causal Concepts and Causal Modelling	34
Evaluating Causal Models	35
Statistical Procedures	36
Specifying the Causal Model	36
Structural Coefficients	39
Model-Fit Statistics	39
Procedure to Test A Causal Model	40
Hypothetical Example	42
A Causal Analysis of Interindividual Differences	45
Conclusion	45

Research Population	46
Questionnaire	47
Questionnaire Format	48
Research Variables	48
Exogenous Variables	48
Endogenous Variables	50
Endogenous Cognitive Variables	50
Endogenous Affect Variables	51
Data Collection	52
Sampling Procedure	53
Interview Strategy	53
Sample Surveyed	54
Biographical and Demographic Details of the Sample	54
Comparing the Sample with Previous Studies	55
Comparing the Sample with D.S.S. Data	56
Chapter III (Cross-Sectional Results): Causal Analysis of the Relationship Between Unemployment and Emotional Health	59
Descriptive Statistics	59
Learned-Helplessness Theory	63
A Causal Analysis of Interindividual Differences	63
Specifying the Causal Model	63
Statistical Analysis	64
Final Causal Structure	69
Discussion	72
Frustrated-Motivation Theory	75
A Causal Analysis of Interindividual Differences	76
Specifying the Causal Model	76
Statistical Analysis	76
Final Causal Structure	79
Discussion	84
A Unified Theory	88
Conclusion	89
Chapter IV (Introduction to Longitudinal Study): Employment Status and Emotional Health	90
Unemployment and Emotional Health	90
Learned-Helplessness Theory	90
Frustrated-Motivation Theory	91
The Transition from Unemployment to Employment and Changes in Emotional Health	91
Social Research	92
The Social-Cognition Perspective	94
Background Factors and Psychological Theory	96
Conclusion	96
Chapter V (Longitudinal Method): Method and Procedures to Interview the Unemployed at Follow-Up	97
Causal Analysis with Longitudinal Data	97
Methodological Framework	98
Conceptual Foundations	98
Causal Concepts in Longitudinal Research	100

Cross-Sectional versus Longitudinal Research	100
Summary	102
A Causal Analysis of Intraindividual Change	102
Measuring Intraindividual Change	102
Causal Analysis	105
Intraindividual Covariation	105
Stable and Dynamic Exogenous Variables	106
Summary	107
Questionnaires	107
Questionnaire Format	107
Research Variables	108
Exogenous Variables	108
Exogenous Variables used in Cross-Sectional Analysis	108
Employment-Status Measure	109
Endogenous Variables	111
Data Collection	113
Sample	113
Chapter VI (Longitudinal Results): Causal Analysis of the Relationship Between Employment Status and Emotional Health	115
Unemployment and Emotional Health	115
Descriptive Statistics	116
Learned-Helplessness Theory	119
A Causal Analysis of Intraindividual Change	119
Discussion	120
Frustrated-Motivation Theory	125
A Causal Analysis of Intraindividual Change	125
Discussion	127
The Transition from Unemployment to Employment and Changes in Emotional Health	131
Descriptive Statistics	133
Learned-Helplessness Theory	134
A Causal Analysis of Intraindividual Change	134
Discussion	136
Conclusion	138
Chapter VII: General Discussion	140
Causal Analysis in Cross-Sectional and Longitudinal Research	140
The Social-Cognition Perspective	141
Unemployment and Emotional Health	142
Learned-Helplessness Theory	142
Frustrated-Motivation Theory	144
The Transition from Unemployment to Employment and Changes in Emotional Health	146
Conclusion	148
Implications for the Unemployed	148
Prevention	148
Therapeutic Intervention	149
Future Research	151
Conclusion	154
References	156

Appendix A	Questionnaire used for Unemployed in Cross-Sectional Study	171
Appendix B	Questionnaire used for Unemployed in Longitudinal Study	186
Appendix C	Questionnaire used for Jobless or Unpaid Workers in Longitudinal Study	210
Appendix D	Questionnaire used for Full or Part-Time Workers in Longitudinal Study	233
Appendix E	VAX/VMS Command Procedure for Reformatting SPSS^x Data into a Format Suitable for LISREL Input	257
Appendix F	LISREL Commands used to Test Causal Models	261

Overview

Employment Status and Emotional Health

The public belief that unemployment is detrimental to emotional health and the rapid increase of unemployment rates over the last two decades has prompted an increase in the number of social science investigations into the relationship between employment status and emotional health (Feather, 1985). The general consensus in the scientific literature is that the unemployed are lower in emotional health than the employed (Jahoda, 1988; Warr, 1983). Unfortunately, however, social psychologists have tended to evaluate emotional *outcome*, and failed to examine the *processes* associated with unemployment that generate the differences in emotion between the two groups (Hartley & Fryer, 1984; Liem & Rayman, 1982).

Given that process assumes causation (Baltes & Nesselroade, 1979), process explanations can be conveyed by social theory in a *causal-process form* that nominates the variables and causal structure that generate human behaviour (Reynolds, 1971). The benefits of causal-process explanations are twofold. First, they offer a full scientific understanding and explanation for human behaviour (Turner, 1974), providing the opportunity to develop a greater theoretical understanding of the relationship between employment status and emotional health. Second, they assist in formulating theory that enables a greater focus for intervention programmes that are designed to aid the unemployed (Liem & Rayman, 1982). The central endeavour in the present study was to formulate causal explanations for the detrimental impact of unemployment that culminate in the relationship between employment status and emotional health.

Two themes guided the study. The first was a commitment to using causal concepts in a “structural” or “causal modelling” approach that evaluates theoretical explanations for the *processes* that generate human behaviour, as opposed to the more traditional “predictive” approach that avoids causal concepts and attempts to isolate the major *predictors* of human behaviour (Blalock, 1964; Cook & Campbell, 1979; Pedhazur, 1982). The theme also incorporates recent developments in life-span developmental psychology (Baltes, Reese & Nesselroade, 1977). Life-span developmental psychology provides a nomenclature to conceptualise the difference between cross-sectional and longitudinal research designs. Cross-sectional methods provide data that record the differences between individuals at one-point in time and can be called a *causal analysis of interindividual differences*, while longitudinal methods provide data that report the changes within individuals over time and can be called a *causal analysis of intraindividual change*.

The second theme was that the social-cognition perspective is a useful source of causal-process explanations for the relationship between employment status and emotional health (Bandura 1986). The potential benefit of this approach is illustrated by comparing the social-cognition perspectives with the stage perspective currently popular in unemployment research. The stage perspective proposes that people proceed through fixed stages in their reactions to unemployment (Kelvin & Jarrett 1985), while the social-cognition perspective specifies social cognitions as a major determinant of the emotional reactions associated with unemployment (Argyle, 1988; Bandura, 1986).

The social-cognition perspective, as used to account for the negative emotional reactions associated with unemployment, takes the form of learned-helplessness and frustrated-motivation theory. Feather and Davenport (1981) have reported that the learned-helplessness theory is useful to explain depression, while frustrated-motivation theory is useful to explain the levels of anger and hostility in the unemployed. The learned-helplessness theory was also proposed as an explanation for the improvements in emotional health that accompany the transition from unemployment to employment. The learned-helplessness and frustrated-motivation theories provide an interesting contrast due to the different causal structures that try to describe the interplay between environment, person and behaviour. The learned-helplessness theory views cognition, and frustrated-motivation theory views behaviour, as mediating the relationship between employment status and emotional health. Moreover, despite difference causal structures, the common emphasis on social cognitions provides the potential for integrating the two theories into a unified account of the development of depression and frustration in the unemployed.

The thesis is presented in two parts. The first part reports a cross-sectional study with 200 unemployed young people interviewed at three government offices in Canberra and is designed to investigate the relationship between unemployment and emotional health. The second part reports a longitudinal study that examines the relationship between unemployment, employment and emotional health for the people interviewed at follow-up. The study concludes by evaluating the methodological framework and theoretical perspectives that guide the study.

Chapter I

(Introduction to Cross-Sectional Study)

Unemployment and Emotional Health

The following chapter reviews two theoretical perspectives that attempt to account for the variation in negative emotions commonly reported in the unemployed. However, any attempt to review the literature concerning the emotional impact of unemployment must take into account the observation that the range of social, economic and physical environments between countries could mean that the emotional impact of unemployment is very different from one country to the next (Kelvin & Jarrett, 1985). Therefore, to ensure the relevance of the present study conducted in Australia with research conducted overseas, the literature review was confined to studies conducted in countries that share the same level of industrialization and are generally considered part of the Western Hemisphere. The chapter opens by briefly reviewing a number of descriptive studies conducted during the Great Depression of the 1930s, and the last two decades, that provide a background for more recent investigations. Current theoretical perspectives in social psychology are then reviewed and rated according to their ability to specify the causal processes that generate emotional ill-health in the unemployed.

Descriptive Research

Community interest in the emotional impact of unemployment on the individual tends to wax and wane according to the prevailing levels of unemployment (Feather, 1985, 1990). The most dramatic increase of unemployment in modern history occurred during the Great Depression (Windschuttle, 1981), triggering widespread concern about the individual impact of unemployment. A broad range of largely descriptive studies were conducted during the Great Depression and provided the first social research investigations into the emotional impact of unemployment (Kelvin & Jarrett, 1985).

A number of authors have noted that the studies conducted during the Great Depression have limited application to understanding the emotional impact of contemporary unemployment (Feather, 1985, 1990; Gurney & Taylor, 1981; Hartley & Fryer, 1984; O'Brien, 1986). Three factors have been identified. First, that there has been a dramatic increase in the standard of living in most industrialized countries between the 1930s and the present. Second, that most of the unemployed during the 1930s were working-class adult males, while today's unemployed include men and women who span the full occupational spectrum. Third, that most of the research conducted during the 1930s was descriptive and lacks the methodological rigour accepted in

contemporary research. Nevertheless, the descriptive reports collected during the Great Depression are still relevant today (Feather, 1985, 1990; O'Brien, 1986), and "cannot be neglected or dismissed because they had strengths that are lacking in many current studies. They allowed the unemployed to describe their experiences in their own terms without the imposition of the researcher's own theoretical categories" (O'Brien, 1986, p. 185). A further consideration for reviewing the descriptive reports is that they were instrumental in providing the foundation for the stage perspective that currently dominates unemployment research (Feather, 1990; Jahoda, 1988).

The novelist George Orwell (1937), provided one of the earliest and most moving accounts of the emotional impact of unemployment during the Great Depression:

I remember the shock of astonishment it gave me, when I first mingled with tramps and beggars, to find that a fair proportion, perhaps a quarter, of those beings whom I had been taught to regard as cynical parasites, were decent young miners and cotton-workers gazing at their destiny with the same sort of dumb amazement as an animal in a trap. They simply could not understand what was happening to them. They had been brought up to work, and behold! it seemed as if they were never going to have the chance of working again. (p.86)

The descriptive accounts presented by novelists and reporters such as George Orwell, publicised the plight of the unemployed during the Great Depression and provided the impetus for more research into the emotional consequences of unemployment. Two descriptive reports considered "classics" and conducted during the Great Depression (Garraty, 1978) were *Marienthal* by Jahoda, Lazarsfeld, and Zeisel (1933/1972), and *The Unemployed Man* by Bakke (1933). Bakke (1933) lived with a working class family in the London suburb of Greenwich for six months, and spent his time in employment offices, neighbourhood pubs, on the streets and any place where the unemployed gathered. He used time diaries, unstructured interviews and observations, and interviewed unemployed people, their families, and accompanied people during their search for work. Bakke (1933) also kept in contact with five people throughout his study. He recorded the meetings and made three general statements based on his observations. First, the longer the unemployment, the greater the psychological distress. Second, despite considerable variation in the magnitude of individual responses, the primary reaction to long term unemployment was apathy and hopelessness. Third, despite the negative affect and the repeated job rejections, most unemployed people continued to apply for jobs. Bakke also studied unemployment in the United States (Bakke, 1940a, 1940b, Clague, Couper & Bakke, 1934), and found little to counter the English observations.

The second 1933 "classic" was a study conducted by Paul F. Lazarsfeld, Marie Jahoda and Hans Zeisel. The three were social scientists at the University of Vienna who stayed at *Marienthal*, a small village not far from Vienna during the 1931-32 winter. The only industry in the town was a

single textile mill that closed down leaving the 1,486 townspeople virtually unemployed. The economic context of the study differed from Bakke's (1933), in that the entire community was unemployed, and the Austrian government handout was small in comparison to the English counterpart. Nevertheless, the conclusions were similar to Bakke's, with reports of despair that accumulated with time. Jahoda, Lazarsfeld and Zeisel (1933/1972) while noting individual differences, also identified a sequence of stages in the emotional response:

We have distinguished four basic attitudes: the predominant one is resignation; a more active one we named unbroken; and the two deteriorated forms we called in despair and apathetic. As we look back on these two forms, it now appears that they are probably but two different stages of a process of psychological deterioration . . . (p.87)

Other observers have also recorded a progressive emotional deterioration associated with unemployment. Beales and Lambert (1934) collected memoirs of people who had experienced extended periods of unemployment and suggested that people progressed from optimism to pessimism to fatalism. Another study by the Pilgram Trust (1938) proposed that between the psychological state of the "worker" and the psychological state of "pauperism", a stage of indifference and passivity existed. Zawadski and Lazarsfeld (1935) examined autobiographical accounts of unemployment in Poland and also found evidence to support the observations that negative reactions increased with time. As the Great Depression continued, the number of memoirs and case histories increased. Eisenberg and Lazarsfeld (1938) reviewed over 112 papers published during the Great Depression, and while acknowledging that the severity of unemployment varied for different individuals, concluded with the following much quoted statement:

We find that all writers who have described the course of unemployment seem to agree on the following points: first there is shock, which is followed by an active hunt for a job, during which the individual is still optimistic and unresigned; he still maintains an unbroken attitude.

Second, when all efforts fail, the individual becomes pessimistic, anxious and suffers active distress: this is the most crucial state of all. And third, the individual becomes fatalistic and adapts himself to his new state but with a narrower scope. He now has a broken attitude. (p.378)

Concern regarding the impact of unemployment declined at the close of the Great Depression, (Taylor & Gurney, 1984), but the rising unemployment rates during the 1970s again focused interest on the emotional impact of unemployment (Feather, 1985). Descriptive accounts of the impact of unemployment during the 1970s and '80s have been provided by Marsden and Duff (1975) in England, Maurer (1979) in the U.S. and Turner (1983) and Watson (1985) in Australia. A number of authors when comparing the reports compiled during the 70s and 80s with the accounts published during the Great Depression and have commented that the emotional impact of unemployment has remained largely the same. Indeed, Jahoda (1979, p. 310) compared contemporary accounts with her own reports collected during the Great Depression, and noted that unemployment has had the same emotional impact in both periods.

Descriptive reports collected during the Great Depression and the post-war period generally agree that although there is individual variation in the severity of emotional responses, the predominant reaction to unemployment includes depression, loss of self-esteem, self-blame and apathy. However, an additional finding that has surfaced in recent years and that was apparently unobserved during the Great Depression, are reports of anger and hostility about being unemployed. Liem (1987), McCaughey (1987), Viney (1982) and Watson (1985) make reference to elevated levels of anger, resentment and hostility in the unemployed they interviewed. McCaughey (1987, p. 146) reports for example, that a father described his eighteen-year-old son's emotional reaction to unemployment with the comment that: "His personality has changed, he has become much more irritable. There is an undercurrent of aggression - it is all because he hasn't been able to get work." Clearly, recent descriptive reports indicate that anger and hostility are reactions to current unemployment that need to be considered when describing the emotional reactions to unemployment.

In summary, the descriptive reports available in the literature were primarily conducted during the Great Depression and indicate that although there is individual variation in the magnitude of emotional responses, the major response to unemployment is a general deterioration in emotional health as indicated by increased depression, loss of self-esteem, along with increasing self-blame and apathy. The number of descriptive reports during the post-war period dropped dramatically, although the conclusions appear identical. The only noticeable difference in the contemporary reports is the increased number of observations that include anger and hostility to being unemployed.

Psychological Research

The second wave of research concerning the emotional impact of unemployment occurred during the 1970s and 1980s. The major impetus for the renewed interest in the effects of unemployment occurred due to the rapid rise of unemployment during the 1970s (Feather, 1985, 1990). However, the context for social research was different to that conducted during the Great Depression, and prompted by a different array of community concerns regarding the emotional impact of unemployment.

The post-war economic boom lulled many economists into the view that high unemployment rates were only of historical interest (Windschuttle, 1981). During the "golden years" from 1946 to 1974 for example, (Garraty, 1978), the Australian unemployment rate was only 1.2% of the workforce (Windschuttle, 1981), cultivating the accepted "axiom that no government could

survive more than 2 per cent out of work'' (Jones, 1985, p.125). However, the faith was shaken during the mid-70s, when unemployment in the Australian labour force increased from 2% to 6%, with a dramatic increase from 6% to 20% for people in the 16 to 24 years age bracket (Windschuttle, 1981). Public concern was further fueled with predictions that the increasing use of labour-saving technology, and an apparent decline of the indigenous tertiary sector, would result in further unemployment (Windschuttle, 1981). The prospect was that an increasing number of individuals would want jobs, when no jobs were available (Jones, 1985; Jordan, 1982; Schumacher, 1979).

The rising rates of unemployment provided an impetus for conducting research into the emotional impact of unemployment. The improved methodology and psychometric instruments available during the post-war period, resulted in more methodologically sophisticated research compared with the largely descriptive research conducted during the Great Depression (Feather, 1985, 1990; Gurney & Taylor, 1981; Jahoda, 1979; 1982). A survey of the 1980s literature reveals a substantial number of commentaries, summaries and research reviews on the psychological impact of unemployment (Banks & Ullah, 1988; Dooley & Catalano, 1988; Farrow, 1984; Feather, 1985; Feather, 1990; Fraser, 1980; Furnham, 1985; Gurney & Taylor, 1981; Hartley, 1980c; Hartley & Fryer, 1984; Jacobson, 1987; Jahoda, 1986; Keefe, 1984; Kelvin & Jarrett, 1985; Kerr, 1983; King, 1989; Layton, 1988; Liem, 1987; Mackay & Haines, 1982; Miller, Soper & Denton, 1983; O'Brien, 1986; Sanford & Mullen, 1985; Schwefel, John, Porthoff & Hechler, 1984; Warr, 1982, 1983, 1984; Winefield, 1985; Winton, Heather & Robertson, 1986).

A number of examples serve to illustrate the range of research techniques and samples that have been used to investigate the impact of unemployment upon emotional health. Feather and O'Brien (1986a, 1986b, 1987) for instance, conducted a longitudinal study using an initial sample of over 3,000 young school-leavers. The study controlled for societal effects and assessed a wide range of variables over a number of waves. The unemployed school-leavers were found over time to experience a decrease in perceived competence, activity, life satisfaction and an increase in depressive affect. Patton and Noller (1984) in a smaller longitudinal study with school children in a middle-class suburb, found that a group of unemployed school-leavers ($n = 21$) at follow-up showed clear deficits in self-esteem, increased external locus of control and depression compared to their colleagues who were employed or still at school. The results also varied with sex, and with differences reported at the initial contact on depression and self-esteem, although at follow-up the only difference was with the depression scores.

Finlay-Jones and Eckhardt (1981, 1982, 1984) conducted a study based on a random sample of 401 single unemployed people aged 16 to 24 years-of-age and registered for unemployment benefits. The subjects were interviewed using the General Health Questionnaire (Goldberg, 1972, 1978), and a short version of the Present State Examination (Wing, Cooper & Sartorius, 1974). By comparing their results with those of a previous study of employed 15 to 25 year old in the same city, Finlay-Jones and Eckhardt estimated that the experience of unemployment in the young raised the odds of having a psychiatric disorder by a factor of six.

An unusual sample was used in a longitudinal study by Cohn (1978). The data set for the project came from a national panel survey of approximately 5000 families taken over 5 waves in the United States. Cohn (1978) analyzed two waves of interviews in the data set and compared employed workers at one wave who became unemployed by wave two, with a random sample of employed individuals who remained employed between the two interviews. A psychometric limitation, however, was that the dependent measure used in the study was a single-item dichotomous response to the question: "Are you more often satisfied or dissatisfied with yourself?" Nevertheless, Cohn (1978) reported that the unemployed expressed increased dissatisfaction with self compared with the individuals who had remained employed. Although using a single-item measure, the results provide an example from a broad data base of the detrimental impact that unemployment has upon psychological health.

The vast array of findings based on different samples and different methods, as well as the findings collected during the Great Depression, support the presence of a relationship between employment status and emotional health (Jahoda, 1988). As Warr (1983, p. 306) states, "Without doubt the psychological health of unemployed people is significantly below that of people in jobs." One explanation for the differences in emotional health between the employed and unemployed is that the individuals poor in emotional health are also the individuals who become unemployed (Bartley, 1988). However, longitudinal case studies conducted with the newly unemployed tend to indicate that the experience of unemployment is the most important factor generating emotional ill-health. As Jahoda (1979, p. 310) mentions when discussing the descriptive reports collected during the Great Depression, they do, at least, establish "the temporal priority of unemployment to the decay of self-esteem and morale." Clearly, the social research conducted during the Great Depression and the 1980s indicates that there is a difference in emotional health between the employed and unemployed, and that the detrimental impact of unemployment is instrumental in generating the difference between the two groups.

Nevertheless, the current research has been subjected to harsh criticism. Hartley and Fryer (1984) argue that the many of the reports have added little to the conclusions provided by the descriptive research conducted during the Great Depression. In particular, the research fails to explore the *processes* that generate the deterioration and variation of emotional ill-health in the unemployed (Warr, Jackson & Banks, 1988). Acknowledging that process assumes *causation* (Baltes & Nesselroade, 1979), other authors use different terms to make the same point: “to explain a phenomenon we need to know . . . what causes the effects we document. Unfortunately, the literature is less than forthcoming about the reasons why the reported deleterious psychological consequences of unemployment occur, that is, theories of the psychology of unemployment” (Hartley & Fryer, 1984, p. 9).

The following study attempts to address the paucity of process research in the unemployment literature, by attempting to develop causal explanations that account for the development and variation of emotional ill-health in the unemployed. The aim of the present study can be clarified by building upon the common distinction between scientific description that answers “how much?”, compared with scientific explanation that answers “why?” (Rogosa, 1979, pp. 263-264). While previous research has described *how much* unemployment influences emotional health, the present study is designed to develop social theory that explains *why* unemployment generates emotional ill-health.

Social theory in a form that provides process explanations for the development of emotional ill-health in the unemployed is relatively rare. Consequently, the nature of theory in such a form is briefly outlined, along with details about the benefits of developing process explanations in the literature. The term *causal-process form* was coined by Reynolds (1971) to indicate any social theory that specifies the causal processes believed to generate human behaviour. Examination of the examples provided by Reynolds (1971, pp. 102-107, pp. 129-132) reveals that social theory in a causal-process form involves using theory to nominate the relevant variables and causal structure (causal links between variables). The attraction of developing causal-process explanations is that such theory has been considered the most advanced form of scientific knowledge (Turner, 1974). Reynolds (1971) claims, for example, that cause and effect explanations are necessary in social theory to provide a full understanding of human behaviour:

A . . . purpose of scientific knowledge, providing a sense of understanding, is both the most difficult to achieve and the most controversial. It is the assumption of this author . . . that a sense of understanding is provided only when the causal mechanisms that link changes in one or more concepts (the independent variable) with changes in other concepts (the dependent variables) have been fully described. If a person feels ambiguous or uncertain about an explanation, it is because some part of the causal linkage has been omitted. (p. 7)

The use of causal-process explanations in mainstream social psychology has become increasingly evident in recent years. Gergen and Gergen (1986, p. 5) for example, state that any theory in social psychology must specify the “internal mental processes of the individual” that generate human behaviour. Furthermore, an increasing number of researchers are defining social cognitions as *hypothetical constructs* that display causal properties, in contrast to *intervening variables* that are devoid of causal properties (i.e., Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984).

A further reason for formulating social theory in a causal-process form is encapsulated in the famous epigram by Kurt Lewin that there “is nothing so practical as a good theory” (Ivey & Simek-Downing, 1980; p. xiii). Liem and Rayman (1982) state that developing causal-process explanations for the unemployed has an applied benefit:

[There is the] . . . need in all research on job loss to place increasing attention on mediation processes rather than outcome alone . . . Concrete answers to these questions for different populations of the jobless have a direct bearing on our capacity to develop meaningful programs of support and services to dislocated workers, their families, and their communities. (p. 1122)

Overall, the primary aim of the present study was to develop a social theory in a causal-process form that would account for the development and severity of emotional ill-health in the unemployed. The following literature review details the research relevant to providing theoretical explanations for the detrimental impact of unemployment. Warr (1984) has noted, however, that the young, middle-aged and old have different reactions to being unemployed. The present study was confined to the young unemployed for two reasons: first, young people have experienced the highest rates of unemployment of any age group (Windschuttle, 1981); second, there has been concern that the detrimental effects of unemployment might carry-over into later life (Gurney, 1980). Nevertheless, despite the focus on youth unemployment, studies from a variety of sources were used when selecting the most suitable theory.

Theoretical Perspectives

The stage and social-cognition perspectives are commonly cited in the research literature and provide contrasting views to explaining the relationship between unemployment and negative emotions. The stage perspective proposes that people proceed through fixed stages in their reactions to unemployment (Kelvin and Jarrett 1985), while the social-cognition perspective cites social cognitions as a major determinant for the emotional reactions associated with negative life-events (Argyle, 1988; Bandura, 1986). Both perspectives will be reviewed briefly, and their ability to provide causal-process explanations for the detrimental impact of unemployment considered.

The Stage Perspective

Kelvin and Jarrett (1985) noted that the stage perspective evolved in the descriptive research literature during the Great Depression and was first mentioned as an “after-thought” by Jahoda, Lazarsfeld and Zeisel (1933/1972). The stage perspective became popular when Eisenberg and Lazarsfeld (1938) in a review of over 100 studies conducted during the Great Depression, commented that the unemployed appeared to proceed through the stages of shock, optimism, pessimism and fatalism. The stage perspective has been used to summarize numerous descriptive studies (i.e., Beales & Lambert, 1934; Finley & Lee, 1981; Hill, 1977; Kaufman, 1982; Pilgrim Trust, 1938; Powell & Driscoll, 1973; Ragland-Sullivan & Barglow, 1981; Zawadski & Lazarsfeld, 1935). Indeed, acceptance of the stage perspective in the descriptive literature has virtually reached “paradigm” status (Kelvin & Jarrett, 1985).

A study by Hill (1977) provides a recent example of the stage perspective. Hill interviewed 150 people of different ages and unemployment duration, registered with a British government employment agency, and identified the “initial response”, “intermediate” and “settling down to unemployment” phases in his open-ended interviews. The initial responses varied and some people were shocked and traumatised, but the typical response appeared to be denial and indifference. The initial response stage lasted from a few weeks to two months, but began to change when the person experienced continuous job rejections. The intermediate stage was then reached and characterized by self-reports of “depression”, “boredom” and “laziness”. The second stage continued from nine months to a year until the final stage was reached when the person became apathetic and resigned to unemployment. The three stages reported by Hill (1977) are also similar to the stages outlined by Eisenberg and Lazarsfeld (1938) and Hays and Nutman (1981).

The proposal that people pass through stages when reacting to unemployment has found currency in a wide range of studies. For example, Jahoda, Lazarsfeld and Zeisel (1933/1972) mentioned the two stages of despair and apathy. Beales and Lambert (1934) reported the three stages of optimism, pessimism and fatalism. Powell and Driscoll (1973) cited four stages: first, relaxation and relief; second, a well organized job search; third, vacillation, doubt and some anger; and finally in the fourth stage, apathy, listlessness, cynicism and a feeling of helplessness. Zawadski and Lazarsfeld (1935) detailed six stages starting with “a feeling of injury; sometimes strong fear and distress; sometimes an impulse towards revenge; hatred; indignation; fury” with the sixth stage indicated by “either sober acquiescence or dumb apathy, and then the alternation between hope and hopelessness, activity and passivity, according to momentary changes in the material situation” (p.235).

Despite popularity, the stage perspective has come under increasing criticism in recent years from researchers engaged in descriptive reports and research using standardized instruments. For example, many of the reports in the descriptive literature have not found the stage concept useful in describing their results (Huczynski, 1978; Fineman, 1983; Gould & Kenyon, 1972; Leventman, 1981; Marsden & Duff, 1975). Indeed, Huczynski (1975), Fineman (1983) and Leventman (1981) report no evidence in their descriptive reports that psychological deterioration proceeded in stages. The utility of the stage perspective to provide testable predictions also raises concern. An initial difficulty is that any attempt to formulate predictions is impeded by the broad range and diversity of stages noted in the observational studies (Hartley & Fryer, 1984; Kelvin & Jarrett, 1985). As previously outlined, there is little agreement about the number of stages and estimates range from two (Jahoda, Lazarsfeld & Zeisel, 1933/1972) to six (Zawadski & Lazarsfeld, 1935), and is compounded by the absence of a clear criteria to distinguish one stage from the next (Kelvin & Jarrett, 1985). There is also disagreement about the type of emotional reaction within stages. For example, Hill (1977) states that people are either traumatised or indifferent to job-loss in the first stage, making specific predictions about the type of emotional reaction difficult to formulate.

The stage perspective has also been unsuccessful in social research using standardized instruments. Stokes and Cochrane (1984) conducted one of the few research studies and used a variety of psychological scales to evaluate the four stages proposed by Eisenberg and Lazarsfeld (1938), Harrison (1976) and Hill (1977). The procedure in the study consisted of interviewing individuals every four weeks over 24 weeks to look for changes in psychological functioning consistent with the four stages. Consistent with recent descriptive research (Huczynski, 1978; Fineman, 1983; Gould & Kenyon, 1972; Leventman, 1981; Marsden & Duff, 1975), the statistical analysis failed to find evidence that the sample reacted to unemployment in a series of stages.

Aside from the empirical findings, the orientation provided by the stage perspective has also been criticised on two theoretical grounds. First, the stage perspective assumes that individuals pass through a fixed set of stages in their reaction to unemployment (Kelvin & Jarrett, 1985). However, the descriptive literature is replete with examples to indicate that individuals vary in the type and magnitude of emotional responses when unemployed (i.e., Bakke, 1933). Unless an account for the individual variation can be provided, the stage perspective cannot be considered a satisfactory explanation for the emotional responses to unemployment. Second, the stage perspective is primarily descriptive, and provides little insight into the processes that are associated with unemployment and that generate emotional ill-health (Kelvin & Jarrett, 1985). There is no explanation, for example, *why* unemployed people pass through the various stages outlined in the stage perspective. The consequence is that the stage perspective cannot answer the need for causal-process explanations cited in the literature (Hartley & Fryer, 1984; Liem & Rayman, 1982).

In summary, although the stage perspective is frequently cited, recent descriptive accounts and research using standardized instruments do not support the proposition that people pass through stages in their reactions to unemployment. Moreover, and more relevant to the aims of the present study, the perspective fails to specify the causal processes that provide the foundation for developing theory in a causal-process form. Consequently, the stage perspective cannot answer the question of *why* unemployment has the detrimental individual impact so commonly reported.

The Social-Cognition Perspective

The social-cognition perspective is a generic term for a body of theories that invoke social cognitions as an important determinant of human behaviour (Argyle, 1988; Bandura, 1986). The perspective specifies environmental, personal and behavioural variables as important in psychology (Bandura, 1986), and shares much with the stimulus, organismic and response variables (Edwards & Cronbach 1952) or situational, personal and behavioural variables (Burck, Cottingham & Reardon, 1973) cited in earlier work. However, the social-cognition perspective is unique in stressing the importance of social cognitions, the causal nature of cognitions, and the interactional nature of this trichotomy (Bandura, 1986).

The following review briefly examines the ability of the social-cognition perspective in the form of learned-helplessness and frustrated-motivation theory to account for the negative emotions commonly observed in the unemployed. The learned-helplessness theory has been proposed in the literature as an explanation for the depression noted in the unemployed and is briefly reviewed (Abramson, Seligman & Teasdale, 1978; Barber, 1982; Hollon & Garber, 1980). The frustrated-motivation theory is also considered, since an empirical study by Feather and Davenport (1981) indicates that a "situation-specific" frustration or anger response is present, in addition to the more "general" depressive response. The distinction between situation-specific and general reactions to stressful life events has been noted by a number of authors (e.g., Akiskal, 1979; Beck, 1967; Depue & Monroe, 1978; Jacobson, 1971), and the term "situational" is often used because the emotion is usually confined to the provoking situation (Feather & Barber, 1983).

Two additional features of learned-helplessness and frustrated-motivation theory are of interest. First, the two theories provide a distinct contrast due to the different causal structures regarding the interaction between environmental, personal and behavioural factors. In particular, the learned helplessness theory cites cognitions as the major mediator, while frustrated motivation cites behavioural variables as the primary mediator. Second, despite different causal structures, learned-helplessness and frustrated-motivation theory have much in common that provides the foundation for a unified theory that could account for the development of depression and frustration in the

unemployed. Both theories specify social cognitions as important determinants of human emotion (Argyle, 1988; Bandura, 1986), and both share variables (i.e., job importance, job expectancy), and the empirical findings in the present study could provide the the foundation for an amalgamation. The two theories are now reviewed, and their relevance to unemployment discussed.

Learned-Helplessness Theory

Overmier and Seligman (1967) and Seligman and Maier (1967) proposed the term “learned helplessness” to describe the passivity and performance deficits observed in dogs exposed to uncontrollable electric shocks. Even when escape was later made available, the dogs appeared unmotivated to escape the painful situation. Seligman (1975) interpreted the development of helplessness in cognitive terms, and proposed that the dogs learned during the task that electric shocks and responses were independent, developing the expectation that the response-outcome independence would be present in the future. The theory has broad applications, as helplessness has been induced in cats (Masserman, 1971; Seward & Humphrey, 1967), in fish (Frumkin & Brookshire, 1969; Padilla, 1973; Padilla, Padilla, Ketterer, & Giacalone, 1970), and in rats (Braud, Wepman, & Russo, 1969; Maier, Albin, & Testa, 1973; Maier & Testa 1975; Seligman & Beagley, 1975; Seligman, Rosellini, & Kozak, 1975).

However, learned-helplessness theory when applied to humans has met with mixed results (Abramson, Garber & Seligman, 1980; Abramson, Seligman & Teasdale, 1978; Peterson & Seligman, 1984). A study by Hiroto (1974) using a triadic (three group) design supported the learned-helplessness formulation, and provides an example of the procedures commonly used with human subjects. In the first group, subjects were exposed to loud noises that could be terminated at any stage by pressing a button four times. The second group was yoked to the first group and experienced the same loud noises, but did not have the opportunity to terminate the noise. The third group was a control group not exposed to the noise. Subjects in the three groups were then trained in a second unrelated task and their performance recorded. Consistent with the animal studies, subjects without control over the loud noise revealed learning deficits compared to the other two groups.

But other research with human subjects has provided results that are difficult to explain (e.g., Tennen & Eller, 1977; Dweck & Repucci, 1973). The learned-helplessness theory predicts that all subjects exposed to uncontrollable outcomes will exhibit equal performance deficits. However, a number of studies revealed that manipulating cognitions during the experiment produced a substantial variation in performance on subsequent learning tasks. For example, Tennen and Eller (1977) manipulated cognitions by presenting subjects with unsolvable problems labelled as

progressively “easier” or “harder”. The results revealed that subjects in the “easier” group displayed helplessness in a second unrelated task, while subjects in the “harder” group did not. A related study by Klein, Fencil-Morse and Seligman (1976) provided similar results.

Other research has also supported the proposal that cognitions can modify the performance on subsequent learning tasks. Dweck and Repucci (1973) reported that after exposure to uncontrollable outcomes, performance deficits were greatest in children attributing failure to ability, and least in children attributing failure to lack of effort. Although learned-helplessness theory gives credence to cognitive factors by stating that “the organism must come to expect that outcomes are uncontrollable in order to exhibit helplessness” (Abramson, Garber & Seligman, 1980, p. 4), the results of research with human subjects indicated that additional cognitive factors were needed to account for the full variation in behavioural deficits (Abramson, Garber & Seligman, 1980; Abramson, Seligman & Teasdale, 1978; Peterson & Seligman, 1984).

Miller and Norman (1979) and Abramson, Seligman and Teasdale (1978) independently proposed a “reformulated” learned-helplessness theory to account for the previously inconsistent results. Abramson, Seligman and Garber (1978) cited three attribution dimensions (internal-external, stable-unstable, and global-specific) that were believed to mediate the relationship between environmental noncontingency and helplessness. The internal-external and stable-unstable dimensions were originally formulated by attribution theorists (Heider, 1958; Kelley, 1967) and parallel to Weiner’s (1972, 1974) achievement motivation attributional analysis. The global-specific dimension was, however, new. Wortman and Dintzer (1978) in their review of attribution analysis and learned-helplessness provide the following definitions for the three dimensions:

[The] . . . internal-external dimension . . . is generally used to differentiate between causes that stem from the person versus those that stem from situational or environmental factors. Stable factors are long-lived and recurrent; unstable factors are short-lived and intermittent. Global factors occur across situations, whereas specific factors are more unique to the situation in which helplessness was induced. (p. 76)

The three attribution dimensions have different roles in precipitating human helplessness (Abramson, Seligman & Teasdale, 1978; Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984). The internality dimension has a direct impact upon self-esteem that is independent of expectancy cognitions. “If the person explains a bad event by an internal factor, then self-esteem loss is more likely to occur. If a person explains the event by an external factor, then self-esteem loss is less likely to occur” (Peterson & Seligman, 1984, p. 348). The relationship between internality and self-esteem is central to the theory because lowered self-esteem couples with helplessness to precipitate depression (Abramson, Garber & Seligman, 1980).

The stability and globality dimensions influence the expectations that noncontingency will continue over time and place (Abramson, Seligman & Teasdale, 1978; Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984). The stability attribution dimension determines the chronicity of noncontingency expectations. If the attribution concerning the aversive event is stable, then noncontingency expectations are maintained for a long period. But if the attributions concerning the aversive event are unstable, then the expectations for noncontingency are short-lived. The globality attribution dimension determines the extent to which noncontingency expectations are maintained across situations. A global attribution indicates that low expectations will be present in a broad range of situations, while attribution to a more specific factor confines the noncontingency expectations to a few situations.

The introduction of attributional cognitions to mediate the relationship between noncontingent, aversive environmental events and subsequent passivity and performance deficits specifies a clear causal structure (based on Devins, Binik, Hollomby, Barre & Guttman, 1981, p. 532):

- person experiences aversive environmental noncontingency (such as being unable to stop a loud noise after numerous attempts),
- perceives lack of control,
- formulates attributions that are more internal, stable and global than external, unstable and specific to account for lack of control,
- forms an expectancy for environmental noncontingency manifested in helplessness and depression.

The reformulated learned-helplessness theory provided a means to interpret previously inconsistent results. In the Tennen and Eller (1977) study for example, children exhibited helplessness when problems were labelled as ‘‘easy’’, because they attributed their failure to lack of ability (internal, stable and global); while children did not exhibit helplessness when problems were labelled as ‘‘hard’’, because they attributed failure to task difficulty (external, stable, and specific). Similar explanations (refer Abramson, Seligman & Teasdale, 1978; Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984), could be formulated to explain other results (i.e., Dweck & Repucci, 1973; Klein, Fencil-Morse & Seligman, 1976) previously difficult to explain.

Another field of investigation concerns the ability of the reformulated theory of learned-helplessness to account for the development of depression in human subjects. Seligman (1975) noted the similarity between animals in a state of helplessness and humans diagnosed as clinically depressed, and proposed that the learned-helplessness theory may provide an explanation for the etiology of some forms of human depression. The empirical studies can be classified into two groups. The first group contains studies that examine the relationship between attributional style

and depression. Raps, Peterson, Reinhard, Abramson and Seligman (1982) for example, investigated the nature of attributional styles in hospital patients classified as unipolar depressed with the Attributional Style Questionnaire (Peterson, Semmel, von Baeyer, Abramson, Metalsky, and Seligman 1982), and also tested patients diagnosed as nondepressed schizophrenics and nondepressed medical patients to control for length of hospitalization and general psychopathology. Consistent with the reformulated theory, unipolar depressed patients were found to be more likely to attribute bad outcomes to internal, stable and global factors than external, unstable and specific factors when compared with non-depressed schizophrenics and nondepressed medical patients. Studies identical in methodology with different samples have reported similar results (Kuiper, 1978; Rizley, 1978; Seligman, Abramson, Semmel, & von Baeyer, 1979).

A number of studies provide only partial support for the theory (Blaney, Behar & Head, 1980; Gong-Guy & Hammen, 1980; Harvey, 1981; Pasahow, 1980; but see Hammen & Cochran, 1981 for an exception). These studies reported that not all of the attributional style dimensions were significantly related to depression. Raps et al. (1982) noted, however, that many have constructed their own attribution scales and failed to assess reliability or validity. Furthermore, researchers often extract the internal, stable and global subscales from the ASQ (Peterson & Seligman, 1984), although Peterson, Semmel, von Baeyer, Abramson, Metalsky and Seligman (1982) when developing the scale recommend against subscale analysis due to low inter-item reliability. Raps et al. (1982) cite other factors and conclude that the aberrant results “may be due to a truncated range of depression scores, to the use of unvalidated attributional tests of unknown reliability, and/or to the assessment of depressive symptoms, several weeks prior to the measurement of attributional style” (p. 106).

The second group of studies that have investigated the learned-helplessness theory as an account for the development of depression, are longitudinal studies that examined the relationship between attributional style and future levels of depression (Golin, Sweeney & Shaeffer, 1981; Firth & Brewin, 1982; Metalsky, Abramson, Seligman, Semmel & Peterson, 1982). The reformulated theory proposes that individuals who make internal, stable and global attributions, in contrast to external, unstable and specific attributions, about negative life events are more prone to subsequent depression. Golin, Sweeney & Shaeffer (1981) administered the Beck Depression Inventory and ASQ to college students on two occasions separated by a month. Using cross-lagged panel correlation analysis they found that consistent with the reformulated theory, subjects with “depressive” attributional styles for bad outcomes at the first interview were significantly more depressed when contacted at the second interview. Firth and Brewin (1982) used the same statistical analysis in a similar study and reported identical results.

A further prospective study was carried out by Metalsky et al. (1982). They argued that Golin, Sweeney and Shaeffer (1981) did not examine the reformulated theory as there was no assessment of the negative life events which may have triggered the learned helplessness process. The study devised by Metalsky et al. (1982) introduced negative life events into their longitudinal investigation by evaluating student reactions to poor mid-term exam marks. They proposed that when students received poor mid-term marks, those who attributed negative outcomes to internal, stable or global factors would be more likely to experience depressive mood reactions than students who attributed negative outcomes to external, unstable, or specific factors. Analysis of results confirmed predictions and, furthermore, consistent with the theory, attributional styles were not correlated with subsequent depressive moods for students who did not receive a poor midterm grade.

In summary, the term ‘‘learned helplessness’’ was coined to describe the passivity and performance deficits in dogs exposed to uncontrollable electric shocks, and at an early stage was proposed as an explanation for some forms of human depression. However, later amendments introduced attributions as a mediating influence between exposure to aversive and noncontingent events, and the development of depressive behaviour in humans. The theory has received considerable support from studies examining the relationship between attributional style and depression in a variety of samples and in longitudinal designs to test the prediction that attributional style is related to future levels of depression.

Application to Unemployment. The reformulated theory of learned-helplessness was originally proposed to account for depressive symptoms observed in subjects exposed to negative and uncontrollable events. Abramson, Seligman and Teasdale (1978), Barber (1982) and Hollon and Garber (1980) have noted that a subject exposed to repeated loud and uncontrollable noise is analogous to an individual encountering repeated rejections when attempting to obtain employment. The theory translated to unemployment predicts that individuals attributing unemployment to internal, stable and global factors are more likely to formulate lower expectations for future success and to exhibit higher levels of depression, than individuals citing external, unstable and specific factors.

The reformulated learned-helplessness theory has been investigated in a number of studies with the unemployed (Baum, Fleming & Reddy, 1986; Edwards 1979; Feather & Barber, 1983; Winefield, Tiggemann & Smith, 1987). The study by Baum, Fleming and Reddy (1986) designed to test aspects of the learned-helplessness theory was unusual because the study was conducted with 20 unemployed and 20 employed volunteers in a laboratory. The study initially tested the

assertion that the absence of control associated with repeated job rejections for the unemployed would generalize to unrelated learning tasks. After controlling background factors and consistent with predictions, the unemployed subjects were found to be less persistent in perceptual reasoning tasks than employed or newly unemployed subjects.

Baum, Fleming and Reddy (1986) also recorded subject attributions during the learning tasks to test the prediction that long-term-unemployed individuals exposed to uncontrollable events would be more likely to attribute noncontingency to internal rather than external factors. However, contrary to theory and research (Abramson, Seligman & Teasdale, 1978; Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984), long-term unemployed people (greater than 8 weeks) in noncontingent learning trials rated external factors (task difficulty and solvability) as more important than internal factors (ability and effort) when compared with the employed and newly unemployed. One explanation is that the unusual and artificial nature of the learning task selected by Baum, Fleming and Reddy (1986) may have made the task more salient for the unemployed and disrupted the normal attributional process.

Winefield, Tiggemann and Smith (1987) investigated the relationship between attributional style, unemployment attributions, self-esteem and depressive affect in a longitudinal study with 951 high-school students. The students were recontacted three years later when 813 were employed and 138 were unemployed. The relationship between attributions and emotional responses provided limited support for the reformulated theory of learned-helplessness. Unemployment attributions were found to be unrelated to self-esteem or depressive affect in the follow-up cross-sectional analysis. Attributional style was more promising, since general attributions for bad events were related to levels of emotional distress. When using the longitudinal data, Winefield, Tiggemann and Smith (1987) failed to find a relationship between the attributions for good or bad events and current measures of self-esteem and depressive affect in the unemployed. Winefield, Tiggemann and Smith (1987) did note, however, that only single items were used to measure attributional style and unemployment attributions, and there was no evidence that the measures were reliable.

Edwards (1979) and Feather and Barber (1983) investigated the viability of the learned-helplessness theory in cross-sectional studies with the unemployed. Edwards (1979) interviewed individuals attending an Australian Commonwealth Employment Service office and measured attributions, motivation, expectations of future employment and self-esteem. Results did not support the learned-helplessness theory as attributions did not predict variation in motivation, expectations or self-esteem. However, methodological features limited the validity of the statistical findings. First, Edwards (1979) noted the high interview rejection rate of about 75% and the danger

that the sample was biased towards high self-esteem individuals leading to a truncated range of scores. Second, Edwards (1979) used her own attributional scale that had not been subjected to full psychometric validation. A third limitation was the nomination of self-esteem as the dependent measure. Abramson, Seligman and Teasdale (1978) specifically state that depressive symptoms may be present without loss of self-esteem. Edwards (1979) did not find a relationship between unemployment and self-esteem, although she noted that depression may have been a superior measure:

A measure of depression may ... have been appropriate in the present study. A number of respondents spontaneously referred to their depression either during the interview, or in their take home diaries. In the interviews respondents frequently mentioned the depressing effects of job rejection after job rejection, and two people spontaneously mentioned that they were on anti-depressant medication. (p. 103)

Feather and Barber (1983) also tested the learned-helplessness theory as an explanation for the variation in depression and self-esteem in the unemployed. They interviewed 116 unemployed individuals, used the Beck Depression Inventory to measure depression, developed eight unemployment-attribution items (four internal and four external), and used single items to measure job expectancy, perceived uncontrollability and employment importance. Results were consistent with the learned-helplessness theory and an hierarchical regression analysis revealed that increasing levels of depression were associated with more internal attributions for unemployment, higher perceived uncontrollability and greater employment importance. Feather and Barber (1983) note, however, the small amount of variance accounted for by the attributional items which had relatively poor inter-item reliability.

In summary, although studies evaluating the reformulated theory of learned-helplessness as an account for levels of depression in the unemployed have reported mixed results, methodological considerations limit the validity of their conclusions. In particular, the studies have commonly used unrepresentative samples with scales of unknown reliability and validity. Further investigations with representative samples and well-established scales are necessary before judgement can be passed on the ability of learned-helplessness theory to account for levels of depression in the unemployed.

Learned-Helplessness Theory in a Causal-Process Form. A primary aim in the study was to develop a theory in a causal-process form that could account for the generation of depression in the unemployed. Translating learned-helplessness into a causal-process form required nominating the relevant hypothetical constructs and specifying the causal relationships that bind the hypothetical constructs in a causal structure.

The learned-helplessness theory provided a clear guide to the hypothetical constructs believed to generate depression. The theory as originally outlined, indicates that individuals who are exposed to uncontrollable negative life-events and tend to formulate internal, stable and global rather than external, unstable and specific attributions to account for the absence of control, form expectations of a future environmental noncontingency manifested in helplessness and depression (Abramson, Garber & Seligman 1980; Abramson, Seligman & Teasdale, 1978; Peterson & Seligman, 1984). A further aspect, often assumed in the research literature, is that the uncontrollable negative life-events are related to something of value for the individual. “*Only those cases in which the expectation of response-outcome independence is about the lack or loss of a highly desired outcome or about the occurrence of a highly aversive outcome are sufficient for the emotional component of depression*” (Abramson, Garber & Seligman, 1980, p. 28, italics in the original). The hypothetical constructs central to the theory are clearly attributional style, expectations of future control, importance placed on the outcome and depression.

Two of the hypothetical constructs in the learned-helplessness theory were readily applicable in the unemployment study (the hypothetical constructs are presented in Figure 1.1), and included the importance placed on getting a job (labelled *job importance* in Figure 1.1) and the expectations placed on reaching the goal of employment (labelled *job expectancy*). However, aspects of the theory allowed greater elaboration of the attributional construct than in previous learned-helplessness research (i.e., Golin, Sweeney & Shaeffer, 1981; Firth & Brewin, 1982; Metalsky, Abramson, Seligman, Semmel & Peterson, 1982), as the theory indicated that a general measure of depression could be further subdivided into self-esteem and depression (also labelled as *self-esteem* and *depression*), and that different predictions were possible for the two measures of emotional health.

The role of attributional style in generating depression in the unemployed could also be developed in the present study. The Attributional Style Questionnaire (Peterson, Semmel, von Baeyer, Abramson, Metalsky & Seligman, 1982) used in the present study allowed a finer measurement of the attributional style dimensions usually achieved in unemployment research (see Winefield, Tiggemann & Winefield, 1987, p. 665). The Attributional Style Questionnaire (ASQ) refers to persons tendency to make attributions for life-events that can be plotted along an internal-external (internality), stable-unstable (stability) and global-specific (globality) dimensions, and the learned-helplessness was developed to explore these predictions. For example, the internal-external dimension (labelled *attributions style [internality]* in Figure 1.1), was presumed to be related to self-esteem, while a combined “generality” dimension (called *attribution style [generality]* in Figure 1.1) score derived by combining the stable-unstable and global-specific subscales in the

Attribution Style Questionnaire (ASQ) to provide a measure of how much the helplessness and depression would generalize.

Peterson and Seligman (1984) have also indicated that attributions relevant to generating depression could be divided into “attributional style” and “situation-specific attributions”. Situation-specific attributions refer to attributions relevant to an immediate situation and would refer to unemployment attributions in the present study. As with the ASQ, these can be divided into an internal-external (called *unemployment attributions [internality]*) and “generality” (called *unemployment attributions [generality]*) dimensions.

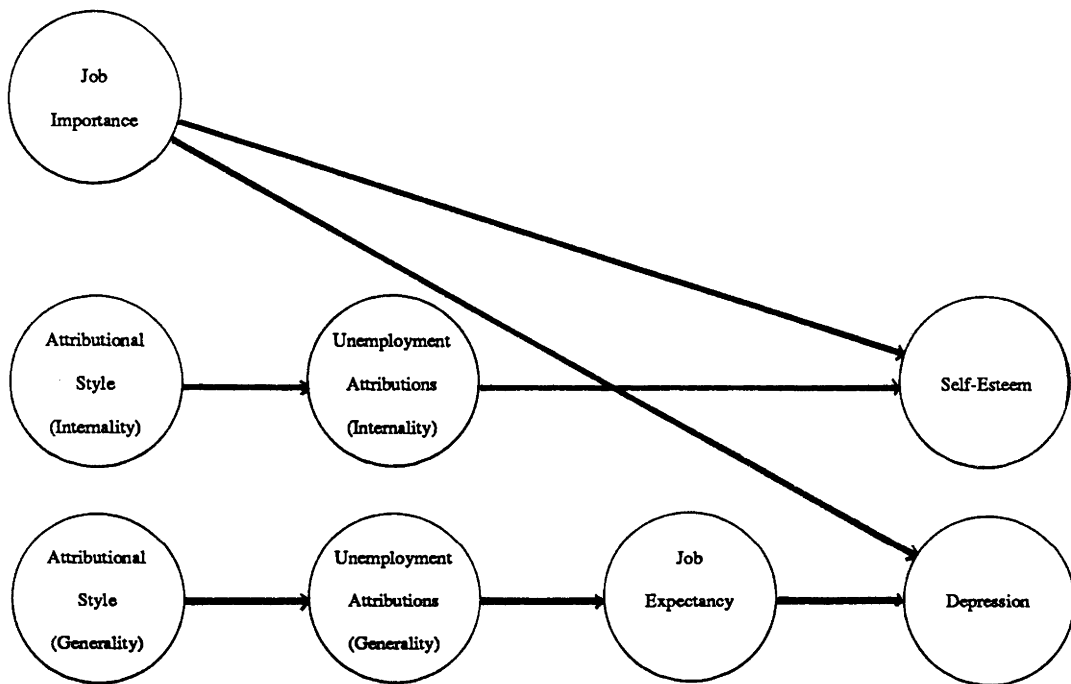


Figure 1.1 Learned-Helplessness Theory in a Causal-Process Form to Account for Depression in the Unemployed. Diagram assumes an intercorrelation between variables on the left-hand side, although curved arrows have been omitted for simplicity. (Internality refers to attributions along the internal-external dimension; Generality refers to attributions along the stable-unstable and global-specific dimension.)

The learned-helplessness theory also provides a general guide to the causal relationships that bind the hypothetical constructs into a causal structure. The most salient guide to the causal structure was from the temporal order of the constructs in the theory, indicating that the experience of unemployment triggered an attributional account for the loss of control, producing variation in the job expectancy, leading to variation in self-esteem and depression (the causal structure is also presented in Figure 1.1). Although providing a general guide to the flow of causal events, however, a number of aspects needed to be clarified before the causal structure could be fully specified.

The first causal relationship not clearly stated in the learned-helplessness theory was between attributional style and situation-specific attributions. Original formulations of the theory overtly refrained from specifying the causal relationship between attributional style and situation-specific attributions. As Abramson, Garber and Seligman (1980, p. 18) stated, “The reformulation is relatively silent with respect to specifying the properties of the attribution *process* itself.” However, later work by Peterson and Seligman (1984) proposed that situation-specific attributions were “determined by both situational and dispositional factors” (p. 354) and that attributional style was a major contributor (see schematic diagram, p. 350). The causal structure in the present study was based upon the proposal by Peterson & Seligman (1984), that when an individual is confronted with a negative outcome for a desired goal in a particular situation, then the most likely situation-specific attribution will arise from the person’s attributional style.

The second causal relationship not specified in the learned-helplessness theory refers to the role of job importance in generating increased depression and lowered self-esteem. At no stage in the reformulation was a statement made about the point at which job importance intervenes in the processes that generate the increasing levels of depression and lowered self-esteem. The reformulated theory does, however, provide a statement that increasing levels of importance placed on a goal (such as the importance placed on getting a job) is associated with increasing levels of depression, and that importance placed on a goal does not have an impact upon the cognitive and motivational processes generating depression (Abramson, Garber & Seligman, 1980). From the theoretical literature available and the hypothetical constructs used, the only possible point of intervention was a direct causal link between job importance and the affect measures of self-esteem and depression.

In summary, the learned-helplessness theory provides a general guide to the hypothetical constructs and causal structure necessary to formulate the theory in a causal-process form. There was, however, some ambiguity in specifying the causal relationships for the hypothetical constructs of attributional style, situation-specific attributions and job importance. The proposed causal structure involved attributional style determining situation-specific attributions, and job importance directly influencing depression and self-esteem.

Frustrated-Motivation Theory

Tolman (1932) first articulated the need to include cognitions alongside stimulus and response variables to provide the foundations for a comprehensive theory of motivation in psychology. The theories are generally called “expectancy-valence” theories because of a common emphasis on expectations and valence as major factors in motivating behaviour (Korman, 1974).

Feather (1982b) reports that the expectancy-valence theory has been adapted for use in seven areas of psychological research: achievement motivation (Atkinson, 1957); attribution theory (Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1971); information feedback (Janoff-Bulman & Brickman, 1982); social learning theory (Rotter, 1954); values and attitudes (Fishbein & Ajzen, 1975); organizational psychology (Vroom, 1964); and decision making theory (Edwards, 1954, 1961). Feather (1982b) when reviewing the literature of the expectancy-valence theory in these areas noted: "There is little question that the attempt to relate actions to expectations (or subjective probabilities) in combination with subjective values (or valence) has been a significant one by any standards" (p. 395).

Atkinson and Feather (1966), Atkinson and Raynor (1974) and Feather (1982b) have provided an array of examples of how the expectancy-valence theory could be adapted and modified to provide theoretical formulations that account for achievement motivation. The theory indicates that achievement motivation (T_s) is a multiplicative function of three variables: motive to achieve success (M_s), which is a relatively general and stable personality disposition; the strength of expectancy (P_s), which is the subjective probability that performance on the task will be successful, and finally, the relative valence or incentive of the outcome (I_s). When expressed mathematically:

$$T_s = M_s \times P_s \times I_s$$

The multiplicative formulation prompted considerable research. French and Thomas (1958) found that M_s was related to performance on difficult problem-solving tasks for personnel in the Air Force. Atkinson and Litwin (1960) reported that the theory provided good predictions of risk willingness, exam marks and time spent on the exam. Rosen (1956) conducted a study with high-school boys measured on M_s from different social class backgrounds and found that middle-class boys were more motivated and generally performed better, although working-class boys of high motivation also achieved high academic marks. Reviews of recent literature have been summarized by Feather (1982b), Atkinson and Raynor (1974) and Atkinson and Feather (1966). Although debate has been levelled at the measures used (Korman, 1974) and the theory has undergone modifications (Rayner, 1982), the theory of achievement motivation has proved popular and has received substantial support (Atkinson & Feather, 1966; Atkinson & Raynor, 1974; Feather, 1982b).

Application to Unemployment. Feather and Davenport (1981) modified the expectancy-valence theory into a form applicable to unemployment by adding the assumption that high levels of motivation when frustrated or blocked, generate disappointment, anger and depressive affect

(“unemployment frustration”). Support for the assumption that blocked motivation leads to frustration has been provided in a study conducted by Feather (1963). Subjects in the experiment worked on an insoluble “perceptual reasoning” task until they requested transfer to another puzzle. Questions asked after the task revealed that consistent with the “frustrated-motivation” formulation, ratings of concern about achievement were positively related with ratings of disappointment.

When translated to unemployment, the frustrated-motivation theory predicts that high expectations and importance placed on employment generate high levels of motivation. However when the motivation is thwarted by repeated job rejections, the result is negative situation-specific affect in the form of unemployment frustration. The process outlined by the frustrated-motivation theory appears particularly relevant to the young unemployed. Porteous (1979), in an English study, revealed that one of the greatest concerns for 15-year-olds was to obtain employment, while observations by Bakke (1933), Marsden and Duff (1975) and Turner (1983) indicate a high level of motivation to obtain employment for a broad cross-section of unemployed people.

Feather and Davenport (1981) tested the frustrated-motivation theory in a cross-sectional study with 212 unemployed young people. The predictions were that levels of disappointment following failure to obtain employment would be related to job attractiveness, and that disappointment would be higher when expectations of success were initially high. In addition to biographic questions, a number of items were included to assess the respondent’s expectations of success, valence of work, motivation to work, causal attributions for their unemployment and depressive affect. Consistent with predictions, Feather and Davenport (1981) found that the more respondents valued work and expected employment the higher their unemployment frustration.

Feather and Davenport (1981) also found that unemployment frustration was positively related to external attributions for unemployment. To account for the role of attributions, Feather and Davenport (1981) incorporated the observation that high levels of unemployment frustration were coupled with high levels of initial confidence:

One might therefore expect them to be less likely to see their present negative situation as the result of lack of motivation (an internal factor). Instead, one would expect them to appeal more to external reasons, such as the widely held view that current unemployment is the product of social, political, and economic forces, a view that is constantly reinforced through the mass media. (p. 430)

The study by Feather and Davenport (1981) supported the frustrated-motivation theory, with results indicating that high levels of unemployment frustration were related to high job attractiveness and high initial ratings of job hunting success. Moreover, high levels of initial

expectation were associated with respondents citing more external factors for their unemployment, and the more external attribution related with higher levels of unemployment frustration. Feather and Barber (1983) repeated the analysis in a cross-sectional study with 116 young unemployed individuals and again found that employment importance and external attributions were positively related to levels of unemployment. Unlike the Feather and Davenport (1981) study, however, there was no relationship between initial confidence in gaining employment and unemployment frustration.

In summary, the studies by Feather and Davenport (1981) and Feather and Barber (1983) lend support to the proposition that the frustrated-motivation theory provides a suitable account for the mechanisms generating unemployment frustration. The authors, nevertheless, express the qualification that a large number of the variables were measured using single-item scales, and that future research would need to develop scales with an acceptable validity and reliability to test fully the theory.

Frustrated-Motivation Theory in a Causal-Process Form. The frustrated-motivation theory was used to nominate the hypothetical constructs and specify the causal structure believed to generate frustration in the unemployed. At a general level, the theory predicts that individuals who are highly motivated to obtain a goal as revealed by their high expectations and high value placed on reaching the goal, when blocked or thwarted by repeated and unsuccessful attempts to reach the goal (particularly when attributed to external factors), results in disappointment, anger and depressive affect.

The theory provided a clear guide to the hypothetical constructs considered instrumental in generating disappointment, anger and depressive affect in the unemployed ('unemployment frustration'). The importance placed on attaining a goal was represented by the value placed on getting a job (labelled *job importance* in Figure 1.2), and the expectations placed on reaching a goal were represented by the amount of expectations placed on gaining a job (labelled *job expectancy*). The blocking or thwarting of goal attainment for the unemployed individual was measured by the frequency of job rejections (labelled *job enquiries*), while the attributions used to explain the failure to attain a desired goal was represented by the attributions measured along an internal-external dimension when the individual was asked to explain his or her unemployment (labelled *unemployment attributions [internality]*). The final hypothetical construct referred to the disappointment, anger and depressive affect felt by the person about being unemployed (labelled *unemployment frustration*).

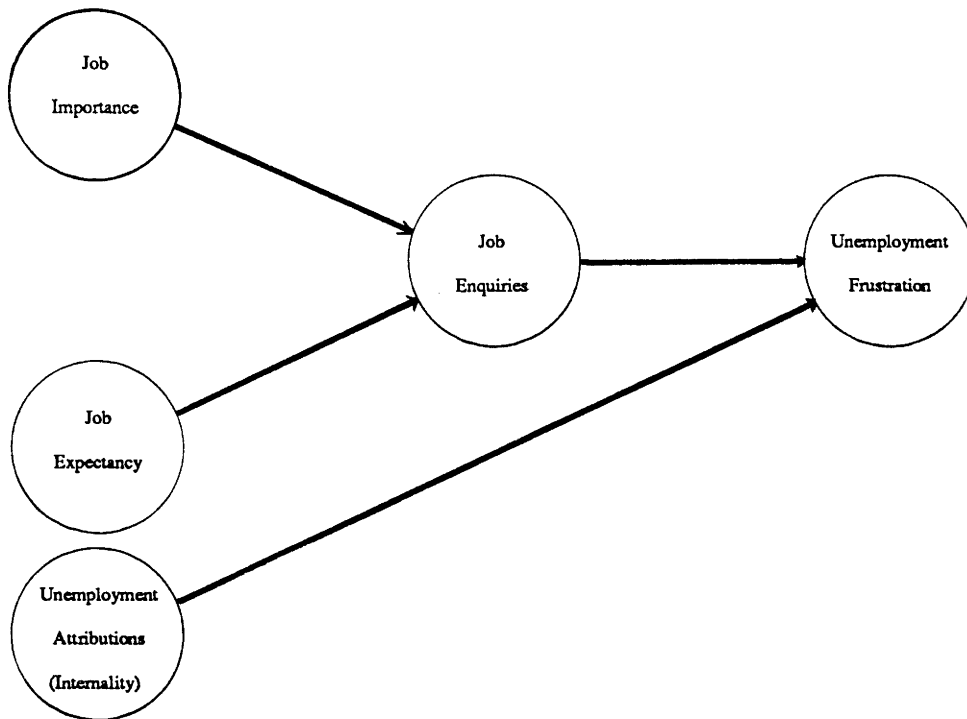


Figure 1.2 Frustrated-Motivation Theory in a Causal-Process Form to Account for Unemployment Frustration in the Unemployed. Diagram assumes an intercorrelation between variables on the left-hand side, although curved arrows have been omitted for simplicity. (Internality refers to unemployment attributions along the internal-external dimension.)

The temporal order of events in the theory also provided a guide to the causal structure presumed to explain the development of frustration in the unemployed. The high job importance and job expectations were believed to generate high rates of job enquiry and associated rejections, and then determine the levels of unemployment frustration (refer to Figure 1.2 for a pictorial representation of the causal structure). However, specifying the frustrated-motivation theory in a causal-process form also highlighted aspects of the theory not previously investigated. In particular, Feather and Davenport (1981) noted that the external attributions for the cause of unemployment were associated with high levels of unemployment frustration, but did not postulate at what stage in the process that unemployment attributions intervene. Because there was no clear statement, unemployment attributions were hypothesized to have a direct impact upon the levels of frustration, although independent of the blocked-motivation process outlined by the theory.

In summary, the frustrated-motivation theory provides a general guide to the causal structure and hypothetical constructs necessary to formulate the theory in a causal-process form. There was, however, some ambiguity in specifying the causal relationships between unemployment attribution and unemployment frustration. The causal structure outlined involved the proposal of a direct link between unemployment attributions and unemployment frustration.

Conclusion

The stage and social-cognition perspectives were evaluated as potential foundations for a causal-process theory to explain the negative affect often observed in the unemployed. The stage perspective was abandoned as being primarily descriptive and unsuitable due to a failure to specify the causal processes that generate emotional ill-health. In contrast, the social-cognition perspective in the form of learned-helplessness and frustrated-motivation theory appears successful as both provide clear guidelines to the variables and causal structure necessary to specify theory in a causal-process form. A review of the unemployment literature also indicates that the two theories may be successful.

Background Factors and Psychological Theory

The learned-helplessness and frustrated-motivation theories were proposed as causal-process explanations for the development of depression and frustration in the unemployed. However, the emphasis on *outcome* research in the unemployment research literature has resulted in an accumulation of variables associated with emotional health, but not linked to a causal-process explanation for the detrimental impact of unemployment (Kelvin & Jarret, 1985). The practice also extends to *moderating* (i.e., Macky & Haines, 1982) and *mediating* variables (i.e., Warr, 1983), for although empirically associated with the development of negative emotions in the unemployed, the causal role of mediating and moderating variables are not specified (Hartley & Fryer, 1984). For example, sex has been considered a moderating variables as research indicates that unemployed women experience more emotional distress during unemployment than men (Warr, 1984), but the relationship could indicate that applying for jobs is more stressful for women due to sexual discrimination, or that women are more emotionally sensitive to job rejections.

A goal in the present study was to investigate at what point the factors shown in previous unemployment research to be associated with emotional health (background factors), intervene in the processes outlined by learned-helplessness and frustrated-motivation theory. Although not nominated by a causal-process theory, background factors have two benefits in the study. First, if the factors were found to have a major impact upon emotional health independent of the variables or causal structure nominated by learned-helplessness or frustrated-motivation theory, then another process would need to be considered to explain the depression and frustration in the unemployed. Second, the points at which background factors intervene in the processes outlined by psychological theory may provide a greater insight into how depression and frustration are generated in the unemployed.

A range of background factors have been cited in the unemployment research literature. Some factors had been shown to be associated only with emotional health, while others had been shown to influence the endogenous variables nominated by learned-helplessness and frustrated-motivation theory. Research that supports the introduction of the exogenous variables used in the study is briefly reviewed and categorized under the headings of biographic and demographic factors, aspects of job search, financial status, social comparison with friends and family, past and present employment details.

Biographic and Demographic Factors

The biographic and demographic factors reported in the literature as associated with emotional health include *age, sex, qualifications, residence, number of co-residents* and *socio-economic status*. The general consensus is that a curvilinear relationships existed between *age* and emotional health in the unemployed (Warr, Jackson, & Banks 1988; Warr 1983, 1984). Hepworth (1980) reported that middle-aged men suffer more than younger or older men, possibly because middle-aged men have greater financial responsibility. In an age range more relevant to the present study, Winefield, Tiggemann and Winefield (1990) reported that age of the young unemployed (16 to 24 years-of-age) had an impact, with self-esteem being associated with employment status in the 19-20 but not the 22-23 age range. Consequently, age appeared likely to influence the processes outlined by learned-helplessness and frustrated-motivation theory.

There was also evidence that *sex* would be associated with the processes that generate depression and frustration in the unemployed, although other factors may also be involved. Warr, Jackson and Banks (1988) when summarizing their studies examining two cohorts of low-qualified school-leavers, found that the general health scores of young males did not change when transferring from school to unemployment, while their female colleagues improved in health. Warr, Jackson and Banks (1988) suggested that the young women had withdrawn from the labour market and taken new roles associated with pregnancy and child care. The evidence that sex plus other factors need to be considered was provided by Feather (1985) and Warr (1983), who noted that women who were “unemployed single women” or “principal wage-earners” gave emotional reactions that resembled their male counterparts.

Aside from the association between sex and emotional health in the unemployed, other research has indicated a relationship between sex and attributions. The impact of sex upon the type of attributions formulated by an unemployed individual was considered important, as attributions are central to the processes outlined by learned-helplessness and frustrated-motivation theory. For example, Furnham (1985) reported that females were more external in attributions about

unemployment than males. Although a complex relationship may exist between sex, emotional health and attributions, the research nevertheless indicated that sex was a potential background factor.

Qualifications was another factor that has been linked with emotional responses to unemployment. Winefield, Tiggemann and Winefield (1990) reported that levels of schooling were associated with depressive affect in a 19-20 year old group, but not in 22-23 year old group. Place of *residence* (such as living with parents) and *number of co-residents* (such as the number of residents in the household) were two additional factors noted in the descriptive literature as important in determining the emotional reactions to unemployment (Marsden & Duff, 1975; McCaughey, 1987; Turner, 1983; Watson, 1985),

Another factor that appeared to be related to emotional distress in the unemployed was *socio-economic status*. Liem (1987) reported that blue-collar workers suffered greater stress than white-collar workers. However, when Payne, Warr and Hartley (1984) controlled for age, length of unemployment and marital status, they failed to find significant differences in general distress, anxiety depression between working-class and middle-class samples. In one of the few studies that has examined the family background of the young unemployed, Winefield, Tiggemann and Winefield (1990) reported that socio-economic family background was associated with depressive affect in a 19-20 year old group, but not in 22-23 year old group. There was also evidence that socio-economic status was also related to the attributions made by the unemployed. Furnham (1982) examined social status and attributions and reported that working-class respondents placed more emphasis on external factors than middle-class respondents. The results do not provide the foundation for a firm relationship between socio-economic status and emotional health, but are sufficient to warrant socio-economic status as a background factor in the present study.

In summary, the research literature indicated that a range of biographic and demographic factors may be related with the psychological processes that lead to the deterioration of emotional health in the unemployed. The factors to be considered in the present study included *age, sex, qualifications, residence, number of co-residents* and *socio-economic status*.

Aspects of Job Search

Length of unemployment has been a popular variable in the social research literature and has indicated that decreasing emotional health is associated with increasing length of unemployment (i.e., Hepworth, 1980). However, recent reviews by Feather (1985), Hartley (1980c), Macky and Haines (1982), Liem (1987), Warr, Jackson and Banks (1982) indicated that the relationship

between length of unemployment and emotional health may not be so clear. Warr (1983), for example, reported that emotional health decreased during the first six months of unemployment after losing a job, but then tends to plateau. On the other hand, Liem (1987) reported a sharp increase in the severity of emotional health after about 12 months. Although the exact nature of the relationship was not clear, length of unemployment was considered an aspect of unemployment that could play a role in the processes generating depression and frustration in the unemployed.

Other aspects of the job search have been associated with emotional health in the unemployed (Hayes & Nutman, 1981; Jahoda, Lazarsfeld & Zeisel, 1933/1972). Job application rates as indicated by the number of *enquiries per week* and *breadth of job applications* were also considered, because emotional states such as depression have often been associated with lowered motivation and activity (Beck, 1967). Overall, length of unemployment, number of enquiries per week and breadth of job applications were considered as aspects of the job search related to the processes outlined by learned-helplessness and frustrated-motivation theory.

Financial Status

Fraser (1980) suggested that lack of money was a major factor during the Great Depression that precipitated the poor physical and emotional health of the unemployed, although he concedes that this alone would not explain the full variation in people's emotional responses. Liem (1987) in summarizing the work of a number of studies (Atkinson, Liem & Liem, 1986; Liem & Rayman, 1982) and assessing the impact of reduced income stated that: "Above all else, unemployment is a threat to economic security. In our research, both the degree of financial loss created by unemployment and the availability of alternative economic resources (e.g., savings, investments) were among the most important determinants of the degree of anxiety and depression experienced by blue- and white-collar workers" (p. 330-331). Feather (1985, p. 270) when summarizing a number of Australian studies also concluded that financial strain was significantly associated with emotional health.

Social Comparison with Friends and Family

Warr, Banks and Ullah (1985) reported that greater amounts of time spent with friends in the past month were significantly associated with lower scores of general distress, depression and anxiety, while Kilpatrick and Trew (1985) in their use of time diaries found that greater social contact was associated with higher psychological health. Bolton and Oatley (1987) also found low social interaction was associated with greater depression in the unemployed. The results generally supported the proposition that social contact appeared to alleviate the detrimental impact of unemployment, perhaps due to a social comparison process that modifies the social cognitions

instrumental in generating emotional health (Abramson, Garber & Seligman, 1980). Three kinds of social comparison appeared to be relevant and included *number of unemployed friends*, *time with unemployed friends* and *having family members unemployed*.

Past and Present Employment Details

Aspects of past and present employment may also influence the psychological processes that generate emotional health in the unemployed. Hartley (1980c) suggested that having a *previous job* could influence the emotional reactions to unemployment, although few studies have empirically examined the relationship between previous job experience and emotional health in the young unemployed. Millham, Bullock and Hosie (1978) in a study of 1000 boys at school did find some indirect evidence of a relationship, as early employment experience was found to be associated with elevated levels of economic and social well-being. Aspects of present employment status may also be relevant. For example, an individual who has a part-time job may be considered unemployed and register with the Australian Government as unemployed (Windschuttle, 1981). Consequently, although a person may be deemed unemployed, aspects about *present part-time work* would also need to be considered as a factor that may ameliorate the emotional impact of unemployment. A related factor that could also be considered important, would be if the unemployed person has *something lined-up* in the form of employment, holiday or education.

Summary of Background Factors

A range of background factors were considered that may be related to the processes outlined by the learned-helplessness and frustrated-motivation theories, and therefore instrumental in generating depression and frustration in the unemployed. The background factors that appeared relevant included biographic and demographic factors (age, sex, qualifications, residence, number of co-residents, socio-economic status), aspects of job search (length of unemployment, enquiries per week, breadth of job applications), financial status, social comparison (number of friends unemployed, time with unemployed friends, family members unemployed), past and present employment details (previous job, present part-time work, something lined-up).

Conclusion

Observation and psychological research during the Great Depression and in recent times indicate that although a range of individual responses to unemployment are evident, the general response is depression, low self-esteem, self-blame and apathy. There is also evidence that unemployed people react with anger and hostility. The stage and social-cognition perspectives were evaluated as potential foundations for a causal-process theory to explore the relationship between

unemployment and emotional health. The stage perspective failed to nominate the variables and causal structure necessary to specify a causal-process theory and was rejected, although the social-cognition perspective in the form of learned-helplessness and frustrated-motivation theory was satisfactory and a review of research literature provided qualified support. The learned-helplessness and frustrated-motivation theory also provides the opportunity to formulate a unified theory to account for the development of depression and frustration in the unemployed. A number of exogenous variables including biographic and demographic, job search, financial support, social comparison and employment details were canvassed as being helpful in clarifying the causal processes under examination.

Chapter II (Cross-Sectional Method)

Research Strategies and Procedures to Interview the Unemployed

The following chapter outlines the methodology used in the cross-sectional study to evaluate causal-process explanations for the relationship between unemployment and emotional health. The discussion initially examines the foundations for a causal analysis and the statistical procedures used to evaluate causal models. A brief examination of the principles for causal analysis is necessary because many of the terms and statistical concepts are new, and because the theoretical interpretations rest heavily on the statistical procedures used in the study. Finally, the research population, questionnaires and data collection procedures are reviewed, followed by a statistical description of the sample surveyed.

Causal Analysis in Nonexperimental Social Research

The number of reports using causal analysis as a statistical procedure in nonexperimental research has increased in recent years (Bentler, 1986; Bronson, 1987). Nevertheless, the role of causal concepts in social research is controversial. Therefore, the nature of causal concepts will be briefly discussed to clarify the stance adopted in the present study. This is followed by an overview of the statistical foundations for causal modelling, the strategies used to evaluate causal models, and a hypothetical example to illustrate the statistical procedures.

Causal Concepts and Causal Modelling

Some philosophers have expressed the view that causal concepts are redundant in science (i.e., Russell, 1913), while others have expressed the view that causal concepts are central to science (i.e., Bhaskar, 1975). The argument against causal concepts can be traced to a generally accepted critique by David Hume (1777/1975) during the 18th Century. Hume argued that no amount of empirical investigation could substantiate the *generative or productive power* presumed in most causal concepts, as the human senses are limited to processing covariational and temporal information about the environment (Greenwood, 1989).

One response to Hume's argument by social scientists hankering for objectivity is to eschew the "metaphysical" concept of causation and favour "predictive" research that attempts to isolate the major *predictors* of human behaviour (i.e., Kerlinger, 1975, p. 393) Nevertheless, most social research methodologists continue to specify causal concepts as central to social research (Agnew &

Pyke, 1987; Campbell & Stanley, 1963; Cook & Campbell, 1979; Kidder, 1981), and therefore, support “structural” or “causal modelling” approaches that use causal concepts to provide a *causal structure* that guides the statistical analysis (Tukey, 1954; Blalock, 1964; Cook & Campbell, 1979). Blalock (1964), Bunge (1959), Pedhazur (1982) and Suppes (1970) propose that causal concepts are retained because scientists and the public *think* and *work* with causal concepts:

In the work of scientists, even in the work of those who are strongly opposed to the use of the term *causation*, one encounters the frequent use of terms that indicate or imply causal thinking. When behavioral scientists, for example, speak about the effects of child-rearing practices on the development of certain personality patterns, or the effect of reinforcement on subsequent behavior, or the reasons for delinquent behavior, or the influence of attitudes on perception, there is an implication of causation. Similarly, it has been noted (Alker, 1966) that while political scientists are reluctant to use causal language, they employ concepts (influence, power, decision making) that imply causal processes. (Pedhazur, 1982, p.577-578)

Incorporating causal concepts in nonexperimental social research has become increasingly popular in recent years (Bentler, 1986; Bronson, 1987), and is testified by the use of statistical procedures that assume causal concepts, such as cross-lagged panel correlation analysis (Campbell, 1963; Kenny, 1973), path analysis (Duncan, 1966; Wright, 1934), and a broad collection of statistical techniques known as causal modelling or structural equation modelling (Pedhazur, 1982).

The term *causal modelling* has become generic for most forms of causal analysis in nonexperimental research (Saris & Stronkhorst, 1984), and describes the statistical procedures used in the present study. Unfortunately, however, the term “model” is rather vague and ill-defined, because the term has a bewildering array of meanings in common speech, and because the relationship between “theory” and “model” in social research is not always clear (Greenberger, Crenson & Crissye, 1976; Duvenger, 1964; Kaplan, 1964). Therefore, to avoid potential confusion, a causal model will be defined as any social theory in a causal-process form that has been operationalized and is eligible for empirical evaluation. The procedures involved in empirically evaluating a causal model are now examined.

Evaluating Causal Models

The primary focus in causal modelling is to evaluate a causal model. The following discussion briefly reviews a number of aspects of evaluating a causal model in nonexperimental social research. The initial focus is on the statistical procedures for evaluating a model. An overview of the strategy adopted in the present study is then outlined, followed by a discussion of the computer program used in the present study.

Statistical Procedures

Since the nomenclature and procedures followed in causal modelling are unfamiliar to many social researchers (Saris & Stronkhorst, 1984), the following section details the statistical approach used to evaluate a causal model. The statistical procedure is described in three sections. The first examines how a social theory in a causal-process form is translated into a causal model for the purposes of empirical examination. The second section details how estimates for the strength of the causal relationships (i.e., structural coefficients) are calculated from the data. The third examines the statistical procedures that are used to evaluate the suitability of the overall model and to evaluate the “fit” between the model and data.

A number of recently released statistical computer programs such as COSAN (McDonald, 1985), EQS (Bentler, 1983), and LISREL (Jöreskog & Sörbom, 1981) are available to evaluate causal models. LISREL (LInear Structural RELationships) was used in the present study because the program has been rated as extremely versatile (Pedhazur, 1982), “user-friendly” (Hayduk, 1987), and is supported by a large range of introductory articles and books (Biddle & Marlin, 1987; Hayduk, 1987; Long, 1984a, 1984b; Pedhazur, 1982; Saris & Stronkhorst, 1984).

Specifying the Causal Model. Specification refers to the procedures used when translating a social theory into a causal model. There are, however, three ways that a causal model can be portrayed. The most common is a causal diagram which provides a pictorial representation of the model. Figure 2.1 provides an example that illustrates some of the conventions used in the literature when drawing a causal diagram (Dwyer, 1983; Jöreskog & Sörbom, 1981; Saris & Stronkhorst, 1984). The single-headed arrows represent the direct causal influence of one variable upon another, while the curved double-headed arrow indicates a covariation between two variables that is not explained by the model.

The causal diagram also makes a distinction between endogenous (Y or η) and exogenous (X or ξ) variables (Greek letters denote hypothetical constructs or “latent variables”, while Roman letters denote measured or “manifest variables”. Latent variables are used in the following discussion, because latent and manifest variables are assumed to be equivalent in the present research.) “Endogenous” refers to variables whose variation is explained to some extent by other variables in the model, while “exogenous” refers to variables whose variation is determined by variables outside the model. In Figure 2.1 for example, the variation in the endogenous variable η_3 is considered to be determined to some extent by variation in ξ_2 and η_2 , while the variation of the exogenous variable ξ_1 is due to the other ξ variables or unknown variables outside the model.

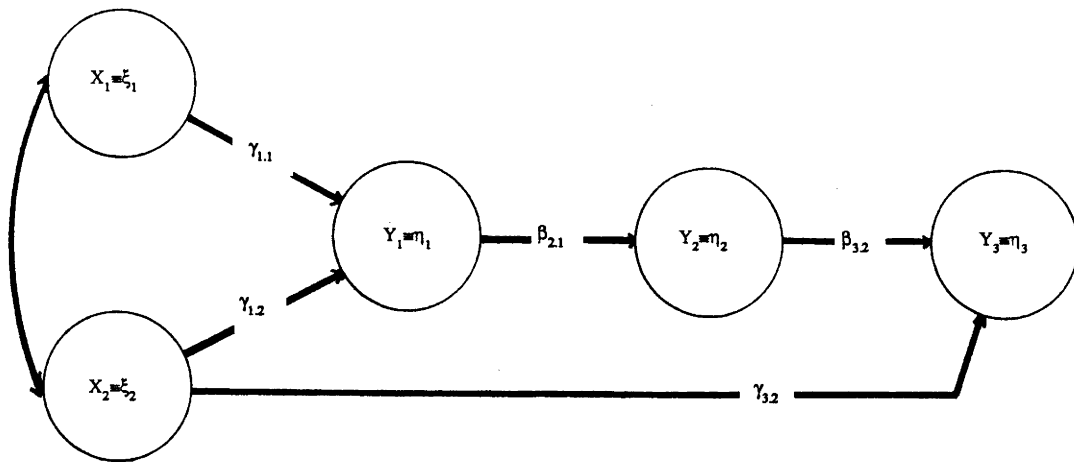


Figure 2.1 Example of Causal Diagram

A number of other features about Figure 2.1 are useful when interpreting the causal model. The coefficients associated with the arrows (called structural coefficients) represent the magnitude of causal influence that one variable has upon another, with the influence from η to η variables denoted by β , and the influence from ξ to η denoted by γ . When statistically analyzed, standardized estimates of the structural coefficients are calculated from the data and indicate the relative strengths of the causal paths. The $\beta_{2,1}$ coefficient on the arrow from η_1 to η_2 for example, indicates the extent to which a change in η_1 is translated into a change in η_2 . The larger $\beta_{2,1}$ is, the larger the change in η_2 that results from a given change in η_1 .

Another way to represent a causal model is to use structural equations. Structural equation models are called “structural”, because the equations are formatted in a manner that describes the causal structure being modelled. Such mathematical models are particularly helpful in providing a guide to the statistical procedures used to calculate the structural coefficients and evaluate the model. A structural equation model is made up of a series of linear structural equations, and Figure 2.1 provides an example of how a causal diagram can be translated into a structural equation model. The three endogenous variables denoted by η_1 , η_2 and η_3 are considered as dependent variables in three linear structural equations, while the variables predicted to cause variation in the endogenous variables are included as independent variables. In Figure 2.1 for example, the causal structure can be conveyed in the following three linear structural equations (variables are assumed to be measured from their means, and ζ represents the error in the equation):

$$\eta_1 = \gamma_{1,1}\xi_1 + \gamma_{1,2}\xi_2 + \zeta_1$$

$$\begin{aligned}\eta_2 &= \beta_{2.1}\eta_1 + \zeta_2 \\ \eta_3 &= \beta_{3.2}\eta_2 + \gamma_{3.2}\xi_2 + \zeta_3\end{aligned}$$

Examination of the independent variables in the three structural equations reveals that a variable can serve as an independent variable in one equation, and a dependent variable in another. For each independent variable in the equation, there is a structural coefficient indicating the amount of change expected in the dependent variable as a result of the change in the independent variable. As in the causal diagram, the symbols $\beta_{2.1}$, $\beta_{3.2}$ and $\gamma_{1.1}$, $\gamma_{1.2}$ and $\gamma_{3.2}$ denote the structural coefficients in the model that are estimated from the data, and provide an expression of the causal influence that one variable has upon another.

A third way to specify a causal model is to use matrices. Portraying a causal model using matrices is helpful, because the terminology used for a matrix specification, is often used in causal analysis. Only two matrices were necessary to specify the causal models in the present study. The causal relationships from the endogenous to endogenous variables are indicated by the β coefficients (refer Figure 2.1) and are specified in a B matrix; while the exogenous to endogenous causal relationships are indicated by the γ coefficients and specified in a Γ matrix. The causal structure is also specified by nominating the matrix elements as “free” or “fixed”. In the present study, a fixed element in a B or Γ matrix indicates that a causal path is not proposed, while a free element indicates that a causal path has been proposed and needs to be estimated from the data. For example, the following B and Γ matrices specify the causal structure of the model in Figure 2.1:

$$\begin{aligned}\Gamma &= \begin{array}{c} \eta_1 \\ \eta_2 \\ \eta_3 \end{array} \begin{array}{cc} \xi_1 & \xi_2 \\ \left[\begin{array}{cc} \text{Free } (\gamma_{1.1}) & \text{Free } (\gamma_{1.2}) \\ \text{Fixed } (\gamma_{2.1}) & \text{Fixed } (\gamma_{2.2}) \\ \text{Fixed } (\gamma_{3.1}) & \text{Free } (\gamma_{3.2}) \end{array} \right] \end{array} \\ \\ \mathbf{B} &= \begin{array}{c} \eta_1 \\ \eta_2 \\ \eta_3 \end{array} \begin{array}{ccc} \eta_1 & \eta_2 & \eta_3 \\ \left[\begin{array}{ccc} \text{Fixed } (\beta_{1.1}) & \text{Fixed } (\beta_{1.2}) & \text{Fixed } (\beta_{1.3}) \\ \text{Free } (\beta_{2.1}) & \text{Fixed } (\beta_{2.2}) & \text{Fixed } (\beta_{2.3}) \\ \text{Fixed } (\beta_{3.1}) & \text{Free } (\beta_{3.2}) & \text{Fixed } (\beta_{3.3}) \end{array} \right] \end{array}\end{aligned}$$

The Γ matrix indicates that the $\gamma_{1.1}$, $\gamma_{1.2}$ and $\gamma_{3.2}$ paths are “free to vary”, and are to be calculated from the data; while the B matrix indicates that the $\beta_{2.1}$ and $\beta_{3.2}$ paths are free and also need to be calculated. The discussion now examines the statistical procedures used by LISREL to evaluate the model by calculating the structural coefficient estimates and the model-fit statistics.

Structural Coefficients. The statistical procedure used to calculate the strength of the causal relationships in the causal model (i.e., the structural coefficients) can be explained in terms of three sets of matrices. The first set comprises the B and Γ matrices used to specify the causal model in a matrix format. The second is the data covariance matrix (often called the “observed”, “data” or “indicator” covariance matrix and represented by S), and is assembled by calculating the covariances or correlations between the variables nominated by the causal model. The third matrix is called the “model-implied” covariance matrix (Σ), because the structural coefficients calculated during the statistical analysis are used to generate the matrix. The three sets of matrices interact using one of five statistical procedures to calculate the structural coefficients in the causal model. The five statistical procedures include two-stage least squares, unweighted least squares, generalized least squares, instrumental variables and maximum likelihood (Jöreskog & Sörbom, 1981). Maximum likelihood was used in the present study, however, because it is the only procedure that could translate categorical and continuous variables into a form suitable for causal modelling (Hayduk, 1987; Saris & Stronkhorst, 1984). Hayduk (1987) provides an informal introduction to the statistical procedures when using maximum likelihood in the LISREL program:

The ... matrices [that specify a] model contain ... fixed coefficients ... and ... free coefficients whose values are to be estimated (primarily the coefficients in B and Γ). Imagine inserting arbitrary estimates in place of each of the free coefficients. The ... matrices would now contain only numerical entries and hence could be [used] to calculate a model-implied covariance matrix among the observed indicators - a Σ .

If we replace the free coefficients with a second arbitrary set of estimates, this implies a second Σ . We can decide which set of arbitrary coefficient estimates is better by comparing the observed covariance matrix S to the model-and-estimate-implied Σ 's ...

Pitting the better set of estimates (and its implied Σ) against a third set of arbitrary estimates might locate an even better fitting Σ and hence a better set of estimates. Repeating this process thousands of times should eventually chance upon a set of estimates that imply a Σ as similar as possible to S , given the constraints of the model (i.e., given that free parameters are allowed in only specific locations in the ... matrices). These estimates would be the maximum likelihood estimates. The process LISREL uses to obtain maximum likelihood estimates of the free structural coefficients improves upon this multiple-guess procedure in only one important respect. LISREL makes “intelligent” guesses about the changes in the estimates that might improve the fit between S and Σ ... (pp. 132-133)

In summary, the structural coefficients in a causal model are determined by the variables and causal structure specified in the causal model (B and Γ), the data covariance matrix (S), and the model-implied covariance matrix (Σ). The LISREL program then uses maximum likelihood procedures to repeatedly estimate Σ , until a set of structural coefficients which generate the best fit between S and Σ is found.

Model-Fit Statistics. Model-fit tests are a group of statistical tests which are often confused with the “explained-variance” tests commonly used in social research (Dwyer, 1983; Mulaik,

1987). Explained-variance tests express the amount of variance accounted for by one or more variables, and a significant finding indicates that the variance is more than would be expected by chance (Dwyer, 1983). On the other hand, model-fit statistics evaluate the compatibility between model and data, and a significant result indicates that the causal model has been rejected. In LISREL, the model-fit statistics operate by assessing the extent to which the model-implied covariance matrix (Σ) approximates the data covariance matrix (S). Anderson (1987) provides an informal introduction to the statistical procedure:

The LISREL program provides a chi-square statistic to test the fit of the model to the data. This statistic is a function of . . . the difference between the observed correlation or covariance matrix and a predicted matrix based on the model. One can interpret this test as measuring whether the residual correlations or variances-covariances obtained by comparing the observed and predicted values differ from zero. If this statistic exceeds a critical value at a predetermined probability level, one concludes that the model does not adequately represent the process that generates the pattern of relationships among the variables in the population. (p. 53)

LISREL VI (Jöreskog & Sörbom, 1981) provides an array of model fit statistics in addition to the χ^2 statistic, and includes the root mean squared residual (RMR), goodness of fit index (GFI) and adjusted goodness of fit index (AGFI). Although the statistical procedure that calculates each measure of fit is different (see Jöreskog & Sörbom, 1981, pp. I.36-I.42; Saris & Stronkhorst, 1984, pp. 228-231), each provides an indication of the degree of fit between model and data. Hayduk (1987) notes that a widely accepted significance level for model-fit statistics has not yet emerged, although Brown (1990) and Cuttance (1987) propose an AGFI index of around 0.9, and Saris and Stronkhorst (1984) a 0.05 significance level for the χ^2 test statistic. Achieving a satisfactory fit between model and data is a major focus for analysis because a causal interpretation does not proceed until the model has been deemed a satisfactory fit with the data (Hayduk, 1987; Saris & Stronkhorst 1984).

Procedure to Test A Causal Model

The procedure used to evaluate a causal model in the present study was based on an approach reported by Brenner and Bartell (1983). Called an "iterative procedure", the approach evaluates a model and examines the contribution of variables found in previous research to be related with the processes under investigation. The first step was to specify the causal structure for the β paths (the endogenous-to-endogenous causal links) in the model. *At no stage during the procedure were the β causal relationships altered.* In contrast, the γ causal paths (the exogenous-to-endogenous causal links) were *atheoretical and added post-hoc during the iterative procedure.* The γ paths were designed to explore the role of variables known to be related to the processes under investigation, but for which a causal-process role has not yet emerged. The procedure has the benefit of providing γ paths that may provide an extra insight into the theoretical processes being studied.

The second step in the iterative procedure was to ascertain which γ causal relationships needed to be added (or “freed”) to minimize the difference between S and Σ . LISREL VI calculates “modification indices” that cite the Γ elements that can produce the biggest improvement in model fit. The indices are scaled so that their value indicates the decrease in the χ^2 test statistic that can be expected when comparing the old model with the new (Jöreskog & Sörbom, 1981). For example, a modification index of 7.00, indicates that a reduction of 7.00 or more is expected on the χ^2 test statistic when comparing the old and new models.

Two considerations are necessary when using the modification indices to modify a causal model (Jöreskog & Sörbom, 1981; Saris & Stronkhorst 1984). First, the Γ elements indicated by modification indices below 5.00 are not freed, because the reduction in the χ^2 test statistic is usually too small to be useful. Second, only one element in the Γ matrix is freed per run, because the modification indices can change drastically from one solution to the next. In the present study, the Γ modification indices table was initially inspected, and the highest element above 5.0 freed. The LISREL analysis was then rerun, and the modification indices table again inspected to see if values above 5.0 were present. If so, the next element was freed, and the analysis rerun. The analysis proceeds until all Γ elements in the modification table were below 5.0.

The third and final step in the iterative procedure involved examining the model-fit statistics. If nonsignificant, the causal structure between the endogenous variables provided a satisfactory fit between theory and data. If the model-fit statistics were significant, the causal structure between the endogenous variables was unable to account for the data and the causal structure was revamped in accordance with the theory, and the iterative procedure repeated. Alternatively, the theory could be rejected as untenable. The aim is that any discrepancy between S and Σ at the end of the analysis is due to the theoretically specified β relationships and not the atheoretical γ relationships. The procedure developed to test and develop a causal model could be summarized as:

1. Posit a causal model with the β paths specified by theory and the γ paths unstated.
2. Free the Γ elements (the causal relationships between the exogenous and endogenous variables) that have the highest modification index. The LISREL analysis is run and the modification indices again examined. The freeing continues until all modification indices in the Γ matrix are below 5.0.
3. The analysis is completed if the model fit statistics indicate a satisfactory fit between theory and data. If the model fit is not satisfactory, the causal model is revamped in keeping with the theory and retested, or discarded.

LISREL occasionally “collapses” or “breaks-down” during analysis because the model is seriously misspecified. Misspecification in most cases occurs when the causal structure in the B or Γ matrices is not correctly recorded (Pedhazur, 1982). In this case, LISREL is either unable to

converge on a solution (i.e., the programme is unable to calculate maximum likelihood estimates for B or Γ), or the structural estimates are unreasonable or impossible. Misspecification is often not apparent until modification indices are omitted, or structural coefficient estimates become unreasonable. An impediment to isolating the problem in the analysis is that the global measures of model fit do not single-out the sources of specification error and necessitate more detailed investigation:

The chi-square statistic and [. . . other statistics . . .] are overall indicators of fit that do not reveal localized problems within a model. A more detailed assessment of fit can be obtained by direct inspection of the matrix of residuals $S = \hat{\Sigma}$ or, more conveniently, of normalized residuals (residuals divided by their standard deviations). Normalized residuals larger than 2 are indicative of specification errors in the model. (Hill, 1987, p. 73)

In other words, the LISREL analysis is abandoned and the residuals of the initial model examined to highlight potential sources of misspecification. The causal model is then modified and reanalyzed. The same procedure for treating model misspecification has also been outlined by Pedhazur (1982), Hayduk (1987) and Jöreskog & Sörbom (1981).

Hypothetical Example

A hypothetical example provides the opportunity to illustrate some of the terms and procedures used in the present study to evaluate a causal model. The example is loosely based on Brenner and Bartell (1983, pp. 131-135), Jöreskog and Sörbom (1981, pp. III.70-III.81) and Nie, Hull, Jenkins, Steinbrenner and Bent (1975, pp. 383-397).

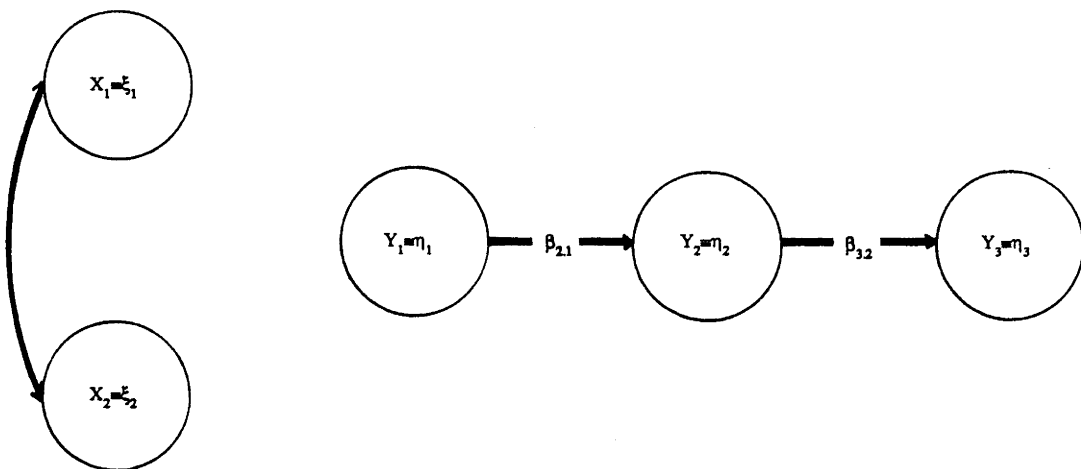


Figure 2.2 Causal Diagram for Hypothetical Example

The researcher guided by a theory in a causal-process form, nominates the relevant variables and specifies the causal structure between the endogenous variables for the causal model (refer Figure 2.2). The causal relationships between the exogenous (X or ξ variables) and endogenous (Y or η variables) are not specified, since the γ paths are established during the analysis. Furthermore, the curved arrow between the exogenous variables indicates that a correlation between the exogenous variables is assumed. The researcher collects measures for the nominated variables, calculates the covariation between the five variables and assembles the results in a data covariance matrix S (the covariance scores are standardized and make up the correlation matrix presented in Table 2.1). The causal structure for LISREL is then specified by fixing or freeing the necessary elements in the B and Γ matrices. The analysis begins with the atheoretical exogenous-to-endogenous variable relationships (the γ paths) being freed in-accordance with the modification indices reported by LISREL. The analysis proceeds until all elements in the Γ modification table are below 5.0.

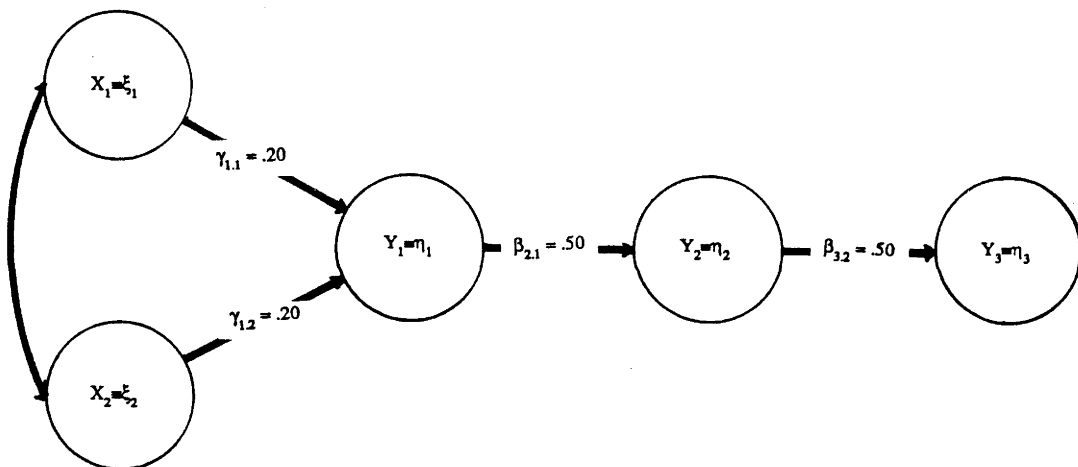


Figure 2.3 Causal Diagram with Structural Coefficient Estimates for Hypothetical Data

The structural coefficient estimates for the final causal model are presented in Figure 2.3. Note that two γ paths have been added during the iterative analysis. The structural coefficient estimates (β) correspond to traditional standardized regression coefficients in the present example (Brenner & Bartell, 1983). The structural estimate for the causal relationship between variable η_1 and variable η_2 ($\beta_{2.1}$) indicates that variation of one standard deviation in η_1 generates a variation of one-half a standard deviation in η_2 (like-wise the causal relationship between η_2 and η_3). The multiplicative rule of path analysis can be used to estimate the indirect causal impact that η_1 has on

Table 2.1

Data Covariance Matrix (S) for Hypothetical Example

Variables	η_1	η_2	η_3	ξ_1	ξ_2
η_1	1.00				
η_2	.50	1.00			
η_3	.75	.50	1.00		
ξ_1	.20	.00	.00	1.00	
ξ_2	.20	.00	.00	.00	1.00

η_3 (Bohrstedt & Knoke, 1982). The structural estimates for $\beta_{2,1}$ and $\beta_{3,2}$ when multiplied together (0.5 X 0.5), indicate that variation of one standard deviation in η_1 should result in variation of one-quarter of a standard deviation in η_3 . The multiplicative rule of path analysis could be used to calculate other indirect effects in the model.

Table 2.2

Model-Implied Covariance Matrix (Σ)
for Hypothetical Example

Variables	η_1	η_2	η_3	ξ_1	ξ_2
η_1	1.00				
η_2	.50	1.00			
η_3	.25	.50	1.00		
ξ_1	.20	.10	.05	1.00	
ξ_2	.20	.10	.05	.00	1.00

LISREL calculates a model-implied covariance matrix (Σ) using the β and γ coefficients to assess model-fit (refer Table 2.2). As comparing the data covariance matrix S and the model-implied covariance matrix Σ indicates (contrast Table 2.1 with Table 2.2), the matrices are identical except for a number of discrepancies. There are four minor discrepancies (η_2 with ξ_1 and ξ_2 , η_3 with ξ_1 and ξ_2) that could be due to sampling variation (Saris & Stronkhorst, 1984). However, the difference for variables η_1 and η_3 between S and Σ is too large to be attributed to sampling fluctuation. In S the covariation is 0.75, whereas in Σ the predicted covariation is 0.25. The discrepancy between S and Σ is 0.50 for η_1 and η_3 and so large that the model does not fit the data. Although a range of statistical procedures for estimating the structural parameters are available

(Jöreskog & Sörbom, 1981, pp. I.27-I.32), and a number of model-fit statistics may be used (Jöreskog & Sörbom, 1981, pp. I.36-I.42), the primary aim of all model-fit tests is to assess if S and Σ are compatible.

A Causal Analysis of Interindividual Differences

A major feature in the present study was the use of a cross-sectional method to collect data. An advantage with using the cross-sectional method was that most investigations into the emotional impact of unemployment have used the same method (Feather, 1990; Kelvin & Jarrett, 1985), providing the opportunity to directly compare the results of the present study with previous research. Baltes, Reese and Nesselroade (1977) point out that a primary feature of the cross-sectional method is that the data conveys information about the differences between people. For example, if one person scores five on self-esteem and another scores ten, then there is a *difference* of five points between two individuals on self-esteem at the time of the interview. Virtually all the variables in the cross-sectional study expressed information regarding the differences between individuals, even variables that contained temporal information. For example, if one person was 16 years-of-age and another was 21 years-of-age, then there was a difference of five years between the two individuals at the time of interview.

Baltes, Reese and Nesselroade (1977) coined the term *interindividual differences* to indicate the type of information conveyed by the data collected in a cross-sectional study, proposing that “interindividual *differences* refer to differences between individuals in a given behavior at one point in time” (p. 93). In the present study, the term *a causal analysis of interindividual differences* was used to acknowledge the evaluation of a causal model using data collected in a cross-sectional study.

Conclusion

Causal analysis is a relatively new statistical technique in nonexperimental social research. The attraction of using a causal modelling in the present study was the opportunity of evaluating social theory in a causal-process form. In particular, the application of a causal analysis of interindividual differences to evaluate the learned-helplessness and frustrated-motivation theory as viable explanations for the development of depression and frustration in the unemployed. The next step was to define a research population that would provide the data to enable learned-helplessness and frustrated-motivation theory to be evaluated.

Research Population

An early consideration in the present study was to specify an unemployed population from which a sample could be drawn to investigate the relationship between unemployment and emotional health. The first issue to be considered involved the definition of "unemployment," the second was to select the target population to be sampled.

Defined literally, "unemployment" means "without employment" (Gurney, 1979). But a literal definition is unhelpful because there is little or no agreement as to what constitutes employment (Royal Institute of International Affairs, 1935; Jahoda, 1982; Hartley & Fryer, 1984). The definition is also too broad, as few would consider the aged, ill and disabled in the same category as the unemployed (Jones, 1985; Royal Institution of International Affairs, 1935). Kelvin and Jarrett (1985) note that in practice, social scientists have tended to use a "bureaucratic" definition of unemployment:

In practice, most empirical studies of the unemployed seem to have selected their samples on essentially bureaucratic criteria: most, for instance, appear to be based on people who are registered as unemployed, or whatever the functionally equivalent term for "registered" might be; or they would qualify for being so registered. Given that defining the unemployed is problematic, that is by no means unreasonable: most unemployed do meet these criteria and, with some exception from unemployed married women, the registered unemployed do in effect constitute the majority of the unemployed. (p. 13)

However, adopting the bureaucratic definition has obvious drawbacks. First, some individuals generally considered unemployed are excluded. For example, the Australian government does not permit an individual to register for unemployment benefits for 6 weeks after voluntarily leaving a job, although such a person is clearly unemployed. Second, research findings may differ because bureaucratic definitions vary between countries (Sorrentino, 1981) and over time (Hartley & Fryer, 1984). Third, there is no evidence to support the claim by Kelvin and Jarrett (1985) that the registered unemployed constitute the majority of unemployed. Indeed, some have questioned the adequacy of government statistics to express the full extent of unemployment (Blakers, 1984; Maurer, 1979; Turner, 1983; Hayes & Nutman, 1981; Windshuttle, 1981). Stricker and Sheehan (1981) examined the issue and concluded that in Australia, at least, the number of people registered for unemployment benefits excludes a large number of people who would be involved in the workforce if they had the opportunity. Examples of the "hidden unemployed" are best conveyed in their own words:

The hidden unemployed are defined as those persons who are not now in the labour force but who would be in the labour force if the conditions characteristic of full employment existed. When jobs become hard to get, and especially when employment opportunities remain sparse for a long period of time, there are many reasons why individuals who would otherwise be working stop actively looking for work. Some examples include the case of a teenager who has failed to find a job and is

sent back to school by his parents; a person of any age who has been actively looking for work for six months despairs of getting a job and stops looking, at least temporarily; a man of, say, 56 years of age who is not very well and has little chance of getting a job in the current situation, applies for and obtains an invalid pension; a man of 60 years of age who loses his job and despairs of getting another resigns himself to a lower income and draws a war service pension; a migrant woman who sees herself as capable of working only in certain jobs in certain factories, and knowing that they are not available she does not look for work; a married woman who cannot find work stops looking for a job and devotes herself to managing on the reduced family income. Thus the forms of discouragement are manifold, and in any of these cases the unemployment is as real, and implies as great personal and social costs, as in the instances of unemployment which are recorded in the official figures. (p. 3)

Using labour force statistics, Stricker and Sheehan (1981) argue that the registered and hidden unemployed come to a total of 11.0% of the workforce (August 1979), much higher than the 5.8% registered for unemployment benefits with the Australian government at that time. The work by Stricker and Sheehan (1981) questions the statement by Kelvin and Jarrett (1985) that the bureaucratic definition includes most of the unemployed. Nevertheless, the bureaucratic definition was used in the present study for three reasons. First, the wide use of the definition in social research provides an opportunity to compare the results of the present study with other research conducted in Australia. Second, the bureaucratic definition includes people generally considered to be unemployed, as the government requires individuals receiving unemployment benefits to be without full-time employment and looking for a full-time job. Finally, the bureaucratic definition provides an accessible population, because people registered with the government for unemployment benefits must regularly attend the government offices.

As a bureaucratic definition for unemployment was adopted, and the study limited to young people, a target population was defined as: *any person, 16 to 24 years of age (inclusive) who was registered for unemployment benefits with the Department of Social Security. People with difficulty comprehending English or understanding the questionnaire were excluded.* The 16 to 24 age range coincides with the "youth unemployment" age category used by the Australian Department of Social Security in their Quarterly Survey of Unemployment Benefits, enabling an estimate of how representative the sample was of young people registered for unemployment benefits in the A.C.T. An additional benefit of using the bureaucratic definition was that employment status could be established by simply asking a person if they were currently registered for unemployment benefits.

Questionnaire

The following discussion briefly outlines the questionnaire format and psychometric details for the data relating to the cognitive and affective variables used in the study.

Questionnaire Format

The majority of questions used a fixed-choice response scale, or required a one word response (see Appendix A for a copy of the questionnaire). The questionnaire was divided into two parts according to the format used by Edwards (1979). Part A primarily contained background questions and was conducted as a two-way interview for three reasons. First, the non-threatening nature of the questions provided an opportunity to cultivate a relaxed atmosphere. Second, the interview could be terminated at the end of Part A without offense if the respondent did not fulfill the sample criteria. Third, the questionnaire could be angled to enable the respondent to read the questions with the interviewer, observe the written responses, and become familiar with the coding procedure used in Part B. The questions for Part B were more personal in nature and designed to be completed by the respondent without assistance from the interviewer and included measures of self-esteem, depression, attributional style, unemployment attributions, job expectancy and other attitudinal dimensions.

Research Variables

Variables in the present study were classified as *endogenous* or *exogenous*. The term endogenous has been used to designate variables for which a causal structure has been specified by theory, while the term exogenous refers to variables for which no causal structure has been specified, but are related in some way to the psychological processes under investigation (i.e., Brenner & Bartell, 1983). In the present study, the endogenous variables were nominated by the learned-helplessness and frustrated-motivation theory, and the exogenous variables referred to background factors shown in previous research to be related with emotional health in the unemployed. The exogenous and endogenous variables used in the study are now reviewed.

Exogenous Variables

All exogenous variables were measured in Part A of the questionnaire, except for the variable concerning *breadth of job applications* which was measured in Part B. A full list of the variables and the related items in the questionnaire are provided in Table 2.3. The responses for most items were straightforward and required a ‘yes’ or ‘no’, a one or two word reply, or selection of a category. The responses were scored according to the categories used on the questionnaire.

A number of the items, did however, require coding. The *qualifications* of the respondent were recorded as an open-ended response and coded on a six-point scale (Part A: No. 5). The responses were scored along the scale of (1) *no certificate* (only relevant to individuals born outside Australia), (2) *Year 10 Certificate* (about 16 years-of-age and the earliest age at which individuals can leave school), (3) *trade certificate*, (4) *Year 12 Certificate* (received at the end of high school),

Table 2.3
 Exogenous Variables used in Cross-Sectional
 Study of the Unemployed

Variables	Item
Biographic and Demographic Factors	
Age	Part A: No. 1
Sex	Part A: No. 2
Qualifications	Part A: No. 5
Residence	Part A: No. 15
Number of Co-residents	Part A: No. 15 ^a
Socio-Economic Status ^b	Part A: No. 16
Aspects of Job Search	
Length of Registration	Part A: No. 6
Enquiries per Week	Part A: No. 7
Breadth of Job Applications	Part B: No. 1 ^c
Financial Status	
Additional Financial Support	Part A: No. 21
Social Comparison with Friends and Family	
Number of Unemployed Friends	Part A: No. 12 ^d
Time with Unemployed Friends	Part A: No. 12 ^e
Family Members Unemployed	Part A: No. 19
Past and Present Employment Details	
Previous Job	Part A: No. 11 ^f
Present Part-Time Work	Part A: No. 11 ^d
Something Lined-up	Part A: No. 23 ^f

Superscript (a) refers to open-ended response; (b) assessed according to Father's Occupation; (c) refers to first item after Attributional Style Questionnaire; (d) refers to sub-item (i); (e) refers to sub-item (ii); (f) refers to initial response.

(5) *diploma* and (6) *degree* (obtained at University). The highest score was recorded if the respondent held a number of qualifications. The *residence* of the respondent was recorded on a four-point scale of (1) *on your own*, (2) *with spouse/de facto*, (3) *independently, but in a group house* and (4) *at home with family* (Part A: No. 15). However, the four-point scale was not relevant to the present study and scores were collapsed to indicate if the respondent lived away from the parental home (scored 0), or at home (scored 1).

The *socio-economic status* of the unemployed was difficult to ascertain, as more than half of the respondents lived with their parents at home, and about one-quarter had not held a job before unemployment. The best estimate for socio-economic status was to score the occupational status of the individual's parents. An open-ended question was used (Part A: No. 16), and the responses coded according to the six-point occupational status scale developed by Broom, Jones and

Zubrzycki (1976) for the Australian workforce. Although mother's occupation was recorded, the estimate of socio-economic status was based on the *father's occupation* as about one quarter of mothers were engaged in house duties and could not be classified. The responses were scored along the scale of (1) *professional*, (2) *managerial*, (3) *white collar*, (4) *skilled manual*, (5) *semi-skilled manual* and (6) *unskilled manual*.

In summary, most of the exogenous variables only required a simple response from the respondent. However, the measures of *qualifications*, *residence* and *socio-economic status* (measured according to *father's occupation*) required additional coding before the responses were ready for statistical analysis.

Endogenous Variables

To aid presentation, the endogenous variables nominated by learned-helplessness and frustrated-motivation theory are classified as *endogenous cognitive variables* or *endogenous affect variables*. The cognitive endogenous variables include attributions, job expectancy and job importance; while the cognitive affect variables include self-esteem, depression and unemployment frustration.

Endogenous Cognitive Variables. The Attributional Style Questionnaire (ASQ) was used to measure attributional style for positive and negative life events (Seligman, Abramson, & Semmel 1979). The scale contains 36 items and can be used to provide scores along the internal-external (internality), global-specific (globality) and stable-unstable (stability) sub-dimensions, although in most social research the scores are collapsed across the sub-dimensions to provide scores for the positive and negative outcome items. Peterson, Semmel, von Baeyer, Abramson, Metalsky, and Seligman (1982) have reported alpha coefficients of 0.75 for the positive event items and 0.72 for the negative life event items. Peterson et al. (1982) also report test-retest correlations over a five week period using a nonclinical sample, with correlations of 0.70 for the positive outcomes and 0.64 for the negative outcomes.

Both negative and positive negative outcome scales have been useful in discriminating between depressed and nondepressed college students (Seligman, Abramson, Semmel & von Baeyer, 1979), and were combined in the present study to provide a single measure of attributional style (Blaney, Behar & Head, 1980). The interitem reliability coefficient for the ASQ using Cronbach's (1964) α was 0.70 in the present study (0.74 for positive and 0.65 for negative outcome items). A number of composite subscales were also used. The Cronbach's α for the internal-external attributional style subscale was 0.55 (0.44 for positive and 0.43 for the negative outcome items), and the "generality" attributional style (adding the stable-unstable and global-specific subscales) was 0.71

(0.70 for positive and 0.70 for negative outcome items). All sub-scales and the composite scales were scored so that increasing values indicated attributions that were more internal along the internal-external dimension, more stable along the stable-unstable dimension, and more global along the global-specific dimension.

Another attribution measure in the study evaluated the respondent's attributions for being unemployed using an open-ended question. The written comments were later analyzed to provide a single-item score representing the respondent's explanation for unemployment along the internal-external, stable-unstable and global-specific dimensions. The analysis was based upon the symptom-context method developed by Luborsky (1964, 1970; Luborsky & Auerback, 1969), and has been previously used to test the learned helplessness theory (Peterson, 1980a, 1980b; Peterson, Luborsky & Seligman, 1983). As with the ASQ, increasing values indicated attributions that were more internal (vs. external), stable (vs. unstable), and global (vs. specific).

The assessment of job expectancy was made with the Job Expectancy Scale. The scale was based on the "Hopelessness Scale" developed by Beck, Weissman, Lester, and Trexler (1974), where hopelessness was defined as "a system of negative expectancies concerning himself and his future life" (Beck et al., 1974, p. 861). Although the 20 items of the Beck et al. scale were reworded for relevance to the unemployed, six items were found difficult to understand by respondents in the pilot study. Six items in the Job Expectancy Scale were therefore dropped and the final scale contained 14 items, with half referring to negative events and half referring to positive events. Responses were made on a 7 point rating scale ranging from (1) *strongly agree* to (7) *strongly disagree*. Interitem reliability using Cronbach's (1964) α was 0.88. The scale was scored so that high values indicated high expectations of getting a job in the future.

The final endogenous cognitive measure in the questionnaire evaluated job importance. The single item was based on an item used by Feather and Barber (1983), but the wording was slightly modified and determined by asking the respondent to rate on a 7-point scale the importance of getting a job. The scale ranged from (1) *extremely unimportant* to (7) *extremely important*.

Endogenous Affect Variables. Assessments were also made of self-esteem, depression, and unemployment frustration. The Rosenberg Self-Esteem scale (1965) measured self-esteem and although constructed as a ten item Guttman scale, research with the young unemployed has utilized the "Likert-type" response format with item responses summed to provide a total score (Aylward, 1981; Gurney, 1981; Tiggemann & Winefield, 1984). According to Rosenberg (1979), high scores indicate elevated self-worth, self-respect and low scores self-rejection, self-dissatisfaction and self-

contempt. Rosenberg (1965) provides evidence for concurrent validity with reports that scale scores are related to feelings of discouragement, unhappiness, symptoms of anxiety, and degree of sociometric status in one's peer group. Schneider (1977) and Silber and Tippet (1965) report that the scale correlates with a range of other self-esteem measures. Silber and Tippet (1965) report a test-retest reliability of 0.85 over two-weeks. The interitem reliability coefficient for the Rosenberg Self-Esteem scale using Cronbach's α in the present study was 0.80, with high scores representing high self-esteem.

The Beck Depression Inventory (BDI) developed by Beck (1967) was selected to measure depression because the scale is well validated and has demonstrated good internal reliability. The instrument contains 21 items, each reflecting an aspect of depression (Beck, 1972). The items were followed by 4 or 5 statements in ascending order of symptom severity, with the respondent indicating the statement closest to his or her present state. Beck, Ward, Mendelsohn, Mock and Erbaugh (1961) reported an odd-even correlation of 0.86, with a Spearman-Brown value of 0.93. With regards to test-retest reliability, Miller and Seligman (1973) report a value of 0.74 among 31 normal undergraduates over a 3 month interval. Evidence for concurrent validity is also presented by Beck (1972). Using 606 patients he found a 0.72 correlation between the BDI score and clinical ratings of depression, with only 0.14 between the BDI and clinicians' anxiety ratings. In the present study the Cronbach's α measure for the BDI was 0.82. The scale was scored so that high values corresponded to high levels of depression.

The third endogenous affect variable was unemployment frustration. This was measured with the single-item for "depressive affect" used by Feather and Davenport (1981) and Feather and Barber (1983), and asked respondents to think about how unemployment made them feel. Feather and Barber (1983, p. 188) noted, however, that the "measure might also reflect differences in anger and resentment about being unemployed." The single item was enhanced in the present study to provide a general measure of "unemployment frustration" by adding two items that ascertain the levels of anger directed by the respondent at self and society. Cronbach's α for the three items was 0.69, with high scores indicating high unemployment frustration.

Data Collection

A major problem in the present study was to find a method that would ensure a representative sample of the target population, and allow the findings to be generalised to other 16 to 24 year olds registered for unemployment benefits in the A.C.T. A range of sampling procedures were considered and are briefly reviewed, along with pilot study details regarding the strategy used to achieve a representative sample.

Sampling Procedure

Several procedures were available to draw a representative sample from the target population. The range of procedures included random sampling, advertising, consulting government unemployment registers and contacting people when they attended the unemployment agencies. Conducting a random sample although the most desirable, involved extremely high cost and time demands. Advertising was also rejected due to the potential for bias and low response rate. The most promising procedure was to use government registers to contact unemployed people. Indeed, Norris (1978) notes that much research is conducted with unemployment registers in the United Kingdom due to sample accessibility and low cost.

Gaining assistance from the government departments appeared desirable, as the people receiving unemployment benefits must regularly attend one of the three Department of Social Security offices (D.S.S.) in the A.C.T. However, the approach was abandoned when the D.S.S. did not allow access to unemployment registration lists. An alternative was to stand inside the D.S.S. offices and contact unemployed people with the assistance of the staff. However, pilot studies indicated that this approach would not yield a representative sample as many of the unemployed people treated government workers with suspicion and were unwilling to be interviewed. The most promising procedure was to stand in front of the three D.S.S. offices in the A.C.T. and approaching people as they entered and left the agency.

Interview Strategy

A series of pilot studies were conducted to find an approach that would lead to the greatest interview-acceptance rate. A direct approach was found to be the best, with the interviewer asking the question, "Could I ask you some questions about unemployment?" Respondents in most cases continued the conversation by wanting to know further details. An issue that became evident during the pilot studies concerned the transient accommodation for many respondents, posing problems for a later follow-up. The problem of gaining a follow-up address was overcome by asking respondents to provide the address of a friend or relative that could be contacted in the future.

The interview took from an hour, to an hour and a half. While the questionnaire could be completed in less time, an important consideration was to encourage respondents to feel comfortable and free to discuss personal matters. At the end of the interview, respondents were asked for a name and follow-up address (or phone number) on the pretext that "it would be interesting to see how things worked out." Five people (four males and one female) were unwilling to provide details of a future address and one person contacted the Psychology Department at the Australian National University for verification of the research project. Further details on the nature

of the follow-up were not provided unless requested. The interview procedure achieved a low rejection rate. Of the 231 people approached, 31 were not interviewed (an 86.5% acceptance rate). The 31 people not interviewed comprised 24 people who refused outright, while 7 were excluded due to difficulties in understanding the questionnaire.

Sample Surveyed

The sample was surveyed from June 1984 to February 1985. Three aspects will be reviewed: first, the biographic and demographic details of the sample; second, a comparison of the present sample with samples obtained in previous research; third, a comparison of the present sample with government data.

Biographic and Demographic Details of the Sample

Two hundred and thirty-one people were approached and 200 were interviewed. The interviewer recorded the sex and estimated age (above or below 20 years-of-age) of people not interviewed to assess the possibility of a rejection bias. People not interviewed were not significantly different in age ($\chi^2 [1] = 2.29, p > 0.05$) or sex ($\chi^2 [1] = 0.69, p > 0.05$) from the people initially approached.

Most respondents were in their late teens, with 17.0% in the 16 to 17 age bracket, 52.0% in the 18 to 20 age bracket and 31.0% in the 21 to 24 age bracket. Of these, 60.0% were male and 40.0% were female. Over three-quarters of the respondents had been registered with D.S.S. for unemployment benefits less than six months (77.5%) and the long term unemployed (greater than nine months) comprised only 11.0% of the sample. The respondent's family occupational status was ascertained by father's (or step-father's) occupation. The responses indicated that a majority of respondents (54.5%) had fathers in professional or managerial, 30.0% in manual and 15.0% in clerical employment.

Questions were also asked about job history. About 75.0% of the respondents had a job prior to unemployment, and the remaining 25.0% had in most cases recently left high-school or a tertiary institution. The occupational status scale developed by Broom, Jones and Zubrzycki (1976) when applied to respondents with a job history, indicated that over two-thirds (64.0%) had held manual work, 21.3% clerical, and 14.7% professional or managerial. In short, and consistent with age of the sample, many respondents had been engaged in low status jobs but were from middle-high occupational status family backgrounds. When asked how the job finished, 39.6% had left intentionally, 12.8% were sacked, 13.4% were retrenched and 32.2% stated that the employment had "finished". The high number who left voluntarily, may reflect the large proportion of

respondents (25.3%) who left part-time jobs when school finished. With regards to education level, 39.0% had less than a Year 12 Certificate (a certificate granted when students finish secondary school), 49.5% had achieved a Year 12 Certificate and 11.5% had a tertiary qualification. Surprisingly, many of the individuals with a "Year 12 Certificate" although eligible for many white collar jobs, had previously held manual or skilled manual jobs.

In summary, the demographic and biographic details of the sample were consistent with a sample of young unemployed people in middle-class Canberra. Most respondents had been unemployed for less than six months, came from a family with a father in a middle-high status job, had typically achieved a Year 10 or Year 12 education but had been employed in manual occupations.

Comparing the Sample with Previous Studies

The target population for the study were people ranging from 16 to 24 years-of-age and registered for unemployment benefits with the Department of Social Security in the A.C.T. The target population and the sampling procedure were different from those used in previous studies, which have tended to obtain their samples from particular locations such as a government agency, or a general criteria such as "any person looking for work" (Aylward 1981; Edwards 1979). Moreover, researchers have often restricted their samples according to research interests. For example, Jackson and Warr (1984) and Warr and Jackson (1984) used a large sample from government unemployment registers but limited the sample to males who had previously been employed in manual occupations for at least three months.

The target population and sampling procedures used in the present study raise the possibility that the present sample was different from previous survey samples. As different samples may lead to divergent findings, demographic and biographic variables of the present study were contrasted with earlier surveys to compare samples. The number of studies available for comparison was limited, however, as many researchers have not aimed at obtaining a representative sample, and do not provide indepth biographical and demographic information (Aylward, 1981; Cameron, 1983; Feather & Barber, 1983; Feather & Davenport, 1981; Jackson & Warr, 1984; Warr & Jackson, 1984). The studies selected were chosen on the grounds of similar methodology, publication in a number of sources, similarity of categories and depth of biographical and demographic information. A further consideration was that location could play role in determining sample characteristics. The Finlay-Jones and Eckhardt (1981; 1982) study was conducted in Canberra as was the present study, while the Viney (1981, 1982, 1985) study was conducted in Wollongong, N.S.W., and the Warr and Jackson (Jackson & Warr, 1984; Warr & Jackson, 1984, 1985) studies

were conducted in the United Kingdom. Basic biographic and demographic details of the four studies are presented in Table 2.4.

Table 2.4 compares the present sample with two Australian samples (Finlay-Jones & Eckhard, 1981, 1982; Viney, 1981, 1982, 1985). The percentages indicate that the three Australian studies were similar with regards to age, sex, interview refusal, living arrangements and marital status. A notable difference was apparent when comparing the educational standards of the Finlay-Jones and Viney studies, revealing that the Viney study used a sample lower in educational standards. Location is the most likely explanation, as Wollongong is an industrial city with a large migrant population from countries that permit people to withdraw at Primary School. The table also provides a comparison with an English study conducted by Warr and Jackson (Jackson & Warr, 1984; Warr & Jackson, 1984, 1985) in the United Kingdom. There are clear differences in age, sex, work history and marital status. Although location may play a role, a more powerful influence on the sample characteristics comes from selective sampling as Warr and Jackson only interviewed males who had been employed in manual work for at least three months.

In short, a comparison between the present study and the two Australian studies by Finlay-Jones and Eckhardt (1981, 1982) and Viney (1981, 1982, 1985) indicated that the samples were similar on many variables except for education. A comparison between the present study and the English study by Warr and Jackson (Jackson & Warr, 1984; Warr & Jackson, 1984, 1985) indicated that the variation on most variables could be attributed to different sampling criteria. Consequently, the sample may be typical of studies conducted in Australia, although the sampling criteria used in Australian and overseas studies needs to be considered before parallels can be drawn.

Comparing the Sample with D.S.S. Data

Sample representativeness was evaluated by comparing age and sex sample characteristics with D.S.S. data for people receiving unemployment benefits in the A.C.T. during the survey period (June 1984 to February 1985). The D.S.S. data was obtained by averaging the May, August, November and February 1985 quarterly statistics published by the Department of Social Security (Department of Social Security, 1984a, 1984b, 1984c, 1985). Table 2.5 reports a comparison of sex and age percentages from the sample and D.S.S. data. A χ^2 analysis did not reveal evidence of a sex difference between the sample frequencies and expected frequencies using D.S.S. data ($\chi^2 [1] = 0.72, p > 0.05$). The age comparisons were based on the age categories used by the D.S.S. in their quarterly reports and a χ^2 analysis reveals a significant difference ($\chi^2 [2] = 7.70, p < 0.05$). Inspection of the Table 2.5 suggests that more people below the age of 20 years of age were included in the sample than people over 20 years of age.

Table 2.4

Comparing Details of Unemployed Sample in Cross-Sectional
Study with Samples of Unemployed in Previous Research

Variables	Finlay-Jones & Eckhardt (A.C.T.) (N = 401)	Viney (N.S.W.) (N = 100)	Warr & Jackson (U.K.) (N = 954)	Present Study (A.C.T.) (N = 200)
Age				
Range	16-24 yrs	15-44 yrs ^a	16-64 yrs	16-24 yrs
Mean	20 yrs ^b	22 yrs ^b	35 yrs ^b	20 yrs ^b
Sex				
Male	66%	65%	100% ^c	60%
Female	34%	35%	0% ^c	40%
Interview				
Location	C.E.S. ^d	C.E.S. ^d	U.B.O. ^d	D.S.S. ^d
Inside or Outside	Inside	Outside	Outside	Outside
Interview Refusal	15% ^e	13%	Not Stated	13%
Length of Unemployment				
Range	2-260 wks	Not Stated	Not Stated	0-78 wks ^e
Mean	40 wks ^b	Not Stated	20 wks ^b	14 wks ^b
Qualifications				
Primary	1%	35%		0%
Some High School	66%	46%	Not Stated	39%
Completed Yr 12	33%	19%		61%
Previous Job				
No Previous Job	18%		0% ^c	25%
Non-manual	28%	Not Stated	0% ^c	31%
Manual	54%		100%	44%
Residence				
With Parents	60%	62%		57%
Not with Parents	40%	38%	Not Stated	43%
Marital Status				
Single	91%		29%	94%
Not Single	9%	Not Stated	71%	6%
Migrant Status				
Born in Country	80%	69%		84%
Born outside Country	20%	31%	Not Stated	16%

(a) most respondents fell in the 15-24 age range.

(b) an unstable measure of central tendency with extreme scores.

(c) the sample only included males previously employed in a manual occupation for at least 3 months.

(d) C.E.S. (Commonwealth Employment Service); U.B.O. (Unemployment Benefits Office); D.S.S. (Department of Social Security).

(e) 44% of the 716 of people originally selected for interview were not approached: 13% registered but did not return to the agency, 9% were lost due to procedural error and 7% handed their forms outside formal hours.

(f) a limit of 78 weeks was specified for length of unemployment.

Table 2.5

Comparing Unemployed in Cross-Sectional Study on Age and Sex
with Department of Social Security Data for Unemployed
in the Australian Capital Territory

Variables	Sample Data	Social Security Data
Sex		
Male	60.0%	62.9%
Female	40.0%	37.1%
	100.0%	100.0%
Age		
Less than 18 years of age	17.0%	13.9%
18 to 20 years of age	52.0%	45.6%
21 to 24 years of age	31.0%	40.5%
	100.0%	100.0%

An explanation for the age bias was that people registered for unemployment benefits have the option to mail fortnightly forms, and there is the likelihood that people over 20 years of age may be more prone to submit their forms by mail. This possibility was not originally considered as people were strongly encouraged by the D.S.S. to submit their forms in person, and pilot study information indicated that virtually all submitted their forms in person because of payment delays. Overall, however, a comparison of sample characteristics of age and sex against D.S.S. data over the period of the survey indicates that although the sample was apparently unbiased on sex, the sample was biased towards respondents below 20 years of age.

Chapter III (Cross-Sectional Study)

Causal Analysis of the Relationship Between Unemployment and Emotional Health

The following chapter examines the ability of the learned-helplessness and frustrated-motivation theories to account for the detrimental impact that unemployment has upon individual emotional health. The chapter opens with a brief review of the descriptive statistics for the sample interviewed during the cross-sectional study, then reviews a causal analysis of interindividual differences for the learned-helplessness and frustrated-motivation theories. Also discussed is the possibility of integrating the two theories into a unified theory that accounts for the development of depression and frustration in the unemployed.

Descriptive Statistics

Table 3.1 and 3.2 report the means, standard deviations, minimum and maximum scores for the endogenous and exogenous variables used in the cross-sectional analysis. The data for a number of the exogenous variables underwent minor alterations to account for outliers. The *winzorization* practice recommended by Winer (1971, p. 51) was used, and involved inspecting the frequency distributions and replacing the outliers with the next values closest to the main body of the distribution. The data for five variables were altered and included *length of registration* (two scores of 56 and 60 weeks were reduced to 54 weeks), *enquiries per week* (a score of 15 per week was reduced to 10 per week), *number of unemployed friends* (three scores of 30, 40 and 50 were reduced to 25) and *something lined-up* (two scores of 52 and 72 weeks were reduced to 36 weeks).

Table 3.3 includes a polychoric and polyserial correlation matrix for the variables used in the analysis (the matrix and the LISREL command files in Appendix F provide sufficient information for the following analysis to be reproduced). The only variable dropped from the analysis was *financial status*, because the high correlation with *present part-time work* ($r[200] = .87, p < .001$) indicated that the *financial status* measure was redundant. Clearly evident was that many of the individuals who had a part-time job were also the individuals who had an income in excess of unemployment benefits. A data transformation was also conducted, but not implemented, as a subsequent analysis revealed no significant variation in the correlation coefficients. The data in Table 3.3 cannot be used as a data covariance matrix *S* for LISREL, however, as the matrix contains redundant information (i.e., the matrix is *not positive definite*) and cannot be processed (Hayduk, 1987; Jöreskog & Sörbom, 1981; Saris & Stronkhorst, 1984). For example, the

Table 3.1

Descriptive Statistics for Exogenous Variables
in Cross-Sectional Study of the Unemployed

Variables	Statistics
Biographic and Demographic Factors	
Age	
Range	16 to 24 yrs
Mean (S.D.)	19.59 (2.23) yrs
Sex	
Female	40.00%
Male	60.00%
Qualifications	
Range	1 to 6
Mean (S.D.)	3.37 (1.37)
Residence	
With Parents	57.00%
Not with Parents	43.00%
Number of Co-residents	
Range	1 to 10
Mean (S.D.)	3.89 (1.61)
Father's Occupation	
Range	1 to 6
Mean (S.D.)	2.65 (1.67)
Aspects of Job Search	
Length of Registration	
Range	0 to 54 wks
Mean (S.D.)	13.34 (15.81) wks
Enquiries per Week	
Range	0 to 20 per wk
Mean (S.D.)	3.25 (3.39) per wk
Breadth of Job Applications	
Only Interested	28.90%
Somewhat Related	55.80%
Every Job Possible	15.20%
Social Comparison with Friends and Family	
Number of Unemployed Friends	
Range	0 to 25
Mean (S.D.)	6.64 (7.13)
Time with Unemployed Friends	
Range	1 to 12 hrs
Mean (S.D.)	3.01 (2.75) hrs
Family Members Unemployed	
Range	0 to 1
Mean (S.D.)	0.30 (0.46)
Past and Present Employment Details	
Previous Job	
No	25.00%
Yes	75.00%
Present Part-Time Work	
No	77.90%
Yes	22.10%
Something Lined-up	
No	61.00%
Yes	39.00%

Table 3.2
 Descriptive Statistics for Endogenous Variables
 in Cross-Sectional Study of the Unemployed

Variables	Statistics
Cognitive Measures	
Job Importance	
Range	1 to 7
Mean (S.D.)	5.21 (1.80)
Job Expectancy	
Range	27 to 95
Mean (S.D.)	69.64 (14.09)
Internal-External Unemployment Attributions	
External	32.70%
Internal	67.30%
"Generality" Unemployment Attributions	
(0) Low on Stability and Globality	18.60%
(1) Average on Stability and Globality	58.20%
(2) High on Stability and Globality	22.50%
Unemployment Attributions	
(0) Very Low on Internality, Stability and Globality	5.20%
(1) Low on Internality, Stability and Globality	34.50%
(2) High on Internality, Stability and Globality	43.80%
(3) Very High on Internality, Stability and Globality	16.50%
Internal-External Attributional Style	
Range	-21 to 18
Mean (S.D.)	-3.44 (7.10)
"Generality" Attributional Style	
Range	-51 to 44
Mean (S.D.)	-9.56 (12.81)
Attributional Style	
Range	-63 to 48
Mean (S.D.)	-13.00 (17.10)
Affect Measures	
Self-Esteem	
Range	17 to 40
Mean (S.D.)	30.68 (4.10)
Beck Depression Inventory	
Range	0 to 31
Mean (S.D.)	7.06 (6.03)
Unemployment Frustration	
Range	3 to 21
Mean (S.D.)	10.51 (3.53)

Table 3.3

Polychoric and Polyserial Correlation Matrix for Causal
Analysis in Cross-Sectional Study of the Unemployed

Variables	1	2	3	4	5	6	7	8	9
1. Job Importance	1.0000								
2. Job Expectancy	.2494	1.0000							
3. Internal-External Unemployment Attributions	-.1639	.1643	1.0000						
4. "Generality" Unemployment Attributions	-.0929	-.1732	-.0007	1.0000					
5. Unemployment Attributions	-.1486	-.0619	.7505	.8078	1.0000				
6. Internal-External Attributional Style	-.1501	-.2241	.0734	.0033	.0394	1.0000			
7. "Generality" Attributional Style	-.1708	-.4469	-.0702	.1184	.0657	.4302	1.0000		
8. Attributional Style	-.1902	-.4277	-.0235	.0903	.0657	.7369	.9272	1.0000	
9. Self-Esteem	-.0984	.3844	.0042	-.0193	-.0145	-.1575	-.1973	-.2130	1.0000
10. Beck Depression Inventory	-.0612	-.4512	-.1673	.1643	.0544	.1968	.3091	.3131	-.4529
11. General Depression	.0218	-.4900	-.1028	.1078	.0404	.2075	.2965	.3081	-.8523
12. Unemployment Frustration	.3542	-.2523	-.3582	.0303	-.1424	-.0738	.1624	.0910	-.3018
13. Age	-.0776	-.0795	-.0873	.0382	-.0061	.0310	.0120	.0219	.1669
14. Sex	-.1214	-.0474	-.3690	-.0679	-.2273	.0800	.1547	.1491	.1436
15. Qualifications	-.0162	.1935	.0221	-.0962	-.0664	.0561	-.1254	-.0706	.2383
16. Residence	.3011	.0815	.1513	-.1021	-.1800	.0270	-.0367	-.0163	-.2181
17. Number of Co-residents	-.0005	.0061	.0210	-.1028	-.0761	.0386	.0063	.0208	.0250
18. Father's Occupation	.0833	.0450	-.0282	-.1009	-.0940	-.0947	.0689	.0124	-.0043
19. Length of Registration	-.1903	-.2884	-.0347	.1577	.1112	-.0104	.1555	.1121	.0344
20. Enquiries per Week	.1049	-.0538	-.0449	-.0727	-.0815	-.0244	.0354	.0164	-.1082
21. Breadth of Job Applications	.1248	-.1171	.0699	.0140	.0430	.0242	.0155	.0216	-.1911
22. Number of Unemployed Friends	-.0594	-.1237	-.1737	.0917	-.0092	.0451	.0852	.0827	.0476
23. Time with Unemployed Friends	-.1470	-.1323	-.1822	.0869	-.0195	.0423	.0626	.0645	-.0620
24. Family Members Unemployed	-.1115	-.0893	.0603	-.1367	-.0916	-.0232	.0735	.0450	.0122
25. Previous Job	.0710	.0357	-.0902	.0071	-.0390	.2157	.0283	.1099	-.1043
26. Present Part-time Work	-.0359	.1227	-.1289	-.1830	-.2157	.0424	-.0895	-.0486	-.0404
27. Something Lined-Up	.0001	.2879	-.1884	-.0938	-.1652	.0750	-.0848	-.0314	.1503

Variables	10	11	12	13	14	15	16	17	18
10. Beck Depression	1.0000								
11. General Depression	.8523	1.0000							
12. Unemployment Frustration	.3786	.3992	1.0000						
13. Age	.0115	-.0912	-.0788	1.0000					
14. Sex	-.0735	-.1271	-.0604	.0301	1.0000				
15. Qualifications	-.2083	-.2620	-.1675	.4589	-.1204	1.0000			
16. Residence	-.0747	.0828	.0744	-.5445	.1828	-.1822	1.0000		
17. Number of Co-residents	-.1030	-.0751	-.0065	-.1165	.0145	-.1200	.1720	1.0000	
18. Father's Occupation	-.0154	-.0065	.0753	-.0828	.0333	-.3289	.0476	-.0363	1.0000
19. Length of Registration	.1869	.1012	.0179	.0524	.1233	-.0512	-.1369	-.0766	.0417
20. Enquiries per Week	.1192	.1334	.3220	-.1269	-.0518	-.1755	.0891	-.0877	.1880
21. Breadth of Job Applications	.0233	.1262	.1224	-.0715	-.0195	-.1033	.0469	.0048	-.0061
22. Number of Unemployed Friends	.0823	.0203	.0399	-.0309	.1467	-.0790	-.1246	-.0788	-.0295
23. Time with Unemployed Friends	.0916	.0901	.0437	-.0979	.2874	-.2351	-.1118	.1483	.0414
24. Family Members Unemployed	.0214	.0058	.0524	-.0405	.0337	-.2983	-.2344	-.0191	.1967
25. Previous Job	.1507	.1512	-.0077	.2966	.0808	-.1745	-.2224	.1005	.0840
26. Present Part-time Work	-.0455	-.0010	-.1218	.0308	.2087	.2301	.0007	-.1340	-.1216
27. Something Lined-Up	-.1455	-.1755	-.1625	-.1219	.1082	-.0330	.0511	-.0003	-.1193

Variables	19	20	21	22	23	24	25	26	27
19. Length of Registration	1.0000								
20. Enquiries per Week	.0214	1.0000							
21. Breadth of Job Applications	-.0826	.0675	1.0000						
22. Number of Unemployed Friends	.1960	.0560	.0118	1.0000					
23. Time with Unemployed Friends	.1250	.0913	-.0688	.3259	1.0000				
24. Family Members Unemployed	.1002	.1597	-.0263	.1969	.1912	1.0000			
25. Previous Job	-.1655	.0304	-.0394	-.0396	-.0197	.0781	1.0000		
26. Present Part-time Work	.0560	-.1737	-.0559	-.0011	-.1223	-.2085	.1123	1.0000	
27. Something Lined-Up	-.0958	.1180	-.1451	.0844	.0011	-.0740	.1034	.2869	1.0000

correlation between attributional style and “generality” attributional style is 0.93 and would be high enough for LISREL to reject the matrix. The limitation can be overcome, however, by extracting the relevant correlations for the particular analysis to be reproduced.

The SPSS^x (SPSS, 1988) and LISREL (Jöreskog & Sörbom, 1981) computer programs were used throughout the analysis. SPSS^x was used to check missing data and examine frequency distributions, while the SPSS^x PRINT command was used (SPSS, 1988, p. 169-180) to provide a raw-data output file that was processed by a VAX/VMX Command Procedure (see Appendix E for a copy of the procedure). The VAX/VMX Command Procedure was necessary because the data format and missing-value indicators used by SPSS^x were not suitable for LISREL raw-data input, and had to be modified before the analysis could proceed. An additional benefit of using the Command Procedure was that the variable labels in the SPSS^x command file were automatically transferred to the LISREL input-data file. When the data had been modified, LISREL was then used to calculate polychoric, polychoric correlations for the data covariance matrix *S* and to conduct the causal analysis.

Learned-Helplessness Theory

Learned-helplessness theory was examined as an account of the processes that generate depression in the unemployed. The following section details the causal analysis used to evaluate the theory, and then reviews the success of the theory to account for the depression in the young unemployed.

A Causal Analysis of Interindividual Differences

A causal analysis of interindividual differences was conducted in three stages. The first involved specifying the causal model in a causal diagram; the second involved conducting the causal analysis using iterative procedures to evaluate the causal model and locate discrepancies between model and data; and the third consisted of reviewing the causal structure at the end of the iterative procedure.

Specifying the Causal Model

Translating the learned-helplessness theory into a causal model for empirical evaluation involved two steps. The first was to define operationally the hypothetical constructs specified by the theory. The hypothetical constructs for the variables nominated by learned-helplessness theory were introduced in Chapter I and included uncontrollable negative life-events, attributions, expectancy and affect. The operational definitions were outlined in Chapter II and listed under the headings of *exogenous*, *endogenous cognitive* and *endogenous affect* variables. All exogenous

variables outlined in the descriptive analysis were used in the causal analysis and included biographic and demographic factors, aspects of job search, social comparison with friends and family, past and present employment details. The endogenous cognitive variables included attributional style, unemployment attributions, job expectancy, and job importance; while the endogenous affect variables included measures of self-esteem and depression.

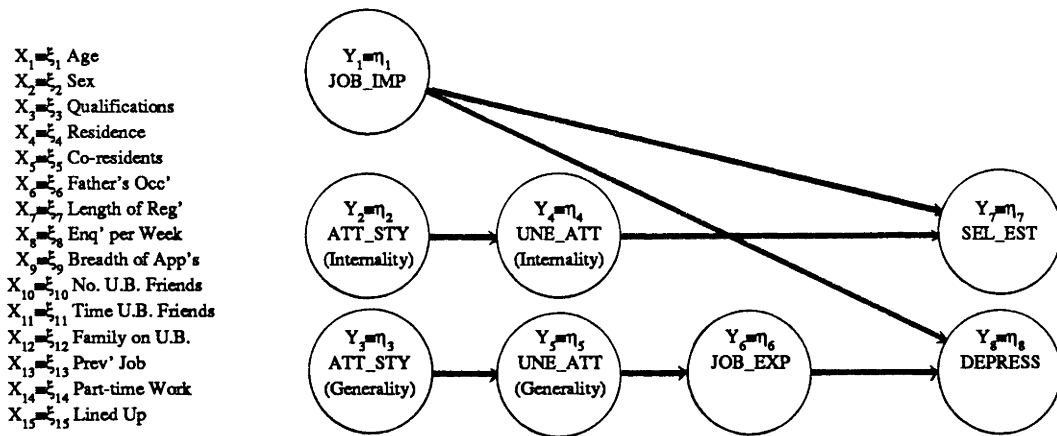


Figure 3.1 Causal Model I specified by Learned-Helplessness Theory in Cross-Sectional Study of the Unemployed. (JOB_IMP, Job Importance; ATT_STY (Internality), Internal-External Attributional Style; ATT_STY (Generality), Stable-Unstable and Global-Specific Attributional Style; UNE_ATT (Internality), Internal-External Unemployment Attributions; UNE_ATT (Generality), Stable-Unstable and Global-Specific Attributional Style; JOB_EXP, Job Expectancy; SEL_EST, Self-Esteem; DEPRESS, Beck Depression.)

The second step when translating the learned-helplessness theory into a causal model involved specifying the causal structure. The causal structure between the hypothetical constructs was originally outlined in Chapter I (refer to Figure 1.1), and has been reproduced in Figure 3.1 using the operational definitions introduced in Chapter II. The causal diagram in Figure 3.1 follows the conventions outlined in Chapter II, except for the omission of circles around the exogenous variables due to lack of space. All exogenous variables in the descriptive analyses were included in the causal analysis and are listed on the left hand side of Figure 3.1.

Statistical Analysis

The statistical analysis was conducted using the iterative procedure to investigate whether the causal model portrayed in Figure 3.1 provided a plausible representation of the data (results are tallied in Table 3.4). The table reports the progressive "freeing" of the γ paths indicated by the modification table calculated by LISREL to produce the maximum reduction in the discrepancy between S and Σ . For example, after conducting the first test of the model (i.e., step 1), the modification table provided by LISREL indicated that adding a causal relationship between

attributional style ($Y_2 \equiv \eta_2$) and residence ($X_4 \equiv \xi_4$) would provide the greatest drop in the discrepancy between S and Σ . The element for $\gamma_{4,2}$ in the Γ matrix was therefore freed, LISREL was rerun to examine the new model, and model-fit statistics were again reviewed. If the model fit statistics indicated that $p > 0.05$ for the χ^2 statistic and that the AFGI index was around 0.90, then the model was accepted and the iterative procedure stopped. If not accepted, the iterative procedure involved selecting the next γ element in the modification table to reduce the discrepancy between S and Σ , the model was re-evaluated and model-fit statistics again reviewed.

Table 3.4

Causal Analysis using Iterative Procedure to Evaluate
Learned-Helplessness Theory in Cross-Sectional
Study of the Unemployed (Causal Model I)

	Free	<i>df.</i>	χ^2	<i>p</i>	GFI	AGFI	RMR
step 1	null	141	565.44	$p < 0.001$	0.826	0.659	0.100
step 2	$\gamma_{4,2}$	140	534.91	$p < 0.001$	0.831	0.667	0.097
step 3	$\gamma_{1,4}$	139	516.01	$p < 0.001$	0.834	0.669	0.094
step 4	$\gamma_{6,15}$	138	500.12	$p < 0.001$	0.836	0.672	0.092
step 5	$\gamma_{6,7}$	137	486.58	$p < 0.001$	0.840	0.677	0.090

The appearance of asymptotic values in the modification index table at step 4 indicated that the analysis was starting to break-down, and at step 5 the analysis collapsed. The analysis breakdown indicated that the causal model was seriously misspecified and needed to be revised before a further analysis could proceed. The print-out obtained in step 1 was examined to see if the residuals and normalized residuals indicated points at which the model was inconsistent with the data. Because the Γ matrix was being freed at the time of the break-down, attention focused on the normalized residuals relevant to the endogenous variables.

Hill (1987, p. 73), Hayduk (1987, p. 170) and Jöreskog & Sörbom (1981, p. I.42) note that normalized residuals higher than 2.00 are indicative of specification error in a causal model. Examination revealed that, as anticipated, the two highest normalized residual scores were associated with relationships between endogenous variables in the causal model. The normalized residual score for internal-external attributional style and "generality" attributional style was 6.07 and the normalized residual score for self-esteem and depression was -6.27. The high normalized residuals indicated that attempts to keep apart the measurements for attributional style and affect had failed. As they were conceptually related and highly correlated (Table 3.2 indicates that

internal-external attributional style and “generality” attributional style correlated at 0.43, and self-esteem and depression correlated at -0.45), the internal-external and “generality” attributional scales were combined in a summary score of attributional style, and the self-esteem and depression measures combined in a general measure of depression.

The decision to combine the subscales of the Attributional Style Questionnaire into a single scale, and to combine the Rosenberg Self-Esteem Scale and Beck Depression Inventory into a general measure of depression, does not imply rejection of the learned-helplessness theory. Peterson and Seligman (1984) in a literature review note that researchers often combine the internal-external, stable-unstable and global-specific subscales of the ASQ. Abramson, Garber and Seligman (1980) also state that depression and self-esteem are likely to fluctuate in unison, and could be summed without endangering the learned-helplessness formulation. The attempt to develop a causal model using general measures for attributional style and depression also required that the unemployment attribution items be summed into a single index, as the individual causal relationships in the initial model could not be maintained.

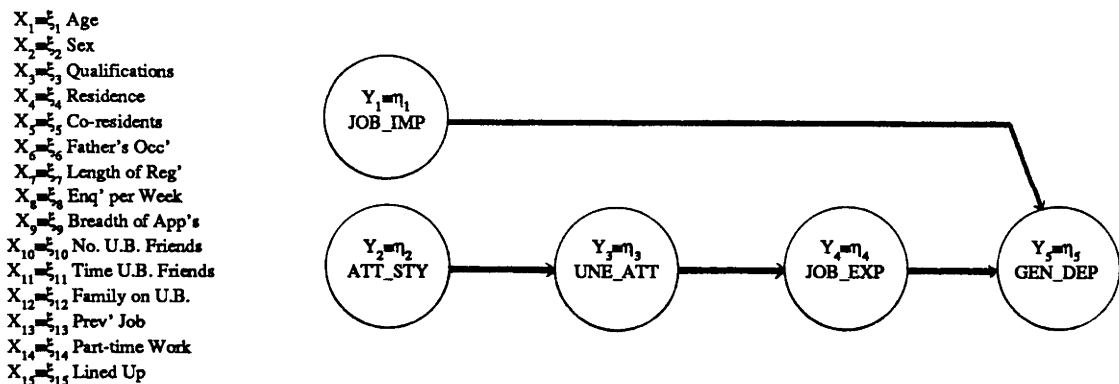


Figure 3.2 Causal Model II specified by Learned-Helplessness Theory in Cross-Sectional Study of the Unemployed. (JOB_IMP, Job Importance; ATT_STY, Attributional Style; UNE_ATT, Unemployment Attributions; JOB_EXP, Job Expectancy; GEN_DEP, General Depression.)

The second causal model used to test the learned-helplessness theory used summary scores for attributional style, unemployment attributions, depression and is presented in Figure 3.2. Table 3.5 shows the iterative procedure applied to the second causal model. At no stage was a break-down indicated and all modification indices in the Γ matrix were freed until below 5.00 (the recommended level designated by Jöreskog & Sörbom, 1981). Nevertheless, the model-fit statistics at step 14 indicated that the model still did not fit the data.

A number of explanations for the absence of fit became evident when examining the LISREL output for Causal Model II. The first was that unemployment attributions were unrelated to attributional style, job expectancy or general depression. The B matrix for the β elements indicated that all specified causal paths were significant, except for the causal paths concerning unemployment attributions ($\beta_{3,2}[200] = .09, p > .05$; $\beta_{4,3}[200] = .05, p > .05$). Moreover, examination of the polychoric and polyserial correlation matrix for the cross-sectional analysis (see Table 3.3), and the normalized residuals calculated by LISREL, indicated that only job importance was significantly related to unemployment attributions. Clearly, the absence of relationships between unemployment attributions and other variables posed a problem for Causal Model II.

Table 3.5

Causal Analysis using Iterative Procedure to Evaluate
Learned-Helplessness Theory in Cross-Sectional
Study of the Unemployed (Causal Model II)

	Free	<i>df.</i>	χ^2	<i>p</i>	GFI	AGFI	RMR
step 1	null	81	280.11	$p < 0.001$	0.893	0.723	0.081
step 2	$\gamma_{1,4}$	80	261.20	$p < 0.001$	0.900	0.737	0.097
step 3	$\gamma_{4,1}$	79	244.50	$p < 0.001$	0.907	0.752	0.074
step 4	$\gamma_{4,15}$	78	229.24	$p < 0.001$	0.910	0.758	0.071
step 5	$\gamma_{3,2}$	77	217.41	$p < 0.001$	0.913	0.763	0.069
step 6	$\gamma_{4,3}$	76	208.73	$p < 0.001$	0.916	0.769	0.066
step 7	$\gamma_{1,2}$	75	201.55	$p < 0.001$	0.920	0.775	0.065
step 8	$\gamma_{5,3}$	74	194.47	$p < 0.001$	0.922	0.778	0.064
step 9	$\gamma_{5,2}$	73	187.61	$p < 0.001$	0.923	0.780	0.064
step 10	$\gamma_{4,6}$	72	180.74	$p < 0.001$	0.926	0.784	0.063
step 11	$\gamma_{5,14}$	71	174.30	$p < 0.001$	0.928	0.788	0.062
step 12	$\gamma_{1,13}$	70	167.98	$p < 0.001$	0.930	0.790	0.061
step 13	$\gamma_{3,14}$	69	162.17	$p < 0.001$	0.920	0.793	0.060
step 14	$\gamma_{4,1}$	68	156.53	$p < 0.001$	0.934	0.796	0.058

The second misspecification in causal model II refers to the relationship between general depression and job importance. Although significant ($\beta_{5,1}[200] = .13, p < .05$), examination of the normalized residuals indicated a strong relationship between job expectancy and job importance not specified in the model. Considering the causal structure of causal model II and the strong influence of job expectancy upon general depression ($\beta_{5,4}[200] = -.51, p < .05$), a more suitable causal relationship was between job expectancy and job importance.

The absence of relationship between unemployment attributions and other variables in the causal model, and the strong association between job expectancy and job importance indicates

alterations to be made that improve the model fit of Causal Model II. The revamped causal model involves removing the causal relationship between general depression and job importance, and introducing a causal relationship between job expectancy and job importance. In short, Causal Model II was rejected, but the two problems indicated by an analysis of Causal Model II were incorporated into a restructuring of the causal model and are outlined in Figure 3.3 (Causal Model III). The model does not include unemployment attributions, and includes a causal relationship between job importance with job expectancy.

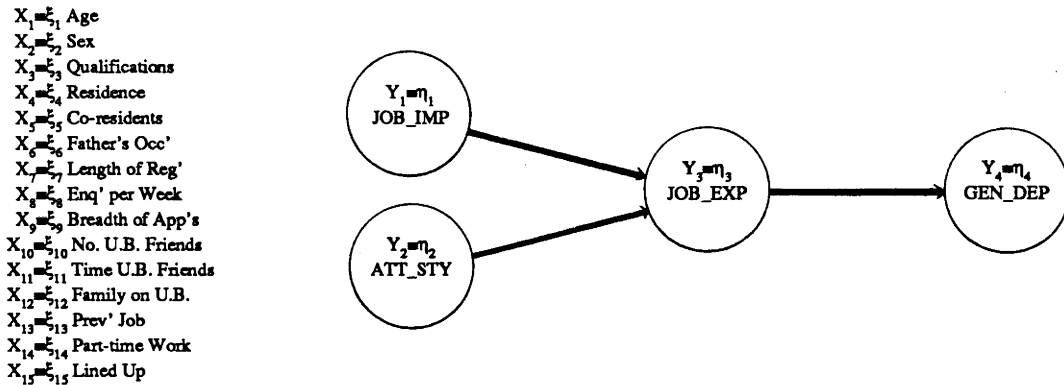


Figure 3.3 Causal Model III specified by Learned-Helplessness Theory in Cross-Sectional Study of the Unemployed. (JOB_IMP, Job Importance; ATT_STY, Attributional Style; JOB_EXP, Job Expectancy; GEN_DEP, General Depression.)

The results of the causal analysis using the iterative procedure for Causal Model III are reported in Table 3.6. The model was close to providing a satisfactory fit with the data, and the analysis proceeded until step 13 when all the γ modification indices were below 5.00. The redundant exogenous variables were then removed to allow an assessment of the model with the appropriate degrees of freedom. The exogenous variables dropped from the analysis included age, enquiries per week, breadth of job applications, number of unemployed friends, time with friends unemployed, number of family members unemployed, and involvement in present part-time work. In short, the number of exogenous variables went from 15 to 8. The result of the new analysis was considered an adequate fit between theory and data ($\chi^2[23] = 31.71, p = 0.12, AGFI = 0.98$).

In summary, the learned-helplessness theory was subjected to a causal analysis with cross-sectional data using LISREL. The initial causal model (Causal Model I) was rejected due to deficiencies in the attributional style and affect measures. The measures were collapsed on theoretical grounds to provide a further analysis of the causal structure specified by the learned-helplessness theory (Model II). The causal structure was also rejected, however, as the

Table 3.6

Causal Analysis using Iterative Procedure to Evaluate
Learned-Helplessness Theory in Cross-Sectional
Study of the Unemployed (Causal Model III)

	Free	<i>d.f.</i>	χ^2	<i>p</i>	GFI	AGFI	RMR
step 1	null	63	185.21	$p < 0.001$	0.920	0.758	0.068
step 2	$\gamma_{3.15}$	62	165.03	$p < 0.001$	0.927	0.775	0.063
step 3	$\gamma_{1.4}$	61	146.12	$p < 0.001$	0.935	0.797	0.058
step 4	$\gamma_{3.7}$	60	135.75	$p < 0.001$	0.939	0.806	0.054
step 5	$\gamma_{3.3}$	59	127.16	$p < 0.001$	0.942	0.813	0.050
step 6	$\gamma_{4.3}$	58	119.41	$p < 0.001$	0.945	0.819	0.048
step 7	$\gamma_{4.2}$	57	111.28	$p < 0.001$	0.948	0.826	0.048
step 8	$\gamma_{1.2}$	56	104.11	$p < 0.001$	0.952	0.836	0.045
step 9	$\gamma_{4.13}$	55	97.55	$p < 0.001$	0.955	0.846	0.045
step 10	$\gamma_{4.4}$	54	88.66	$p = 0.002$	0.959	0.857	0.043
step 11	$\gamma_{1.13}$	53	82.34	$p = 0.006$	0.961	0.862	0.041
step 12	$\gamma_{3.6}$	52	76.05	$p = 0.016$	0.964	0.869	0.039
step 13	$\gamma_{4.5}$	51	69.92	$p = 0.040$	0.967	0.876	0.038

unemployment attributions did not act as a link between attributional style and job expectancy and, moreover, there was evidence against the proposed relationships between job importance and general depression. The final causal model (Model III) contained amendments that included dropping the unemployment attribution measure and positing a causal relationship between job importance and job expectancy.

Final Causal Structure

As the causal model developed during the iterative procedure provided an acceptable fit with the data, the structural coefficients are now eligible for examination (Brenner & Bartell, 1983; Hayduk, 1987; Saris & Stronkhorst, 1984). The final causal model is presented in Figure 3.4 and includes not only the theoretically specified β relationships, but also the atheoretical γ coefficients established during the analysis to examine the contribution provided by the exogenous variables.

The final causal model indicated that job importance, attributional style and job expectancy were determinants of general depression in the unemployed. The causal structure also indicated that job expectancy had a direct influence on general depression, while job importance and attributional style had an indirect influence upon general depression mediated by job expectancy. A more detailed account of the process can be gained by examining the β structural coefficients in Figure 3.4. The direct causal relationship between job expectancy and general depression ($\beta_{4,3}[200] = -.50, p < 0.05$) indicated that high levels of job expectation were associated with low levels of

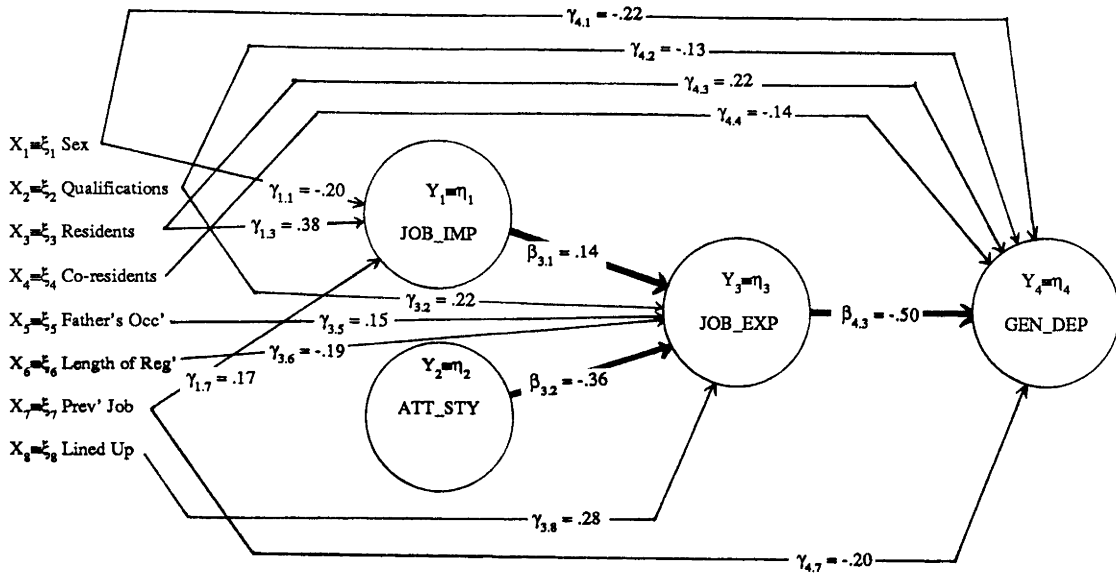


Figure 3.4 Final Causal Model for Learned-Helplessness Theory developed during Cross-Sectional Study of the Unemployed. Model includes γ paths added during iterative procedure. (JOB_IMP, Job Importance; ATT_STY, Attributional Style; JOB_EXP, Job Expectancy; GEN_DEP, General Depression.)

general depression. The causal model also revealed that while job importance and attributional style did not have a direct impact on general depression, job importance and attributional style had a direct impact upon job expectancy. The direct relationship between job importance and job expectancy ($\beta_{3,1}[200] = .14, p < 0.05$) indicated that high levels of importance placed on getting a job was related to high expectations of getting a job. The direct relationship between attributional style and job expectancy ($\beta_{3,2}[200] = -.36, p < 0.05$) indicated that those who attributed failure to internal, stable and global factors and success to external, unstable and specific factors, were less likely to express high expectations of getting a job, than people who tended to attribute failure to external, unstable and specific and success to internal, stable and global factors.

The direct impact of job importance and attributional style on job expectancy also indicated that job importance and attributional style had an indirect impact upon general depression. The structural coefficients in Figure 3.4 revealed that the more important a job, the lower the levels of general depression. Furthermore, those who attributed failure to internal, stable and global factors and success to external, unstable and specific factors, were more likely to exhibit general depression, than those who tended to attribute failure to external, unstable and specific and success to internal, stable and global factors.

The endogenous variables were also embedded in an array of relationships with the exogenous variables (the γ paths in Figure 3.4). In contrast to the relationships between the endogenous variables that were only changed on theoretical grounds, the relationships between the exogenous and endogenous variables were established on a *post-hoc* basis. Although the γ paths were atheoretical in origin, the *post-hoc* interpretations provided an opportunity to examine the processes acting upon the young unemployed in finer detail. A notable observation in Figure 3.4 was the absence of γ relationships between attributional style and any of the exogenous variables. In contrast, however, job importance was associated with the exogenous variables of sex, residence and having a previous job. The finding that females rate jobs more important than males ($\gamma_{1.1}[200] = -.20, p < 0.05$) was unexpected due to the assumption that males would be eager to establish a role in the community and, therefore, place a higher value on getting a job. Respondents living away from home rated a job more important ($\gamma_{1.3}[200] = .38, p < 0.05$) presumably because young people supporting themselves were in greater need of an income to support an independent life-style. The need to maintain an independent life-style may also explain why respondents with a previous job, rated a job as more important than respondents not having had a previous job ($\gamma_{1.7}[200] = .17, p < 0.05$).

The endogenous cognitive variable of job expectancy was related to four exogenous variables. Higher expectations were associated with higher qualifications ($\gamma_{3.2}[200] = .22, p < 0.05$), lower father occupational status ($\gamma_{3.5}[200] = .15, p < 0.05$), shorter length of unemployment ($\gamma_{3.6}[200] = -.19, p < 0.05$) and having something lined up ($\gamma_{3.8}[200] = .28, p < 0.05$). The relationships were not surprising, although the negative relationship between father's occupational status and job expectations was counter-intuitive. A possible explanation was that respondents from higher class backgrounds were more secure, more selective about accepting a job, and had lower expectations of accepting a job in the near future.

The fourth endogenous variable in the causal model was general depression. Briefly stated, higher levels of general depression were associated with being female, having lower qualifications, not living at home, having a lower number of unemployed co-residents, and having a previous job. The direct relationships between the exogenous variables and general depression, indicated that the learned-helplessness theory failed to account for all the processes that generated general depression in the unemployed. The association between high levels of general depression and being female ($\gamma_{4.1}[200] = -.22, p < 0.05$) is often reported, possibly due to different socialization processes (Beck, 1967, 1972; Rosenberg, 1965, 1979). The relationship between lower qualifications and higher levels of depression ($\gamma_{4.3}[200] = -.13, p < 0.05$) may indicate that young unemployed with fewer qualifications are more concerned about being unemployed, although such an explanation could not constitute a full account because job expectancy would presumably act as a mediator.

Two of the relationships between general depression and the exogenous variables be due to a social support process (Mitchell, Billings & Moos, 1982; Ullah, Banks & Warr, 1985). The relationships indicated that the emotional impact of unemployment was lower for young unemployed individual living at home ($\gamma_{4,3}[200] = .22, p < 0.05$), or who had friends experiencing unemployment ($\gamma_{4,4}[200] = -.14, p < 0.05$). An additional finding was that people previously employed ($\gamma_{4,7}[200] = .23, p < 0.05$) were less likely to be depressed, possibly because previous success at getting a job reduced concerns about the present period of unemployment.

In summary, the initial causal model specified by the learned-helplessness theory was rejected. However, the model fit was acceptable after the unemployment attribution measure was dropped, and job importance was directly linked with job expectancy and not general depression. The final causal model indicated that job importance, attributional style and job expectancy were instrumental in generating general depression in the unemployed. Furthermore, that job expectancy had a direct influence on general depression, while job importance and attributional style had an indirect influence upon general depression mediated by job expectancy.

Discussion

The final causal model which arose from the evaluation of the learned-helplessness theory indicated that cognitive variables such as job importance, attributional style and job expectancy were instrumental in generating depression (refer Figure 3.4). The results indicated that the young unemployed who were depressed, tended to place little value on being employed, expressed low expectations of getting a job, and gave internal, stable and global attributions for negative life-events, and external, unstable and specific attributions for positive life-events. The final causal model has a number of implications for the learned-helplessness theory.

Several aspects of the learned-helplessness theory were supported by the final causal model. The predicted causal relationship between job expectancy and general depression was supported by the analysis. For young unemployed people, the lower the expectations of obtaining employment in the future, the higher the levels of general depression. The finding supports the prediction that individuals experiencing unemployment come to perceive a noncontingency between job search behaviour and getting a job, resulting in the increased levels of general depression.

Variation in attributional style was also found to be directly related to job expectancy, indicating that people who attributed failure to external, unstable and specific factors, and success to internal, stable and global factors, were more likely to express higher expectations of getting a job than people who tended to attribute failure to internal, stable and global, factors and success to

external, unstable and specific factors. The results concur with the learned-helplessness proposal that people who believe they are unable to implement the behaviour necessary for success on a particular task (an internal factor), when coupled with the belief that the failure to implement the behaviour will generalise over time (a stable factor) and place (a global factor), will have reduced expectations of success in the future.

The performance of the job importance variable was not, however, in accordance with two predictions provided by the learned-helplessness theory. The first prediction was that increasing levels of job importance would be associated with increasing levels of depression, and the second was that job importance would not have an impact upon the cognitive and motivational processes generating depression. Both predictions failed. The first prediction failed as job importance did not have a direct impact upon the levels of depression in the unemployed (refer to Causal Models I and II). The second prediction failed because job importance was found to have a direct impact upon job expectancy, and, therefore, an effect on the cognitive and motivational processes generating depression in the unemployed.

The unanticipated role of job importance in the final causal model necessitates a reinterpretation of the processes outlined by learned-helplessness theory. The causal relationship between job importance and job expectancy is best explained by considering job importance and job expectancy as hypothetical constructs linked together in a network of coherent beliefs (Festinger, 1957). The proposal is that the importance placed on a job has implications for the expectations of getting a job in the future. For example, the human tendency to maintain a consistent set of beliefs will mean that an individual who places a high value on getting a job will also expect to get a job in the future. If the respondent places a high value on getting a job but believes that there is no chance of getting a job, discomfort will arise due to the dissonance created by placing a high value on a goal that is beyond reach.

Overall, the final causal model to account for the development of depression in the young unemployed is generally consistent with the learned-helplessness theory. However, the causal relationship between job importance and job expectancy suggests a reconceptualisation of the role of job importance in generating depression. The original theory envisaged job importance as a variable that had an impact that was largely independent of the processes generating depression in the unemployed, while the reinterpretation considers job importance an integral part of the cognitive and motivational processes that generate depression.

Aside from the final causal model, modifications to the original model during the analysis also have implications for the theory. A major factor in rejecting two earlier models (Causal Model I and II) was the absence of a relationship between attributional style (internal-external, "generality", and total score measures) and unemployment attributions (internal-external, "generality", and total score measures). Obtaining a lead from the theoretical literature is difficult because treatment of the relationship has been inconsistent. Early accounts of the learned-helplessness theory did not specify a relationship. For instance, Abramson, Garber and Seligman (1980, p. 18) state, "the reformulation is relatively silent with respect to specifying the properties of the attribution *process* itself." Nevertheless, later work by Peterson and Seligman (1984) proposed that situation-specific attributions are "determined by both situational and dispositional factors" (p. 354) and attributional style has been specified as a major contributor (see schematic diagram, p. 350).

The absence of a relationship between attributional style and unemployment attributions may be due to using an unemployment attribution measure that failed to reflect the attributions used by the unemployed when explaining their unemployment. There is little evidence, however, to indicate an invalid measure. First, the procedure used in the present study has been often reviewed and supported in the literature. For instance, Peterson and Seligman (1984, p. 351) state that an attribution is a hypothetical construct that "does not have a single definition nor is it exhausted by any one operation", and review a range of procedures to evaluate situation-specific attributions, including the strategy outlined by Peterson, Luborsky and Seligman (1983) used in the present study. Second, the unemployment attribution measure was successful in the frustrated-motivation causal analysis, where the unemployment attribution measure was significantly related with variables specified by the frustrated-motivation analysis (see Table 3.3 and Figure 3.7).

A firm conclusion about the absence of a relationship between attributional style and situation-specific attributions is difficult to reach. There is no clear evidence that the unemployment attribution measure is invalid, while the learned-helplessness theory is vague about the causal relationships between attributional style and situation-specific attributions. Unfortunately, the present analysis adds little to clarify the nature of the relationship. The most acceptable conclusion is that learned-helplessness theory fails to nominate the variables, or provide a guide to the causal relationship between attributional style and situation-specific attributions applicable to the young unemployed.

The atheoretical γ relationships introduced during the iterative procedure raised an interesting point concerning the absence of relationships between attributional style and the 15 exogenous

variables in the initial causal model. A partial explanation is that attributional style is a personality trait and relatively invariant to events in the physical and social environment (Peterson & Seligman, 1984, p. 370). Nevertheless, some relationship between biographic and demographic factors would be expected. Feather (1983) states for example:

The explanations that people give for events such as poverty and unemployment can be understood not only as products of cognitive processing but as social products as well. They reflect the background of a person's social experience in different settings as channelled through family, school, groups, the media, and other sources of influence. These various socializing agents shape a person's construction of social reality and the nature of their impact varies from person to person depending upon where a person is located in the social structure. (p. 229)

The statement by Feather (1983) is supported by findings in the unemployment literature. For example, Furnham (1982) reports that respondents from working-class backgrounds placed more emphasis on external factors than middle-class respondents. Additionally, Furnham (1985) and Gurney (1981) noted that young unemployed males tended to be more external in their attributions than females. The attributional style questionnaire appears valid, as the Cronbach's (1964) α estimate of interitem reliability is reasonable at 0.70, and the questionnaire has been successfully used in previous research (Peterson & Seligman, 1984; Peterson, Semmel, von Baeyer, Abramson, Metalsky & Seligman, 1982). Nevertheless, the findings in the present study did not corroborate previous research, and indicates that attributional styles for the young unemployed are independent of biographic and demographic factors, job search, social comparison and employment details.

Overall, the causal structure specified by the learned-helplessness theory was successful. Attributional style, job expectancy and general depression were related in a manner consistent with the theory. However, performance of the job importance variable necessitated a reinterpretation of the theory, with job importance considered an integral part of the cognitive and motivational processes generating depression. The unemployment attribution measure failed to be relevant however, and the absence of significant relationships with other variables in the analysis made providing alternative formulations difficult. In conclusion, the learned-helplessness theory after modifications provides a guide to the processes that generate depression in the young unemployed.

Frustrated-Motivation Theory

Frustrated-motivation theory was proposed as an explanation for the process instrumental in generating frustration in the unemployed. The section begins by detailing the causal analysis used to evaluate the theory, followed by a review of the theory as an account for the development of frustration in the unemployed.

A Causal Analysis of Interindividual Differences

As when evaluating the learned-helplessness theory, a causal analysis of interindividual differences was conducted and proceeded in three stages. The first involved specifying the causal model, the second involved testing the causal model using iterative procedures, and the third consisted of examining the final causal structure.

Specifying the Causal Model

The theoretical constructs nominated by frustrated-motivation theory were introduced in Chapter I and operationally defined in Chapter II. All the exogenous variables listed in the descriptive analysis were used in the causal analysis of the frustrated-motivation theory. The endogenous cognitive variables included job importance, job expectancy, internal-external unemployment attributions, and the endogenous affect variable was unemployment frustration. The causal structure between the endogenous variables was also introduced in Chapter I (refer Figure 1.2), and is reproduced in Figure 3.5 using the operationally defined variables.

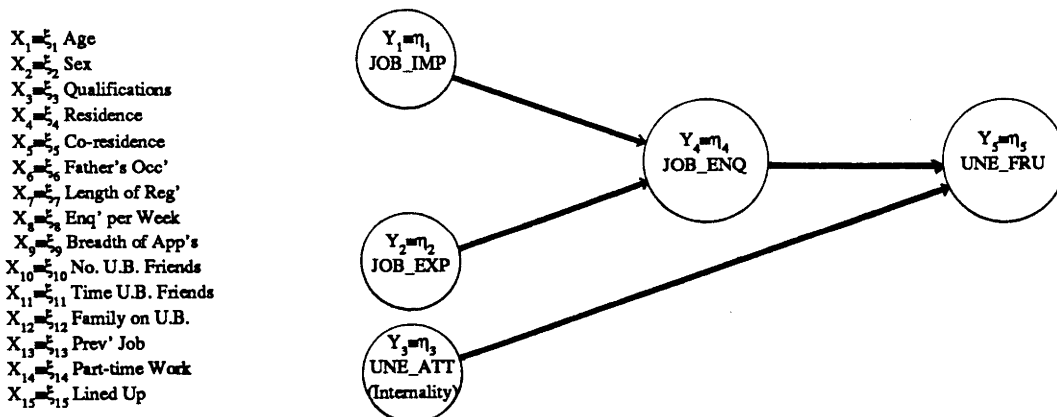


Figure 3.5 Causal Model I specified by Frustrated-Motivation Theory in Cross-Sectional Study of the Unemployed. (JOB_IMP, Job Importance; JOB_EXP, Job Expectancy; UNE_ATT (Internality), Internal-External Unemployment Attributions; JOB_ENQ, Job Enquiries; UNE_FRU, Unemployment Frustration.)

Statistical Analysis

The statistical analysis using an iterative procedure for Figure 3.5 is reported in Table 3.7. At step 18 there were no γ modification indices above 5.0, and a discrepancy between Σ and S was evident by the significant model-fit statistics, indicating that the absence of fit was attributable to the causal structure specified by the frustrated-motivation theory. However, the iterative procedure reported in Table 3.7 with an AGFI of 0.84 indicated that the model was close to providing a fit with the data. To provide a clearer estimate for the model-fit statistics, the inoperative exogenous

variables were deleted from the analysis and new model-fit statistics tabulated. The exogenous variables found to be inoperative included number of co-residents, breadth of job applications, number of unemployed friends, time with unemployed friends and number of family members unemployed. However, the model-fit statistics remained significant ($\chi^2[34] = 96.51, p < 0.001, AGFI = 0.85$).

Table 3.7

Causal Analysis using Iterative Procedure to Evaluate
Frustrated-Motivation Theory in Cross-Sectional
Study of the Unemployed (Causal Model I)

	Free	df.	χ^2	<i>p</i>	GFI	AGFI	RMR
step 1	null	76	321.57	$p < 0.001$	0.882	0.704	0.085
step 2	$\gamma_{3.2}$	75	292.44	$p < 0.001$	0.889	0.719	0.080
step 3	$\gamma_{1.4}$	74	273.53	$p < 0.001$	0.894	0.727	0.076
step 4	$\gamma_{5.14}$	73	253.95	$p < 0.001$	0.903	0.747	0.075
step 5	$\gamma_{2.7}$	72	236.68	$p < 0.001$	0.909	0.760	0.070
step 6	$\gamma_{2.14}$	71	221.26	$p < 0.001$	0.912	0.766	0.066
step 7	$\gamma_{3.4}$	70	209.51	$p < 0.001$	0.915	0.770	0.066
step 8	$\gamma_{2.3}$	69	200.94	$p < 0.001$	0.919	0.778	0.065
step 9	$\gamma_{5.2}$	68	192.46	$p < 0.001$	0.925	0.791	0.065
step 10	$\gamma_{5.4}$	67	183.50	$p < 0.001$	0.929	0.799	0.062
step 11	$\gamma_{1.2}$	66	176.32	$p < 0.001$	0.932	0.803	0.061
step 12	$\gamma_{4.6}$	65	169.49	$p < 0.001$	0.934	0.808	0.058
step 13	$\gamma_{4.14}$	64	162.95	$p < 0.001$	0.937	0.813	0.056
step 14	$\gamma_{4.13}$	63	155.12	$p < 0.001$	0.940	0.820	0.054
step 15	$\gamma_{2.6}$	62	148.71	$p < 0.001$	0.944	0.827	0.053
step 16	$\gamma_{1.12}$	61	142.39	$p < 0.001$	0.946	0.832	0.051
step 17	$\gamma_{3.14}$	60	136.31	$p < 0.001$	0.948	0.836	0.050
step 18	$\gamma_{2.1}$	59	130.73	$p < 0.001$	0.950	0.839	0.048

Examination of the print-out for causal model I indicated that large residuals were present for the cognitive variables of job importance, job expectancy, and the affect variable of unemployment frustration. Roughly speaking, there was a "surplus" of covariation between job importance and unemployment frustration, and between job expectancy and unemployment frustration that was not accounted for by the causal structure. The model appeared to fail because the behavioural measure of job enquiries did not act as a mediating variable for the relationship between motivation (job importance and job expectancy) and the levels of frustration. The failure of a major mediating variable specified by the frustrated-motivation theory indicated little chance to save the theory.

The best attempt to salvage the frustrated-motivation theory in some form, was to make two major amendments. The first involved removing the job enquiry measure as an intervening

variable. Examination of the polychoric and polyserial correlation matrix (Table 3.3) revealed that job enquiries was virtually independent of the other cognitive and affective variables in the model. As the variable was clearly associated with unemployment frustration in some manner, the most acceptable solution was to allow job enquiries to directly influence unemployment frustration independent of the other cognitive variables. In this role, the number of job rejections were considered independent of the cognitive factors that generate motivation, but held to have a direct influence on the levels of unemployment frustration. The second major adjustment involved incorporating internal-external unemployment attributions as a mediating variable between job importance and job expectancy on the one hand, and unemployment frustration on the other. The proposed causal relationship was prompted by the observation in the polychoric and polyserial correlation matrix (Table 3.3), that the internal-external unemployment attributions was related to many of the variables in the causal model. The proposition appeared plausible because the more external the attributions concerning specific events when confronted with failure, the greater would be the frustration at not getting a job. The new causal model is presented in Figure 3.6.

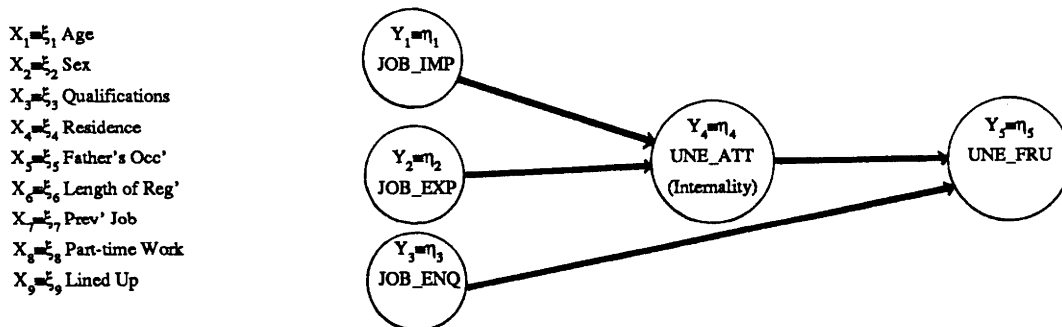


Figure 3.6 Causal Model II specified by Frustrated-Motivation Theory in Cross-Sectional Study of the Unemployed. (JOB_IMP, Job Importance; JOB_EXP, Job Expectancy; JOB_ENQ, Job Enquiries; UNE_ATT (Internality), Internal-External Unemployment Attributions; UNE_FRU, Unemployment Frustration.)

The causal analysis of figure 3.6 is reported in Table 3.8. The analysis began with the 10 exogenous variables active in the previous analysis. At step 16 there were no more Γ modification indices above 5.0. Examination of the results indicated that X_8 (part-time work) was inactive, and the exogenous variables was dropped and the analysis at step 16 repeated. The new model-fit statistics for the more parsimonious model indicated that the model still did not constitute a satisfactory fit with the data ($\chi^2[31] = 62.59, p = 0.001, AGFI = 0.88$). Examination of the residuals indicated that the maximum reduction of discrepancy between S and Σ could be achieved by introducing a causal relationship between job importance and job expectancy as a further endogenous causal relationship. The new model-fit statistics came close to an acceptable fit ($\chi^2[30] = 53.52, p = 0.005, AGFI = 0.89$).

Table 3.8

Causal Analysis using Iterative Procedure to Evaluate
Frustrated-Motivation Theory in Cross-Sectional
Study of the Unemployed (Causal Model II)

	Free	<i>d.f.</i>	χ^2	<i>p</i>	GFI	AGFI	RMR
step 1	null	51	267.12	$p < 0.001$	0.851	0.693	0.100
step 2	$\gamma_{4.2}$	50	240.89	$p < 0.001$	0.865	0.716	0.095
step 3	$\gamma_{4.4}$	49	215.12	$p < 0.001$	0.875	0.732	0.097
step 4	$\gamma_{1.4}$	48	196.22	$p < 0.001$	0.887	0.752	0.090
step 5	$\gamma_{5.9}$	47	176.64	$p < 0.001$	0.899	0.774	0.084
step 6	$\gamma_{2.6}$	46	159.36	$p < 0.001$	0.908	0.790	0.083
step 7	$\gamma_{2.9}$	45	143.94	$p < 0.001$	0.914	0.798	0.079
step 8	$\gamma_{4.9}$	44	128.37	$p < 0.001$	0.922	0.813	0.075
step 9	$\gamma_{5.2}$	43	119.89	$p < 0.001$	0.927	0.822	0.074
step 10	$\gamma_{2.3}$	42	111.32	$p < 0.001$	0.934	0.834	0.072
step 11	$\gamma_{5.4}$	41	102.35	$p < 0.001$	0.938	0.841	0.066
step 12	$\gamma_{1.2}$	40	95.18	$p < 0.001$	0.942	0.848	0.061
step 13	$\gamma_{3.5}$	39	88.01	$p < 0.001$	0.946	0.855	0.055
step 14	$\gamma_{2.5}$	38	81.61	$p < 0.001$	0.951	0.865	0.054
step 15	$\gamma_{1.7}$	37	75.28	$p < 0.001$	0.955	0.873	0.050
step 16	$\gamma_{2.1}$	36	69.70	$p = 0.001$	0.958	0.876	0.049

In conclusion, the frustrated-motivation theory was examined to account for the levels of unemployment frustration in the unemployed. The first causal model specified by the theory failed because the behavioural variable of job rejections did not act as an intervening variable. The second causal model cited internal-external unemployment attributions as an intervening variable and provided a more satisfactory fit.

Final Causal Structure

The causal structure of the final causal model and the statistically significant β s and γ s are presented in Figure 3.7. The structural relationships between the endogenous variables (the β relationships) are initially discussed, followed by discussion of the relationship between the exogenous and endogenous variables (the γ relationships). The final causal model indicated that the cognitive endogenous variables of job importance, job expectancy, internal-external unemployment attributions and job enquiries were instrumental in generating frustration in the unemployed. The causal structure indicated that internal-external unemployment attributions and job enquiries had a direct influence on unemployment frustration, while job importance and job expectancy had an indirect influence on unemployment frustration mediated by internal-external unemployment attributions. Job importance was also found to have a direct impact on job expectancy.

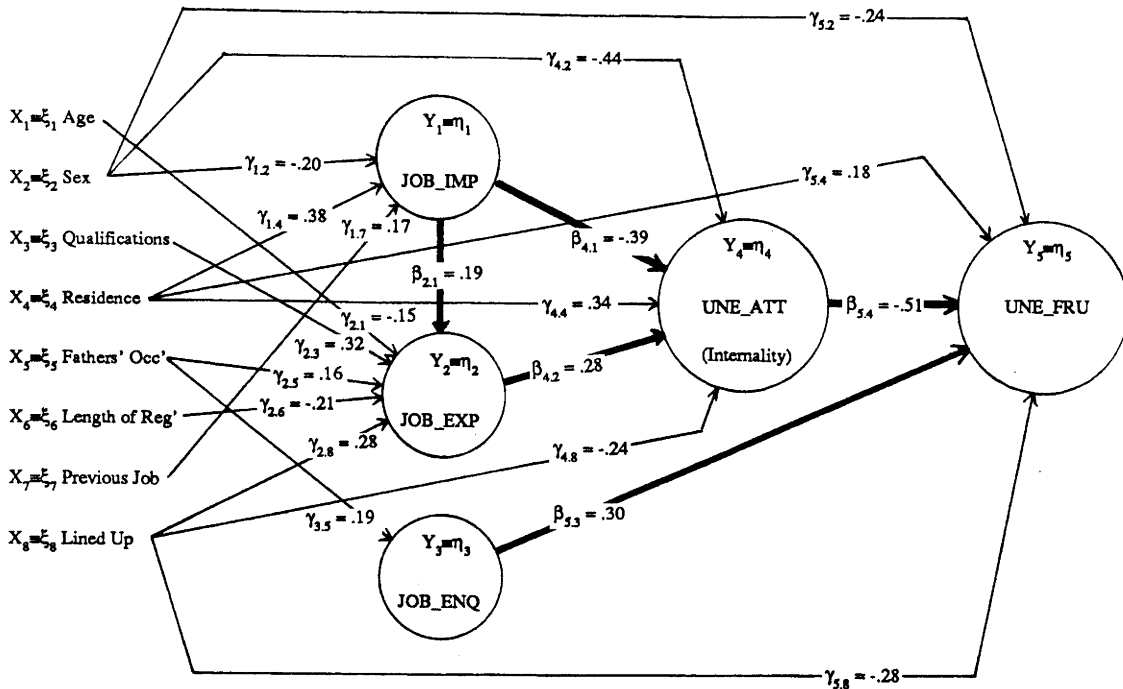


Figure 3.7 Final causal model for Frustrated-Motivation Theory developed during Cross-Sectional Study of the Unemployed. Model includes γ paths added during iterative procedure. (JOB_IMP, Job Importance; JOB_EXP, Job Expectancy; JOB_ENQ, Job Enquiries; UNE_ATT (Internality), Internal-External Unemployment Attributions; UNE_FRU, Unemployment Frustration.)

Additional aspects of the process portrayed in Figure 3.4 can be gained by examining the β structural coefficients. The two *post-hoc* causal relationships concerning internal-external unemployment attributions and rates of job enquiry introduced in the reformulated causal model were successful. The greater the external attribution for the cause of unemployment, the higher the levels of unemployment frustration ($\beta_{5,4}[200] = -.51, p < 0.05$). Furthermore, increasing number of unsuccessful job enquiries acted as an independent predictor of rising levels of unemployment frustration ($\beta_{5,3}[200] = .30, p < 0.05$). The findings appear to indicate that a separate cognitive and behavioural process generates frustration in the unemployed. The cognitive processes was clearly the most dominant and generated about 26% of the variance in the frustration scores. Meanwhile, a behavioural process was independent of the cognitive process and generated about 9% of the variance in frustration scores.

Another influential endogenous cognitive variable was job importance ($\beta_{4,1}[200] = -.39, p < 0.05$), indicating that higher ratings of job importance produced more external unemployment

attributions. The strong relationship was consistent with the view that people who value a job highly and are unemployed, cite external factors to explain their unemployment. However, an unanticipated finding was that job importance had an opposing influence mediated by job expectancy. The impact of job importance on job expectancy ($\beta_{2,1}[200] = .19, p < 0.05$) and the impact of job expectancy on internal-external unemployment attributions ($\beta_{4,2}[200] = .28, p < 0.05$), indicated that increasing levels of job importance had the indirect effect of increasing the external explanations for not having a job. In essence, increasing job importance had the direct impact of increasing external unemployment attributions, but the indirect impact via job expectancy of decreasing external unemployment attributions. Although the opposing influence of job importance was of interest, the relatively small indirect impact of job importance upon internal-external unemployment attributions could not be overlooked. According to the multiplicative rule of path analysis (Bohrstedt & Knoke, 1982), the direct impact of job importance accounted for roughly 15% of the variance in the internal-external unemployment attribution variable, while the indirect effect via job expectancy was negligible (0.003%).

Another finding was that estimates of job expectancy did not perform in a manner consistent with frustrated-motivation theory. According to theory, higher levels of expectation in obtaining an out-of-reach goal generate greater frustration. However, the relationship between job expectancy and unemployment frustration was the opposite, with higher levels of job expectancy associated with decreasing external unemployment attributions ($\beta_{4,2}[200] = .28, p < 0.05$), resulting in lower levels of unemployment frustration ($\beta_{5,4}[200] = -.51, p < 0.05$).

The second aspect of Figure 3.7 which needed to be considered was the relationship between exogenous and endogenous variables. A number of the relationships concerning the endogenous variables of job importance and job expectancy were examined when discussing the learned-helplessness theory and only briefly reviewed in the present analysis. The results indicated that many of the exogenous variables such as age, qualifications, father's occupation and length of registration had an impact on the cognitive variables early in the temporal sequence. The cascading causal sequence provided support for the causal process because if the cognitive variables were redundant, the exogenous variables would have a direct impact upon the levels of unemployment frustration.

Job importance as the first endogenous variable attracted a number of relationships with exogenous variables, indicating that higher levels of job importance were related to being female ($\gamma_{1,2}[200] = -.20, p < 0.05$), residence ($\gamma_{1,4}[200] = .38, p < 0.05$) and having had a previous job ($\gamma_{1,7}[200] = .17, p < 0.05$). The factors that generated job importance were generally stable and

indicated the predominance of family background factors. The only exception was previous job experience and was attributable to the observation that many people previously employed have grown used to an employment life style and place a high priority on getting a job. The endogenous cognitive variable of job expectancy was also associated with a broad range of exogenous variables. Higher levels of job expectancy were related to lower age ($\gamma_{2.1}[200] = -.15, p < 0.05$), higher qualifications ($\gamma_{2.3}[200] = .32, p < 0.05$), lower father's occupation ($\gamma_{2.5}[200] = .16, p < 0.05$), shorter lengths of unemployment registration ($\gamma_{2.6}[200] = -.21, p < 0.05$) and having something lined up ($\gamma_{2.8}[200] = .28, p < 0.05$).

The behavioural variable of job enquiries was largely independent of the exogenous variables in the present study. The only exogenous variable associated with job enquiries was father's occupational status ($\gamma_{3.5}[200] = .19, p < 0.05$), indicating that respondents who made more job enquiries tended to have fathers of lower occupational status. An explanation for the relationship between job-enquiry rates and father's occupational status could be formulated by amalgamating two observations. First, previous research indicates that children have a similar occupational status to their father (Duncan, 1966). Second, respondents from the lower occupational status groups in the present study often commented that getting a blue-collar job often required "being on the spot at the right time." Builders' labourers, for example, often visited building sites during the morning to enquire if employment was available. The two findings provide a possible explanation for the relationship between job-enquiry rates and father's occupational status, as respondents with a father of lower occupational status may be more likely to search for lower occupational status jobs that involve repeated on-site applications.

The endogenous cognitive measure of internal-external unemployment attributions was related to a number of exogenous variables. The analysis corroborates the finding by Furnham (1985) that males were more inclined to cite external factors to account for their unemployment ($\gamma_{4.2}[200] = -.44, p < 0.05$) than females. The degree of externality for unemployment attributions was also found to be related to living away from home ($\gamma_{4.4}[200] = .34, p < 0.05$) and most likely reflects a situation where young people living away from home are more accustomed to accepting responsibility for their lives. Finally, people were more likely to cite external factors for their unemployment if they were beginning a job or educational appointment in the near future ($\gamma_{4.8}[200] = -.24, p < 0.05$), perhaps because the individuals about to cease unemployment were more likely to attribute the change in circumstances to an external factor.

Three exogenous variables were directly related to unemployment frustration, indicating that the proposed causal structure failed to fully account for the causal processes generating

unemployment frustration in the young unemployed. Sex of the respondent had a direct effect on unemployment frustration and indicated that females experienced higher levels of unemployment frustration than males ($\gamma_{5,2}[200] = -.24, p < 0.05$). The direct effect was opposite in direction to the indirect effect of sex upon frustration mediated by unemployment attributions (Figure 3.7). The direct impact indicated that females experienced more unemployment frustration (roughly 6% of unemployment frustration variance), while the indirect effect mediated by unemployment attributions indicated that males experienced more unemployment frustration (about 5% of the variance in unemployment frustration). The contrast indicated that the mediational processes proposed by frustrated-motivation theory may account for increased male frustration to unemployment, but the direct impact that females are higher than males was not explained by the model because the influence was not mediated by any of the cognitive variables.

The remaining two exogenous variables directly related to unemployment frustration indicated that higher levels of frustration were associated with living away from home ($\gamma_{5,4}[200] = .18, p < 0.05$) and not having a job or educational appointment lined-up ($\gamma_{5,8}[200] = -.28, p < 0.05$). Living away from home would most likely produce greater unemployment frustration in the unemployed due to the burden and responsibility of self-support without the stability provided by employment. Similarly, the absence of job or educational pursuits in the near future might increase the levels of unemployment frustration in the unemployed. Overall, the exogenous variables made a notable contribution to the causal process under investigation. The primary exception was the behavioural measure of job enquiries, for which the relevant causal mechanisms were not been isolated in the present study.

In summary, the first causal model developed from the frustrated-motivation theory was unworkable for two reasons. First, there was little evidence that job enquiries acted as a mediating variable. Further analysis revealed that although job enquiries were related to unemployment frustration, the impact was largely independent of the cognitive processes cited by the theory. Second, there was little evidence that job enquiries were the outcome of a “motivational force” provided by the combined impact of job importance and job expectancy. More detailed analysis failed to provide evidence consistent with the view that high levels of expectation generate high levels of frustration. Indeed, the opposite appeared to be the case, with higher levels of expectation being a strong determinant of lower levels of frustration. In short, the findings indicate that the people most frustrated about not having a job are those who value a job, do not expect to get a job, and cite external factors as hindering their goal of employment.

Discussion

The final causal model indicated that cognitive factors such as job importance, job expectancy, job enquiries and internal-external unemployment attributions were instrumental in generating unemployment frustration in the present sample of young unemployed (Figure 3.7). The general picture is that individuals who are more frustrated than their colleagues have applied for more jobs, cite external factors for their unemployment, place greater importance on getting a job, but have little expectation of getting a job. The concept of “frustrated-motivation” appears appropriate as many individuals are motivated to get a job as indicated by the high value placed on employment, but also believe that they are blocked by a series of factors that include external factors, high rates of job rejection, and low expectations of getting a job. However, the causal structure of the final causal model was drastically different to the initial structure provided by the frustrated-motivation theory. The following discussion reviews the final causal model and the alterations that were necessary to the original formulation.

Job importance was found to have a major but complex influence on unemployment frustration. The job importance variable had a direct and powerful impact upon employment attributions, with young unemployed people who valued employment tending to cite external factors for their unemployment. The relationship between the high value placed on a job and more external unemployment attributions is consistent with the motivational formulation proposed by Feather and Davenport (1981). They suggest that an individual who places high value on obtaining employment is highly motivated to obtain employment and, therefore, less likely to view the negative situation of unemployment as due to lack of motivation (an internal factor). Consequently, more external factors such as social, political and economic forces are cited to explain their unemployment status.

However, a number of aspects concerning the job importance variable in the first causal model were not consistent with the original theory. For example, an unanticipated finding during the analysis was that increasing levels of job importance had a direct impact on raising the expectations of gaining employment. In other words, a young unemployed person who rates a job as extremely important will also have high expectations of getting a job. The relationship can be understood using the explanation introduced in the learned-helplessness discussion for the same relationship; namely, that job expectancy may increase with job importance due to the human tendency to maintain consistent beliefs (Festinger, 1957). For instance, a respondent who values a job would most likely envisage him or herself as having a job in the future, because to believe otherwise is to introduce a discrepancy between beliefs.

The direct relationship between job importance and job expectancy indicates that the relationship between job importance and unemployment attributions is more complicated than originally conceived. The relationship is complex because job importance has two routes of influence upon unemployment attribution. On the one hand, job importance has a direct influence upon unemployment attributions; on the other, job importance has an indirect influence on unemployment attributions mediated by job expectancy. The complicated relationship between job importance and unemployment attributions is further compounded by the finding that the two paths have an opposing influence. Job importance had a direct impact that increased external unemployment attributions, while the indirect impact via job expectancy decreased external unemployment attributions. Although the opposing impact of direct and indirect causal paths is not unusual in causal modelling (see Bohrnstedt & Knoke, 1982, pp. 414-415; Cook & Campbell, 1979, pp. 306-308), there is little evidence that the indirect path between job importance and job expectancy is useful in explaining the development of frustration in the unemployed. The direct impact of job importance was found to be far greater than the indirect effect via job expectancy. Consequently, examination of the indirect path to explain the development of frustration in the unemployed is not further discussed. Overall, job importance is a major determinant of depression by directly influencing the attributions made by young people to explain their unemployment.

The job expectancy measure also failed to perform in a manner consistent with the frustrated-motivation theory. Other research has reported identical results. For example, Feather and Davenport (1981) used "initial confidence", "present chances" and "present confidence" as indices of expectation, but found that only initial confidence was positively related with reports of increasing frustration, while later work by Feather and Barber (1983) failed to find any relationship between "present confidence", "initial confidence" and frustration. Particularly unexpected, however, was the finding that the relationship between job expectancy and unemployment frustration was in the opposite direction to that predicted. The theory states that high levels of expectation precipitate high levels of frustration, but the present study revealed that high levels of job expectancy resulted in low levels of unemployment frustration.

A *post-hoc* explanation for the operation of the job expectancy variable in generating unemployment frustration can be derived from the final causal model. The model indicates that the influence of expectancy upon frustration was mediated by internal-external unemployment attributions, indicating a two-stage causal process between job expectancy and unemployment frustration. The first link between job expectancy and internal-external unemployment attributions indicates that increasing expectations about getting a job tend to produce more external attributions for unemployment. Feather and O'Brien (1987) note the close relationship between expectancy and

attributions in the unemployed, and provided a potential explanation that builds upon the implications that follow from formulating high job expectancy: first, a belief in high expectations necessitates a belief in environmental contingency (i.e., a relationship between behaviour and outcome); second, a belief in high expectations necessitates that the relevant behaviour can be performed. For the unemployed, the result is that individuals with high expectations in getting a job will be predisposed to formulate internal explanations by "assuming responsibility" for their unemployment.

The second causal link that more external attributions for unemployment are associated with higher levels of frustration is consistent with the original theory and previous research (Feather & Barber, 1983; Feather & Davenport, 1981). The results generally add weight to earlier findings that expectancy does not constitute part of a motivational process that generates unemployment frustration. Overall, the final causal model supports the concept of "frustrated-motivation" to explain the development of frustration in the young unemployed. The individuals most frustrated with unemployment were those who highly value getting a job, but were blocked by external factors, high rates of job rejection, and low expectations of getting a job.

However, the causal structure of the final causal model was dramatically different from the structure provided by the first interpretation of the frustrated-motivation theory. Perhaps the most notable departure from the original formulation concerns the operation of the job-enquiry variable. The initial theory postulated that individuals highly motivated to obtain a job and blocked by repeated job rejections, experience negative situation-specific reactions to unemployment ("unemployment frustration"). The first causal model based on frustration motivation theory was rejected as the behavioural measure of job enquiries did not mediate the relationship between job importance, job expectancy, and the affect measure of unemployment frustration. A potential explanation for the absence of a relationship is the use of an invalid measure of job-application rates. However, Feather and O'Brien (1987) used a different measure of job enquiry rates and also recorded the absence of relationship between job expectancy and job enquiry rates.

The original causal model that specified job-search behaviour as a mediating variable was rejected, and two *post-hoc* amendments introduced. The first alteration was that job application rate was maintained as a predictor for unemployment frustration, but with an impact independent of the other cognitive variables. The model-fit statistics supported the proposal that separate cognitive and behavioural processes generate frustration in the unemployed. The cognitive process is dominant and generate about 26% of the variance in frustration scores in the unemployed. Meanwhile, a behavioural process quite independent of the cognitive process generates about 9% of the variance

in frustration scores. The second alteration builds upon the observation that internal-external unemployment attributions could act as an intervening variable between job importance, job expectancy and unemployment frustration. The mediating role of unemployment attributions maintains job importance as the “motivational component” of the frustrated motivation theory. An additional benefit is the clear linkage between internal-external unemployment attributions and frustration, with the understandable scenario that people citing external factors for failure to get a job are more likely to experience frustration at being unemployed. The theoretical reformulation departs from the original theory by proposing that unemployment frustration is more cognitive than behavioural in origin.

The atheoretical relationships introduced during the iterative procedure raised an issue concerning the absence of relationships between the exogenous variables and the number of job enquiries. The results are in contrast to a report by Feather and O’Brien (1987) using a similar sample of unemployed youth. Feather and O’Brien (1987) found that job importance, unemployment affect (a general measure of affective reactions to unemployment such as helplessness, guilt, anger and depression), and length of unemployment were related to job-seeking behaviour. There was no evidence in the present study, however, that job importance or length of unemployment was related to job-seeking behaviour.

The contrasting results for job-seeking behaviour in the two studies may be due to their different definitions of unemployment. In the present study, individuals registered for government unemployment benefits were classified as unemployed and must continually provide job-application evidence to continue receiving benefits. The registration conditions may have resulted in over-inflated job-application rates because beneficiaries to remain eligible for unemployment benefits must continue to apply for job whatever the likely outcome. Indeed, post-interview discussions revealed that some unemployed people believed they had to apply for at least two jobs per week to be eligible for benefits. In contrast, Feather and O’Brien (1987) asked school-leavers to designate their own employment status, a sample in which job-seeking rates would resemble processes uncontaminated by the government registration criteria. Although the definitions of unemployment may account for contrasting results, a more important concern is that research using people registered for unemployment benefits may limit the opportunity to test predictions that job-search behaviour acts as a mediating variable.

In conclusion, the initial “behavioural-mediation” version of the frustrated-motivation theory failed on two accounts. First, job search did not mediate the processes outlined by theory. Second, there was no evidence that increasing job expectations were related to increasing unemployment

frustration. Contrary to prediction, results indicated that high levels of job expectation was related to low levels of frustration. Nevertheless, *post-hoc* data analysis revealed that a “frustrated motivation” approach still describes a process generating frustration in the unemployed. The new formulation is more cognitive in orientation and proposes that unemployment frustration is, in essence, the result of incompatible beliefs. The proposal is that respondents who place a high value on employment and are, therefore, highly motivated, are increasingly frustrated the more they view external factors as thwarting their attempts, the lower their expectations of actually getting a job, and the more attempts they make to get a job.

A Unified Theory

The cross-sectional study was designed to investigate two theoretical accounts for the development of unemployment frustration and general depression in the unemployed. A further desirable goal, however, would be to integrate the two theories into a comprehensive and unified explanation for the development of depression and frustration in the unemployed (Popper, 1969; 1977). Two aspects of the theories augur well for integration. First, both are social-cognition theories that specify social cognitions as important determinants of human emotion (Argyle, 1988; Bandura, 1986). Second, the learned-helplessness and frustrated-motivation theories share variables (i.e., job importance, job expectancy) that could provide the foundation for an amalgamation.

Post-hoc considerations and a review of the literature reveals two avenues that may be profitable. One approach is to focus on a “trigger” variable that is common to both processes and can initiate the different psychological processes. The role of such a trigger variable would be to initiate one process when values are high, but trigger another process when values are low. In the present case for instance, attributions play a central role in the processes that generate depression and frustration in the unemployed. Indeed, examination of the learned-helplessness theory reveals that attributional style and situation-specific attributions are closely related, with situation-specific attributions presumed to be an outcome of the respondent’s attributional style (Peterson & Seligman, 1984). Further evidence for using attributions to unify the two processes, is that the internal-external attributional dimension appears critical in both causal models. In the learned-helplessness model the more internal the attributions the higher the depression, while for the frustrated-motivation model, the more external the attributions the higher the frustration. Hence, attributions along the internal-external dimension appear to be a major determinant of emotions in both models. However, closer examination reveals that such an approach would not work with the data and measures in the present study. The primary impediment is the absence of relationship

between the measures of unemployment attributions and attributional style because of the absence of covariation (see Table 3.3).

A second avenue is to consider prolonged unemployment as a variable that links the two processes together (Feather & Davenport, 1981; Feather & Barber, 1983). “A movement from transient, situation-specific affective states to more general depression may occur in some people following prolonged and/or repeated periods of unemployment” (Feather & Barber, 1983, p. 186). However, the two causal models provide little evidence that length of unemployment, number of job rejections, frequency of job rejections, or any other variable that measures aspects of exposure to unemployment, are instrumental in generating depression or frustration in the unemployed (compare Figure 3.4 and 3.7). Indeed, most variables relevant to the two processes are general background variables such as age, sex, qualifications and socio-economic status and not directly related to the experience of unemployment. In summary, *post-hoc* examination of the learned-helplessness and frustrated-motivation causal models at the present stage do not reveal a mechanism or common theme that permits the two theories to be unified.

Conclusion

In conclusion, two social-cognition theories were investigated to account for the depression and frustration in the unemployed. The findings support the proposition that a distinction needs to be drawn between general and situation-specific reactions to unemployment. The learned-helplessness theory in a modified form provided a plausible account of the causes of general depression in the young unemployed. The “behavioural-mediation” frustrated-motivation theory, in contrast, failed to provide a viable account for the causes of unemployment frustration. However, when modified, a “cognitive-frustrated-motivation” theory was successful in accounting for the levels of frustration associated with being unemployed.

Chapter IV (Introduction to Longitudinal Study)

Employment Status and Emotional Health

The cross-sectional study revealed that the social-cognition perspective in the form of learned-helplessness and frustrated-motivation theory, after modifications, provided a plausible account of the social processes generating depression and frustration in the unemployed. However, the cross-sectional study was limited to providing information at one point in time and could not adequately explore the dynamic processes involved in generating emotional health. To develop the findings in the cross-sectional study, the people initially interviewed were recontacted a year later to provide the longitudinal data necessary to investigate the changes in emotional health associated with prolonged periods of unemployment and the transition from unemployment to employment. The chapter opens by briefly reviewing the contribution made by a social-cognition perspective towards explaining the deterioration in emotional health during unemployment, and then examines the social-cognition perspective as a means to explain the changes in individual emotional health associated with the transition from unemployment to employment.

Unemployment and Emotional Health

The cross-sectional study indicated that the social-cognition perspective as represented by the learned-helplessness and frustrated-motivation theories, provided an account of the variation in depression and frustration in the unemployed. The follow-up study provided an opportunity to use longitudinal data to evaluate the dynamic processes that generate depression and frustration in the unemployed.

Learned-Helplessness Theory

The learned-helplessness theory developed in the cross-sectional analysis indicated that individuals who tended to attribute negative life events to internal, stable and global factors, and positive life events to external, unstable and specific factors, were more prone to formulate lower expectations for job-hunting success and higher levels of general depression. The results were not entirely consistent with the learned-helplessness theory, however, as the original theory postulated that job importance had a direct impact on depression, and that high levels of job importance would be associated with high levels of depression. However, the analysis revealed that job importance had an influence on depression that was mediated by job expectations, and that high levels of job importance were associated with low levels of depression.

The causal relationship between job importance and job expectations was explained by considering job importance and job expectations as hypothetical constructs linked together in a network of coherent beliefs (Festinger, 1957). The proposal was that the importance placed on getting a job would have implications for the expectations developed by individuals concerning future job hunting success. For example, the human tendency to maintain a consistent set of beliefs would mean that an individual who places a high value on getting a job will also expect to get a job in the future. Although the modified learned-helplessness theory was consistent with the data collected in the cross-sectional study, the theory was nevertheless constructed on a *post-hoc* basis, and may reflect relationships that are due to sampling fluctuations in the data (Saris & Stronkhorst, 1984). Moreover, the longitudinal data also provided the opportunity to evaluate the ability of the causal model to account for the dynamics of change that would be recorded in a longitudinal study.

Frustrated-Motivation Theory

A cognitive reformulation of the frustrated-motivation theory was found in the cross-sectional study to account for the variation of frustration in the unemployed. The theory proposed that the frustration experienced by the unemployed was largely due to blocked motivation. As formulated and supported in the cross-sectional study, high levels of motivation were expressed by the high value placed on getting a job. However, when high levels of motivation were thwarted by external factors outside the person's control, coupled with low expectations of getting a job in the future, respondents reported greater levels of frustration at not having a job. Although not directly predicted by the original theory, high rates of job rejection was also found to have an independent contribution to the high levels of frustration. The longitudinal data collected in the follow-up study provided the chance to evaluate the ability of the causal model to account for the processes that generate frustration over time.

The Transition from Unemployment to Employment and Changes in Emotional Health

The follow-up research design also enabled a large number of individuals to be interviewed after the transition from unemployment to employment. The literature review in Chapter I revealed that social researchers have consistently reported that the unemployed are lower in emotional health than the employed (Warr, 1983), and that individuals gaining employment after a period of unemployment would therefore be expected to gain in emotional health. The following section briefly reviews the studies that report changes in emotional health during the transition from unemployment to employment. The discussion then examines the social-cognition perspective as a means to explain the variation in emotional health that occurs during the change in employment status.

Social Research

Few studies have investigated the change in emotional health that accompanies the transition from unemployment to employment (Hartley & Fryer, 1984). The small number of studies are due to the time and financial expense involved in tracking down unemployed individuals at a later date when they have gained employment. Moreover, researchers often guarantee anonymity to respondents as a means to improve response rates and are unable to contact the respondents at a later date (i.e., Aylward, 1981; Edwards, 1979). Despite the difficulties of recontacting the unemployed, some studies have followed individuals during the change in employment status from unemployment to employment. Marsden and Duff (1975) in a descriptive study, for example, reported a range of positive responses when people had obtained a job. Some became excited and in one case the person shouted "I've got myself a job, mate!" (p. 212), while other individuals tended to be more reserved. Marsden and Duff (1975) also reported that some individuals experienced stress when gaining employment, although the predominant reaction was still an improvement in emotional health.

The number of studies using well-established psychological instruments that follow the transition from unemployment to employment are exceedingly small (Hartley & Fryer, 1984). In one study, however, Warr and Jackson (1985) were permitted by government authorities to select randomly 954 unemployed men from the registration lists at 41 Unemployment Benefit Offices in the mainland of the United Kingdom. The respondents were selected according to a preset criteria, and the sample contained individuals who had held their previous job for at least three months, had engaged in unskilled or semi-skilled manual work, and whose age and length of current unemployment were uncorrelated. Nine months later, 711 of the original sample (75% follow-up rate) were recontacted for follow-up interviews. Statistical analysis revealed a significant increase in psychological and physical health for people who had transferred from unemployment to employment between interviews.

Another study that examined the transition from unemployment to employment and associated changes in emotional health was reported by Banks and Jackson (1982) and Jackson, Stafford, Banks and Warr (1983). The study involved following the progress of two 16 year-old cohorts for three years after leaving school in England. A number of interviews were conducted after the students left school, providing the opportunity to evaluate changes in emotional health related with the transition from employment to unemployment as well as the transition from unemployment to employment. Changes in employment status were found to correspond with psychological health, with the "unemployment to employment" respondents reporting an improvement in emotional

health, and the "employment to unemployment" respondents reporting a deterioration in emotional health.

Not all studies have, however, found a relationship between employment status and emotional health. An extensive study conducted in Australia used a large sample of subjects drawn from the final three years of high school in metropolitan Adelaide (Feather, 1990; Feather & O'Brien, 1986a, 1986b, 1987). The students were 15 to 18 years of age and interviewed on two occasions separated by a year. A number of variables were used to evaluate emotional health and included measures of stress, life satisfaction and unemployment disappointment. Although life satisfaction and unemployment disappointment scores tended to increase for the "unemployment to employment" group and decrease for the "employment to unemployment" group, there was no evidence in the statistical analysis to indicate a significant change in emotional health.

Feather (1990) indicated that the difference in results between the English (i.e., Banks & Jackson, 1982; Jackson, Stafford, Banks & Warr, 1983) and Australian (i.e., Feather & O'Brien, 1986a, 1986b, 1987) studies with young school leavers may have been due to different samples and measures. The English studies tended to sample a population of under-qualified young school leavers while the Australian studies sampled students from the final three years of high school who held a range of academic qualifications. The better qualified Australian school leavers may have been less discouraged about their future prospects of getting a job than their English counterparts. The measures used in the English and Australian studies were also different. The English studies used measures of emotional health such as the General Health Questionnaire that evaluates an individual's current life situation, while the Australian studies typically assessed more enduring aspects of emotional health such as general stress and life satisfaction. The measures used in the English studies may have been more sensitive to the changes in emotional health that accompanied the variations in employment status. The different findings, nevertheless, provide evidence that sample and measures may be important consideration when evaluating the relationship between employment status and emotional health.

In conclusion, few studies have investigated the changes in emotional health that accompanies the transition from unemployment to employment, although the evidence generally indicates that the change from unemployment to employment is associated with improvements in emotional health. Noticeably absent in the literature, however, is any theoretical explanation for the improvements in emotional health when the unemployed obtained a job. The discussion now examines the social-cognition perspective as a means to explain the changes in individual emotional health associated with the change in employment status.

The Social-Cognition Perspective

A general aim of the present study was to evaluate the social-cognition perspective as an account of the commonly observed relationships between employment status and emotional health. The learned-helplessness and frustrated-motivation theories were successful in the cross-sectional study in accounting for the processes that generate depression and frustration in the unemployed. The findings were also consistent with reports that unemployment is detrimental to emotional health and instrumental in precipitating the differences in emotional health between the employed and unemployed groups (i.e., Jahoda, 1979). The following discussion takes the theoretical investigation one step further, by investigating the utility of the social-cognition perspective as an account for the changes in emotional health that occur when a person obtains employment.

The learned-helplessness and frustrated-motivation theories vary in their ability to account for the impact of employment-status change upon emotional health. Frustrated-motivation theory was a poor candidate because the outcome measure was not relevant to the employed person. For example, one of the items in the unemployment frustration scale asked the respondent: "How often do you feel angry with *yourself* for not having a job?" The frustrated-motivation theory was therefore, dropped, as the theory was not appropriate for the changes in emotional health associated with the transition from unemployment to employment. In contrast, the learned-helplessness theory appeared promising, as the measures of self-esteem and depression that make up the measure of "general depression" are relevant whatever the employment status of the person.

The learned-helplessness theory was originally formulated as an explanation for the relationship between negative life events and depression (Abramson, Seligman & Teasdale, 1978; Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984). The approach adopted in the present study was to view unemployment as an aversive life event that individuals wanted to avoid. Upon employment, however, the detrimental processes outlined by the learned-helplessness theory would cease to operate. Nevertheless, the relationships posited by the theory may still hold for people during the transition from unemployment to employment. If so, the learned-helplessness theory could provide a guide to the processes that lead to the alleviation of depression commonly associated with gaining employment. A number of predictions about the point of impact that a change in employment status has upon the process outlined by the learned-helplessness theory are possible. The causal model developed in the cross-sectional study contained a number of variables that could be susceptible to influence by the transition from unemployment to employment and included attributional style, expectations placed getting a job in the future, and the importance placed on getting a job (refer Figure 3.4).

Attributional style was one potential point of influence in the process outlined by learned-helplessness theory. Although generally considered a trait-like construct, Peterson and Seligman (1984) reported that an individual's attribution style could be changed. Supporting the suggestion that attributional style may change, and relevant to the sample in the present longitudinal study, Winefield, Tiggemann and Winefield (1990) reported that the attributional style for a group of young school-leavers changed over time. Because the transition from unemployment to employment has often been accompanied by a reduction in depression, then attributional style would have to change over time in accordance with the learned-helplessness theory in a manner that would alleviate the elevated levels of depression. Hence, opposite to the person opposite to the individual who would be likely to experience depression during an exposure to negative life events, attributional style was predicted at follow-up for the newly employed to become more external, unstable and specific for negative life events, and more internal, stable and global for positive life events.

Hollon and Garber (1980) while acknowledging that a change in attributions could ameliorate depression, have proposed that the expectations for future success formulated by an individual may be more susceptible to change. Based on observations made during clinical interventions, they found that the attributions of depressed people were difficult to change because the attributions were already established and difficult to refute. On the other hand, expectations refer to the success of a future event and could be more easily modified during clinical trials. Presuming that the observations acquired in clinical work translate to everyday life, the change in employment status may have a major impact on the expectations of success in the future. As the causal model developed in the cross-sectional study indicated that high expectations were related to low depression, the prediction in the longitudinal study was that gaining a job would lead to increasing expectations of future job-hunting success and lower levels of depression.

An additional possibility not addressed in the learned-helplessness literature and consistent with the causal model developed in the cross-sectional study, was that the change in employment status could have an impact upon the ratings of job importance. One proposition is that the transfer to employment might increase the value placed on having a job, because the newly employed person takes on more financial obligations and adopts a more expensive life-style. If the causal model developed in the cross-sectional study held together, then the increased value placed on having a job may result in a reduction in the levels of depression.

In conclusion, the social-cognition perspective in the form of learned-helplessness theory may provide a guide to the process associated with the transition from unemployment to employment

and account for the often observed reduction in depression. A review of the theory indicates that employment-status change may influence attributional style, job expectations or job importance and may explain the reduction in general depression.

Background Factors and Psychological Theory

The primary aim of the longitudinal study was to investigate the ability of the social-cognition perspective to provide social theory that would account for the relationship between employment status and emotional health. The cross-sectional analysis included an array of background factors that were relevant to the variables specified by the learned-helplessness and frustrated-motivation theory, and included biographic and demographic factors, aspects of job-search, social-comparison with friends and family, and past and present employment details. All background factors found relevant in the cross-sectional models were included in the longitudinal analysis.

Conclusion

The longitudinal study was designed to evaluate the social-cognition perspective as an account for the processes involved in the relationship between employment status and emotional health. The longitudinal data provided the opportunity to examine the processes that account for the detrimental impact of unemployment upon emotional health, and the transition from unemployment to employment and the associated improvements in emotional health. Although little research has been conducted in the field of employment-status change, previous research indicated that individuals who gained employment after a period of unemployment improved in emotional health. Noticeably absent, however, was any theoretical explanation for the improvement in emotional health associated with the change from unemployment to employment. The social-cognition perspective in the form of learned-helplessness theory was proposed as a means to account for the variation in emotional health that occurs during the change in employment status.

Chapter V (Longitudinal Method)

Method and Procedures to Interview the Unemployed at Follow-up

The following chapter outlines the method used to examine the changes in emotional health associated with extended periods of unemployment and the transition from unemployment to employment. The chapter begins by outlining the methodological framework used in the longitudinal study and the foundations for a causal analysis of intraindividual change, followed by details of the interview procedures, questionnaires and measures used when re-contacting the two hundred unemployed people originally interviewed. The sample obtained is then reviewed for any evidence of a follow-up bias.

Causal Analysis with Longitudinal Data

The primary aim of the present study was to test social theory in a causal-process form using longitudinal data. Despite the current interest in longitudinal methods (i.e., Baltes & Nesselroade, 1979; Kessler & Greenberg, 1981; Plewis, 1985), most strategies used in the research literature do not evaluate causal-process explanations. For example, a typical procedure is to use an outcome variable measured at an initial interview to predict variation in the same variable at follow-up (often called a "covariate"), and then test if the variables nominated by theory account for a significant amount of variance in the outcome variable over and above the covariate (see Reichardt, 1979; Jöreskog, 1979). When testing the learned-helplessness theory for instance, depression scores measured at the initial interview would be used as a covariate for depression scores at follow-up, and variables such as attributional style and job expectancy would be tested to evaluate their success in predicting the depression scores at follow-up. But such a strategy is clearly "predictive", as the role for learned-helplessness theory is to nominate the variables that may account for a significant amount of variance in the outcome variable, and no account has been taken of the causal structure specified by the theory.

The following section outlines a causal analysis of intraindividual change as one means to evaluate social theory in a causal-process form using longitudinal data. The section begins by introducing life-span developmental psychology which provides the conceptual foundations for the causal analysis, and then details the measures and procedures used when evaluating a causal model with longitudinal data.

Methodological Framework

Life-span developmental psychology investigates the determinants of behaviour change over the human life-span (Baltes & Nesselroade, 1979; Baltes, Reese & Lipsitt, 1980; Baltes, Reese & Nesselroade, 1977). Although life-span developmental psychology provides a comprehensive framework to investigate the causes of behaviour change, only three aspects were relevant to the present study: the conceptual foundations of life-span developmental psychology; the relationship between causal concepts and longitudinal research; and the benefits of longitudinal research over cross-sectional research.

Conceptual Foundations

The conceptual foundations for life-span developmental psychology are based on a modified concept of *individual differences*. In most psychological research (Boring, 1957), the term individual difference is static and refers to investigations concerning the “characteristics or traits along which individual organisms may be shown to differ.” (Reber, 1985, p. 351). Baltes, Reese and Nesselroade (1977, p. 94) report, however, that “the term *individual differences* is vague and that it is usually important to specify whether individual differences refer to differences among individuals in levels of behavior or to differences among individuals in amount of change.” The term *interindividual differences* in life-span developmental psychology refers to *differences among individuals in levels of behaviour*, and *intraindividual change* refers to *differences among individuals in amount of change* (i.e., Buss, 1974; Baltes & Nesselroade, 1979; Baltes, Reese & Lipsitt, 1980; Baltes, Reese & Nesselroade, 1977; Rogosa, 1979).

Another way to define intraindividual change and interindividual differences can be formulated when there is no variation between individuals over time. “When plotted on a time continuum, interindividual *differences* refer to differences between individuals in a given behavior at one point in time (for example, at birth). Intraindividual *changes* refer to within-person differences in the same behavior across time.” (Baltes, Reese & Nesselroade, 1977, p. 93). However, if there are differences between individuals in the rate of human development, then the concept of *interindividual differences in intraindividual change* is necessary to specify the different variation between individuals that can occur over time (Baltes & Nesselroade, 1979; Baltes, Reese & Lipsitt, 1980; Baltes, Reese & Nesselroade, 1977). The three concepts of interindividual differences, intraindividual change and interindividual differences in intraindividual change provide a nomenclature to study the behavioural development of an individual over time.

The hypothetical example in Figure 5.1 provides an opportunity to illustrate the development of a single behaviour in ten individuals over the milestones of birth, childhood and adulthood.

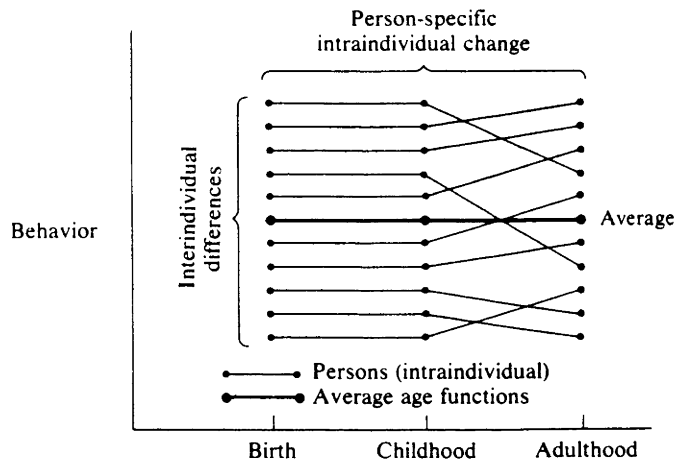


Figure 5.1 Examples of interindividual differences, intraindividual change, and interindividual differences in intraindividual change (Based on Baltes, Reese & Nesselroade, 1977, p. 93).

Examination of the period between birth and childhood reveals no intraindividual change or interindividual variation in intraindividual change. The total absence of intraindividual change results in the differences between individuals at birth being present at childhood. There are, however, marked variations of interindividual differences in intraindividual change between childhood and adulthood that lead to changes in the interindividual differences at adulthood. In other words, the interindividual differences observed in adulthood can be considered as a consequence of the intraindividual change that occurred during the period from childhood to adulthood. The ability of different patterns of intraindividual change to determine later interindividual differences is an important feature of life-span developmental psychology:

... if one is willing to assume that there are no interindividual differences at conception (the ideal zero point of development), all interindividual differences observed at a later age under identical measurement conditions must result solely from prior intraindividual change that was different for different persons. In this sense, developmental change is logically and empirically a precursor to a psychology of individual differences; that is, an understanding of how individuals change with age will give one a fairly comprehensive understanding of individual differences. To put it simply, intraindividual change and differential intraindividual change are at the core of interindividual differences. (Baltes, Reese & Nesselroade, 1977, p. 95)

The relationship between intraindividual change and later interindividual differences extends beyond the hypothetical case of a zero starting point for interindividual differences. The relationship is universal and as Baltes, Reese and Nesselroade (1977, p. 98) state, “any changes in interindividual differences from one time to another must result from differences in intraindividual change between the two points in time.” (Baltes, Reese & Nesselroade, 1977, p. 98).

The methodological framework provided by life-span developmental psychology is not restricted to human life-span research. As stated by Baltes, Reese and Lipsitt (1980, p. 69), "life-span developmental psychology is not a particular theory but an orientation to the study of behavioral development." Furthermore, while life-span developmental psychology tends to focus on the development of relatively stable attributes such as intelligence, reasoning ability and physical performance (i.e., Baltes & Nesselroade, 1979; Baltes, Reese & Lipsitt, 1980; Baltes, Reese & Nesselroade, 1977), the approach is also applicable to investigating "short-term behavior-change processes (for example, attachment, heart-rate deceleration)" (Baltes, Reese & Nesselroade, 1977, p. 120). In brief, life-span developmental psychology is a broad ranging methodological framework that can be used to conceptualise the changes in individual behaviour over time.

Causal Concepts in Longitudinal Research

Life-span developmental psychology presumes the need to develop and evaluate causal-process theory. "The aims of developmental psychology include the pursuit of knowledge about the determinants and mechanisms that help us understand the how and why of development: what causes the change?" (Baltes, Reese & Nesselroade, 1977, p. 4). Furthermore, life-span developmental psychology provides a clear statement about the role of causal concepts in longitudinal research:

Longitudinal methodology involves repeated time-ordered observation of an individual or individuals with the goal of identifying processes and causes of intraindividual change and of interindividual patterns of intraindividual change in behavioral development. (Baltes & Nesselroade, 1979, p.7, italics in original)

In other words, life-span developmental psychology is oriented towards using longitudinal methods to investigate the casual processes that generate intraindividual change. If the mechanisms that generate intraindividual change are isolated, then the causal processes that lead to the development of the differences between people are understood.

Cross-Sectional versus Longitudinal Research

The nomenclature used in life-span developmental psychology also provides an opportunity to demonstrate the benefits of using longitudinal methods to evaluate dynamic social processes, and offers an explanation for the different conclusions often reached in cross-sectional and longitudinal research (Baltes and Nesselroade, 1973; Rogosa, 1979). Developmental psychology is primarily directed towards discovering the causes of intraindividual change (Baltes & Nesselroade, 1979; Baltes, Reese & Lipsitt, 1980; Baltes, Reese & Nesselroade, 1977). But cross-sectional and longitudinal methods vary in their ability to measure intraindividual change (Baltes, Reese and Nesselroade 1977):

The cross-sectional method does not get at *intraindividual* change, and therefore most developmentalists consider this method to yield only approximate conclusions about development. The longitudinal method, on the contrary, yields direct information about *intraindividual* change and *interindividual* differences in change. (p. 123)

The inadequacy of cross-sectional methods can be conveyed in an example that examines the impact of stable historical factors (i.e., prior *interindividual* differences) on the evaluation of a causal hypothesis. For example, a researcher interested in testing the proposition that increasing periods of unemployment causes greater levels of depression, might conduct a cross-sectional study with two groups of people that have been unemployed for two and six months. If the researcher finds a statistically significant relationship between time unemployed and depression, he or she might conclude that the evidence is consistent with the proposition that increasing periods of unemployment leads to increased depression.

But the data provided by the cross-sectional method does not measure *intraindividual* change, and *interindividual* differences that are stable across time and quite unrelated to the dynamic processes under investigation may be responsible for the relationship. To cite one possibility, the 2 month group may have just left school with Year 12 certificates and have high expectations of getting a job and therefore not depressed, while the 6 months group left school because of poor academic performance and are depressed because of poor future job prospects. Hence the differences in depression in the cross-sectional study are attributable to *initial interindividual differences* in level of educational and job expectations, rather than an ongoing process associated with unemployment expressed by *intraindividual change*. The full limitation of cross-sectional studies can be comprehended when the breadth of factors that differentially affect the two groups are considered: social context, economic activity in the community, government legislation, or the suitability of psychometric instruments developed at a particular point in time.

The power of the longitudinal method derives from the ability to eliminate the *interindividual* differences that are stable across time and contaminate the evaluation of a dynamic causal process (Baltes & Nesselroade, 1979). For example, the researcher interested in the relationship between length of unemployment and depression could conduct repeated interviews with the respondents after leaving school, eliminating job expectations as a stable *interindividual* difference. Although hypothetical, the example serves to illustrate that longitudinal data can provide more information about *intraindividual* change. The next issue is to discuss how the conceptual foundations in life-span developmental psychology can be applied to a causal analysis using longitudinal data.

Summary

The concepts of interindividual differences, intraindividual change and interindividual differences in intraindividual change provide the conceptual foundations for life-span developmental psychology. The primary focus of life-span developmental psychology is to investigate the causal processes that generate intraindividual change, which are the nature precursor to understanding the development of differences between people at one point in time. Consequently, the emphasis is on longitudinal methods which constitute the only means to directly evaluate intraindividual change and provide a full understanding of the processes that result in the differences between individuals at one point in time. The next issue is to examine how the conceptual foundations of life-span developmental psychology can be applied to a causal analysis using longitudinal data.

A Causal Analysis of Intraindividual Change

The following section details a *causal analysis of intraindividual change* to evaluate causal-process theory using longitudinal data. Two aspects are outlined. First, the use of change scores to measure intraindividual change. Second, statistical issues concerning the application and interpretation of causal models using change scores as a measure of intraindividual change.

Measuring Intraindividual Change

The collection of data that provide an unambiguous measure of intraindividual change is the primary benefit of longitudinal research. "The meaning of development is intraindividual change, an assessment of which requires at least time-ordered information" (Baltes, Reese & Nesselroade, 1977, p. 160). The "natural" measure of interindividual change in a two wave longitudinal study is to calculate the change in scores between posttest and pretest scores (Rogosa, 1979), providing a score that indicates the magnitude of change for each individual on a particular attribute over time. However, change scores are often not recommended in social research due to the drop in measurement reliability, relative to the separate pretest and posttest measures (Allen & Yen, 1979; Guilford, 1954). As stated by Lord (1963, p.32): "the difference between two fallible measures is frequently much more fallible than either." The reduction in reliability with change scores can be conveyed using classical measurement theory (Allen & Yen, 1979). A change score (i.e., C) is formally defined in a two wave study as the difference between postscores (i.e., Y) and prescores (i.e., X):

$$C = Y - X$$

The difference score can be viewed as being comprised of true-score and error-score variance:

$$\begin{aligned}
 C &= Y - X \\
 &= (T_Y + E_Y) - (T_X + E_X) \\
 &= T_Y + E_Y - T_X - E_X \\
 &= T_Y - T_X + E_Y - E_X \\
 &= (T_Y - T_X) + (E_Y - E_X) \\
 &= T_D + E_D
 \end{aligned}$$

The variance of a change score can therefore be partitioned into true-score and error-score variance. Of particular interest is that the reliability of the change score deteriorates due to unsystematic error variance in the pretest and posttest scores which accumulates when change scores are calculated. As Allen and Yen (1979) state:

Since errors of measurement are uncorrelated under the classical model, it can be shown that

$$\sigma_{E_D}^2 = \sigma_{E_X}^2 + \sigma_{E_Y}^2$$

The error variance of a difference score will be as large or larger than the error variance of either of the scores entering into the difference . . . (p. 209)

The accumulated error variance and lowered reliability of change scores have often been cited as reasons to avoid using change scores in social research (Allen & Yen, 1979; Guilford, 1954; Lord, 1963). However, the recommendation that change scores be avoided is debatable in the light of three considerations. The first consideration is that the reliability of change scores is determined by the separate scales and the available data, and in most social research the reduction in reliability is not substantial (Rodgers & Bachman, 1988; Rogosa, Brandt & Zimowski, 1982). The factors important in bringing down the reliability for change scores can be isolated by briefly examining the formula used to calculate change-score reliability (Allen & Yen, 1979; Ferguson, 1976; Guilford, 1954). The formula for calculating the reliability of change scores is (Allen & Yen, 1979, p. 210):

$$\rho_{DD'} = \frac{1/2(\rho_{YY'} + \rho_{XX'}) - \rho_{YX}}{1 - \rho_{YX}}$$

The formula relies on posttest (i.e., Y) and pretest scores (i.e., X) to calculate the reliability. The operation of the equation is primarily determined by the average reliability of the two scales ($1/2(\rho_{YY'} + \rho_{XX'})$) and the cross-time correlation between the scores (ρ_{YX}). Examination of the equation reveals that assuming pretest and posttest scales are equally reliable, as pretest and posttest scores "come together" as revealed by higher cross-time correlations, then the "unique" information associated with the true score decreases relative to the amount of error variance. In

other words, the higher the cross-time correlation, the lower the reliability of the change scores. The consequence for social researchers is that the reliability of change scores depend on the data and scales used in a study. Rogosa, Brandt and Zimowski (1982) assess the reduction in reliability using a variety of scales and cross-time correlations and conclude that the reduction of reliability in many instances is not substantial.

The second consideration is that the reduction in significance-test sensitivity when using change scores of low reliability can be compensated for by using samples of an increased size (Ferguson, 1976). Low reliability in classical measurement theory indicates a reduction of true score variance relative to error score variance (Allen & Yen, 1979). The low reliability reduces the opportunity to find statistically significant relationships because the true score covariation decreases compared to the error score variance (Kerlinger, 1975; Pedhazur, 1982). However, increasing the sample size reduces the standard error, and increases the sensitivity of the statistical test (Kirk, 1984). As stated by Ferguson (1976, p. 434), "Low reliability does not necessarily invalidate a technique as a device for drawing valid inferences. Low reliability may be compensated for by an increase in sample size".

The third consideration concerns the benefits of directly measuring intraindividual change (Rogosa, Brandt & Zimowski, 1982). For example, if individual A is unemployed and scores 5 on the Beck Depression Inventory (Beck, 1967), and six months later scores 15, the 10 point change indicates a substantial increase of depression. The 10 point difference is readily interpretable and indicates that individual A has experienced an intraindividual change of depression. In contrast, individual B also unemployed and measured under the same conditions may score 12 at the pretest and 7 at the posttest, indicating a 5 point drop on the Beck Depression Inventory. The 10 point increase for individual A and the 5 point decrease for individual B indicate two quite different courses of depression over the six months of unemployment, and provide a readily interpretable guide to the intraindividual change for the two individuals.

Rodgers and Bachman (1988) and Rogosa, Brandt and Zimowski (1982) after reviewing the literature and investigating the relevant issues on the use of change scores in social research (also called difference scores), came to the following conclusions:

... in general, the standard errors of estimates based on change scores are greater than those based on static scores. The conventional wisdom tells us that this increase is likely to be large and that for this reason the use of change scores to estimate ... models is to be eschewed. The conventional wisdom is wrong, however. For reasonably large sample sizes, and for a wide range of stabilities of the true value and measurement errors in the predictor variables, the ratio of the sampling errors for estimates based on change scores to those based on static scores is *not* excessively large. (Rodgers & Bachman, 1988, p. 98)

... low reliability is cited as a major reason to eschew the difference score. In contrast, we find that shunning the difference score because of these findings of low reliability is unwise. ... difference scores are not intrinsically unreliable, and furthermore, the difference score can be an accurate and useful measure of individual change even in situations where the reliability is low. (Rogosa, Brandt & Zimowski, 1982, p. 730)

In summary, the general recommendation that change scores be avoided in social research is questionable. Recent developments indicate that the drop in reliability associated with change scores is often not substantial, that low reliability can be compensated for by increasing sample size, and that the change scores provide a direct and readily interpretable measure of intraindividual change. The strategy adopted in the present study was to examine the data and scales used in the longitudinal study to evaluate the suitability of using change scores in the present longitudinal study.

Causal Analysis

The causal analysis using longitudinal data was designed to investigate the causes for intraindividual change. The following discussion examines how change scores were used as a measure of intraindividual change in the causal analysis, as well as the need to distinguish stable and dynamic exogenous variables when formulating the causal models.

Intraindividual Covariation. Change scores are a direct measure of intraindividual change that when intercorrelated, provide a measure of "*intraindividual covariation*" that describes the joint covariation between two variables over time. For example, data could be collected in a longitudinal study that measures of self-esteem and emotional well-being at two points in time. The scores for self-esteem collected at the initial interview (i.e., X_1) would be subtracted from the follow-up scores (i.e., X_2) to provide a set of change scores (i.e., $C_X = X_1 - X_2$). The same procedures would be repeated for the scores on emotional well-being (i.e., $C_Y = Y_1 - Y_2$). If self-esteem and emotional well-being happened to increase during the study, then the change scores would be positive for both measures. Furthermore, when the change scores were correlated, the corresponding increase of both self-esteem emotional well-being would result in a positive intraindividual covariation.

Intraindividual covariation provides a means to test the causal structure in a causal model. The causal structure consists of monocausal relationships with one variable designated as the cause (i.e., X) and the other as the effect (i.e., Y). The concept of causation generally adopted in social research is that variation in X will *produce or force* variation in Y (Blalock, 1964). If the scores of X and Y are recorded over time, then the causal relationship theoretically guarantees that any variation in X is followed by variation in Y. Accepting that intraindividual covariation represents

the correspondence between scores over time, *stating that X causes Y implies an intraindividual covariation between X and Y*. If there is no significant intraindividual covariation, the data are inconsistent with the causal proposition.

An example may clarify the relationship between causal relationships and intraindividual covariation. The learned-helplessness theory predicts that decreasing levels of expectation cause increasing levels of depression. The causal proposition could be tested by collecting data in a longitudinal study and measuring the levels of expectation and depression at two points in time. If the causal relationship is true, change scores would reveal that levels of expectation would decrease while levels of depression increase, or that levels of expectation would increase while levels of depression decrease. When the change scores were correlated, a significant and negative intraindividual correlation would indicate an association between the levels of expectation and depression consistent with the causal prediction.

LISREL VI (Jöreskog & Sörbom, 1981) can be used to process intraindividual covariation data, because LISREL accepts correlation and covariation matrices for data when evaluating a causal-process theory. The approach adopted in the present study was to calculate the change scores based on the initial and follow-up scores, and calculate the covariation between change scores to provide an intraindividual covariation matrix. The matrix was then used as LISREL-data input to test the causal models specified by learned-helplessness and frustrated-motivation theory.

Stable and Dynamic Exogenous Variables. The causal analysis conducted in the present study presumed that the endogenous variables in the causal models were dynamic and fluctuated over time. The majority of exogenous variables were also considered dynamic, and presumed to have a direct and monotonic impact on the endogenous variables within the model. Such causal relationships are commonly cited in nonexperimental research and operate much like the “main effects” in an ANOVA statistical analysis (see Cook & Campbell, 1979; Campbell & Stanley, 1963). For example, if the number of unemployed friends known by a respondent had a positive and direct causal influence on the tendency to make external situation-specific attributions about unemployment, then an increase in the number of unemployed friends would lead to an increase in the external situation-specific attributions about unemployment.

In contrast to the dynamic exogenous variables, a number of the exogenous variables in the causal model would clearly remain stable over time (i.e., sex, parent’s occupational status). The postulation of stable exogenous variables necessitated a different kind of causal explanation to that operating between the dynamic exogenous and dynamic endogenous variables. The explanation

chosen in the present study was that the stable variable produced a *differential* response in the dynamic endogenous variable, identical to the “interactional effects” reported in ANOVA (Cook & Campbell, 1979; Campbell & Stanley, 1963). For example, sex would be a stable variable that could have an impact on situation-specific attributions made about unemployment. For the unemployed, a newly unemployed male could be more likely to make external situation-specific attributions about getting a job, while a newly unemployed female could be more likely to make internal situation-specific attributions about getting a job. There would presumably be causal factors operating outside the scope of the model that would fully explain why males and females make different situation-specific attributions about unemployment, but these would be the subject of future research.

Summary

A causal analysis of intraindividual change was deemed a viable means to evaluate causal models using longitudinal data. Intraindividual change can be measured by change scores, that when correlated, provide a measure of intraindividual covariation that enables a causal model to be evaluated. Although most exogenous and endogenous variables in the model are considered dynamic, a few of the exogenous variables are stable and have a differential or interactional impact upon the dynamic endogenous variables in the causal model. The questionnaires used to collect the data to enable the calculation of the change scores used in the longitudinal study are now reviewed.

Questionnaires

The following section outlines the three questionnaires used during the follow-up interviews. The questionnaire format is discussed, research variables reviewed, four measures of employment status compared, and details of the exogenous and endogenous variables included in the analysis provided. The section concludes with an overview of the procedures used to recontact the individuals initially interviewed in the cross-sectional study, along with characteristics of the follow-up sample.

Questionnaire Format

Three questionnaires were developed for people who were unemployed, employed and engaged in unpaid work at the follow-up interview (copies are provided in Appendix B, C and D). The general aim was to elicit from the person the maximum amount of information about aspects of their life that had changed since the initial interview. The follow-up questionnaires therefore included all the items in the initial contact questionnaire, although alterations in wording were necessary to account for the different categories of employment status. For example, the question

regarding job application rates for the unemployed became a hypothetical question for the employed.

The primary departure from the initial-contact questionnaire consisted of including an employment history section to collect details of variations in employment status between interviews. The employment history section consisted of five subsections to account for the employment status of the respondent. The first section requested details on how long the person continued to receive unemployment benefits after the initial interview, the second for details on present jobs held, the third for information on jobs that had ceased since the first interview. The fourth and fifth sections were directed at current or past periods of joblessness during which the person was not registered for unemployment benefits.

Research Variables

In a manner similar to the cross-sectional analysis, the research variables were classified as exogenous or endogenous. The exogenous variables included variables that were not specified by the learned-helplessness or frustrated-motivation theory, but might be involved in the processes outlined by the theories. While the endogenous variables in contrast, are specified by the theory.

Exogenous Variables

The exogenous variables used in the longitudinal study were classified into two groups. The first group included variables measured at the initial and follow-up interviews and used in the longitudinal analysis. The second group contained the employment-status variable used to measure the employment status of the individual at follow-up.

Exogenous Variables used in Cross-Sectional Analysis. The exogenous variables previously used in the cross-sectional analysis were also candidates for the longitudinal analysis, and included biographic and demographic factors, aspects of job search, social comparison with friends and family, and past and present employment details. A major consideration, however, was the determination of which exogenous variables were to be treated as stable or dynamic. The distinction between stable and dynamic was judged according to the likelihood that the variables would change over time, or be influenced by changes in employment status. For example, sex does not change over time or respond to changes in employment status, while the number friends an unemployed person can cite may change over time or alter during the transition from unemployment to employment.

The *a priori* distinction between stable and dynamic variables had implications for data treatment. Variables such as age (constant rate of change during study), sex, qualifications and

socio-economic status were deemed stable, and the values that had been obtained in the initial interview were used in the longitudinal analysis. In contrast, variables such as residence, number of co-residents, number of unemployed friends, time with unemployed friends, and family members unemployed, were considered dynamic and calculated as change scores by subtracting the follow-up score from the initial-contact score.

Employment-Status Measure. A review of the unemployment literature indicated that four measures of employment status are often used, and the details about employment status collected in the longitudinal study provided an opportunity to compare and select the most useful measure. A broad demarcation between *outcome* and *experience* measures of employment status can be made. The *outcome* measure has been used to describe current employment status, and was usually scored by simply asking the respondent if they were "employed" or "unemployed". In contrast, the *experience* measure attempted to account for the relative periods of unemployment and employment experienced by the respondent. The data in the present study provided an opportunity to evaluate the convergence of the two measures of employment status. If the scores provided by the two measures were uncorrelated, then the outcome and experience measures would be treated as different aspects of employment status and require separate analyses to investigate fully the relationship between employment-status change and emotional health. If significantly related, however, the convergence would indicate that only one measure of employment status and one statistical analysis was needed.

The outcome measure has been the most commonly used in social research, because the researcher only needs to ask the respondent for their current employment status (e.g., Banks & Jackson, 1982; Banks & Ullah, 1987; Branthwaite & Garcia, 1985; Breen, 1984; Clark, 1985; Cohen, 1978; Donovan & Oddy, 1982; Dowling & O'Brien, 1981; Dressler, 1986; Feather, 1982a; Feather & Bond, 1983; Feather & O'Brien, 1986a, 1986b; Hepworth, 1980; Jackson, Stafford, Banks & Warr, 1983; Layton, 1987; Layton & Eysenck, 1985; Melville, Hope, Bennison & Barraclough, 1985; O'Brien & Kabanoff, 1979; Patton & Noller, 1984; Platt, 1986; Tiggemann & Winefield, 1980, 1984; Warr & Jackson, 1985; Winefield & Tiggemann, 1985; Winefield, Tiggemann & Smith, 1987). However, such *point-in-time* measures combine individuals who are engaged in permanent and temporary employment into one group, and the job permanence may be an important factor in determining how people react to employment. For example, the permanently employed can look forward to a stable and reliable income, while the temporarily employed must plan their budget based on a future of unemployment. To account for job permanence, some authors have introduced an employment-status stability criteria. For example, Joshi, Garon and Lechasseur (1984) and Lynn, Hampson and Maggee (1984) developed a *stable status* measure by confining their employed groups to permanently employed respondents.

Other authors have, nevertheless, queried the use of outcome measures that presume a simple dichotomy between unemployment and employment (Dowling & O'Brien, 1983; Dressler, 1986; Gurney, 1979; Gurney & Taylor, 1981; McRae, 1986; McRae, 1986, August; McAllister, 1986; Rump, 1983). Rump (1983) argues, for example, that a dichotomous outcome measure fails to account for the periods of employment and unemployment experienced by the respondent. The measure developed by McAllister (1986) provided one solution to the problem, by formulating an *unemployment-experience* measure that compared the time unemployed with the time spent in the labour force.

When measuring unemployment experience, McAllister (1986) confined his subject population to members of the labour force, and did not account for periods when respondents were outside the labour force. A further refinement of the measure was possible in the present study (the *unemployment ratio*), due to information about the number of weeks between the initial and follow-up interviews when people fell into an unpaid work category. Including periods of unpaid work into the calculation permitted a potentially more accurate picture of the unemployment experienced by people, because the time spent outside the labour force was included in the calculations.

Table 5.1

Intercorrelations Between Four Measures of Employment Status

	Employment Status Outcome		Employment Status Experience	
	Point-in-Time	Stable Status	Unemployment Experience	Unemployment Ratio
Point-in-Time	--	.82*** (n = 143)	.67*** (n = 143)	.69*** (n = 143)
Stable Status	.82*** (n = 143)	--	.60*** (n = 143)	.63*** (n = 143)
Unemployment Experience	.67*** (n = 143)	.60*** (n = 143)	--	.91*** (n = 166)
Unemployment Ratio	.69*** (n = 143)	.63*** (n = 143)	.91*** (n = 166)	--

* $p < .05$. ** $p < .01$. *** $p < .001$.
n's vary according to Employment Status criteria.

Operational definitions were based on the theoretical considerations concerning the four employment-status measures. The *point-in-time* measure simply involved noting the person's employment status at follow-up. The *stability* measure was developed by examining the data and

formulating a suitable stability criteria. The data revealed that of the 100 people employed at follow-up, 87 had maintained the same job and could be considered stably employed. The remaining 13 people who had held more than one job, had re-registered for unemployment benefits, and were again employed were allocated to the unemployed group due to the transient nature of their employment status. The *unemployment-experience* measure consisted of calculating a ratio between the number weeks registered for unemployment benefits, and the time between interviews. The *unemployment ratio* consisted of the time registered for unemployment benefits, divided by the time between interviews subtract the number of weeks in unpaid work. All measures were scored so that high values indicated either a job, or increasing periods of employment.

The correlations between the four-employment status measures are presented in Table 5.1. The high correlations in Table 5.1 indicate that the outcome and experience measures of employment status converge to a considerable degree. For example, the high correlation between the *point-in-time* and *unemployment-experience* measure ($r[143] = .67, p < .001$) indicated that for the present sample, an employed individual at follow-up had experienced significantly more time employed than an unemployed. In other words, current employment status at the follow-up interview had a high degree of correspondence with the amount of unemployment experienced. Because of the high concordance between measures, the *point-in-time* measure of employment status was selected in the present study because of the measures' widespread use, ease of administration and scoring accuracy.

Endogenous Variables

An assumption in the causal models used in the longitudinal analysis was that the endogenous variables represented dynamic variables that could account for the processes that generate emotional health. As such, change scores were calculated for all the endogenous variables to provide a measure of intraindividual change in the longitudinal analysis. The formula provided by Allen and Yen (1979, p. 209), was used to calculate the reliability of change scores (see Table 5.2), and the reliability of the job expectancy, self-esteem and depression scales were considered adequate. The reliabilities for the positive and negative life-event items in the Attributional Style Questionnaire (A.S.Q.) were calculated separately, because psychometric investigations by Peterson, Semmel, von Baeyer, Abramson, Metalsky and Seligman (1982) indicate that the attribution style for negative life-events is unrelated to the style for positive life-events. The reliability for the positive subscale of the A.S.Q. was adequate ($\rho_{DD'} = 0.58$), but was particularly poor for the negative subscale ($\rho_{DD'} = 0.37$). The reliability for the unemployment frustration scale was also poor ($\rho_{DD'} = 0.38$).

Table 5.2

Reliabilities for Change Scores in Longitudinal Study

Variables	Cronbach's α at Time ₁ ($\rho_{XX'}$)	Cronbach's α at Time ₂ ($\rho_{YY'}$)	Correlation over time (ρ_{YX})	Change Score Reliability ($\rho_{DD'}$)
Job Expectancy	0.88	0.88	0.59	0.71
Attributional Style for Positive Events	0.74	0.74	0.38	0.58
Attributional Style for Negative Events	0.65	0.63	0.43	0.37
Self Esteem	0.80	0.84	0.41	0.70
Beck Depression Inventory	0.82	0.82	0.57	0.58
Unemployment Frustration	0.69	0.66	0.48	0.38

The low reliability of the ASQ and unemployment-frustration scales raised doubts about using the change scores in the longitudinal analysis. Unfortunately, an examination of the research literature provided little indication about the levels of change-score reliability that would be generally considered acceptable. The only two studies that have used change scores with the young unemployed, reported inter-item reliabilities based on cross-sectional data and did not include a report of the change-score reliabilities (Feather & O'Brien, 1986b; Jackson, Stafford, Banks & Warr, 1983).

The only comparison that could be made was with studies that have reported the Cronbach's α estimate of inter-item reliability based on cross-sectional data. But again, information was limited. Feather and Barber (1983) and Feather and Davenport (1981) measured unemployment frustration with the young unemployed for example, but did not provide inter-item reliability information as the scale only contained one item. A review of the literature also indicated that research with the young unemployed had not used the Attributional Style Questionnaire (ASQ). The only comparable case, involved an administration of nine items from the Rotter's locus of control scale to the young unemployed (see Feather & O'Brien, 1986a, p. 128; Feather & O'Brien, 1986b, p. 465). The Cronbach's α in the study was relatively poor and calculated to be 0.48. The only other comparison was with scales that were developed to measure situation-specific unemployment attributions. But these were also poor, with four items for internality providing a Cronbach's α of 0.47, and four items for externality providing a Cronbach's α of 0.22 (Feather & Barber, 1983, p. 189).

Overall, there was little information in the research literature to enable the change-score reliabilities in the present study to be evaluated. Although change scores have been used in studies with the young unemployed, the failure to report change-score reliability information makes

difficult any attempt to evaluate the change-score reliabilities calculated in the present study, or to specify a cut-off point below which change-score reliabilities become unacceptable. The only comparisons that could be made were with studies that reported the inter-item reliabilities calculated from cross-sectional data, and in these cases, the reliabilities in the present study were typical for a sample of young unemployed. Consequently, the change scores calculated for the attributional style and unemployment frustration measures were retained for the longitudinal analysis.

Data Collection

Ten months after the initial interview, respondents were contacted by phone or a personal visit and asked if a number of questions could be posted “. . . to see how things had turned out.” Thirty-one of the original 200 could not be traced and three refused to be re-interviewed. A reminder letter was posted if the questionnaire was not returned within two weeks. If there was no response after a further two weeks, a handwritten letter was posted, reminding the person that their responses were important and requesting that the questionnaire be returned as soon as possible. If there was no reply to the second letter, the interviewer visited the person at home and stated “. . . that it is important I have your replies and as I’m here, could we go through them now.” This strategy proved most successful, and only two people refused to be interviewed when approached.

Respondents were asked to fill out one-of-three questionnaires that varied according to their employment status. The unemployment questionnaire was handed to respondents who met the criteria for unemployment used in the cross-sectional analysis (being registered for unemployment benefits). The employment questionnaire was handed to individuals who had not registered with social security and were engaged in full-time employment. The unpaid work questionnaire was given to individuals who had not registered for unemployment benefits but who were not engaged in full-time employment.

Sample

One hundred and sixty-six (83%) of the original 200 people were contacted 10 months after the initial interview. At the follow-up, 100 held a job, 43 were registered for unemployment benefits, and 23 were not employed but had ceased looking for paid work. Although the high contact rate reduced the chances of follow-up bias, a series of goodness-of-fit statistics (χ^2) were conducted using a number of biographic and demographic variables to investigate the possibility of a biased follow-up sample. Examination of age ($\chi^2[2] = 0.09$ $p > 0.05$), sex ($\chi^2[1] = 0.01$ $p > 0.05$), duration of unemployment benefits ($\chi^2[2] = 0.30$ $p > 0.05$), highest qualification ($\chi^2[5] = 3.51$ $p > 0.05$),

residence ($\chi^2[3] = 1.82 p > 0.05$), father's occupation ($\chi^2[5] = 2.91 p > 0.05$), occupation of last job ($\chi^2[5] = 0.91 p > 0.05$) failed to find evidence of a follow-up bias.

Examination of the 100 people holding a job at follow-up indicated that most had continued their registration for unemployment benefits a number of months after the initial interview (mean = 10.36 weeks; mode = 8.00 weeks). A majority did not register for unemployment benefits again (87%), indicating that most individuals remained with the first job obtained. The greatest number of jobs held were manual (43%), closely followed by clerical (42%), the remainder (15%) being professional and managerial. Over half (56%), indicated that they wanted the job, and more than half described their jobs as permanent (61%), although a quarter (25%) described the job as temporary.

Forty-three of the people at follow-up were registered for unemployment benefits. Less than one-half (42%) had been continuously registered for unemployment benefits, and over one-half (58%) registered for benefits again (30% once, 26% twice and 2% more than twice). Although registered for unemployment benefits, a number (12%) held a part-time job at the time of interview (mean = 11.50 hrs per week) and less than a third (28%) were currently engaged in studies of some kind (both are acceptable to the Department of Social Security as long as the respondent is still seeking full-time work). While 43 people were classified as unemployed, a majority (65%) had held a part-time or full-time job since the initial interview. A number of people had finished one job (37%), some two jobs (14%) and the remaining over two jobs. These jobs were largely manual (82%).

Twenty-three people fell into the category of not holding or wishing to hold a job. Most (57%) were now engaged in full-time education, some on holiday (13%), some had transferred to another form of government benefit (13%), while the remaining were married, about to get a job or did not cite a reason. Financial support came from a variety of sources, with many receiving government support in the form of T.E.A.S. (Tertiary Education Assistance Scheme) or sickness benefits (39%), some from savings (30%) and the remaining dependent on another person. Although not considering themselves as holding a job, a number (17%) did hold a part-time job (5 to 8 hours per week). The respondents were registered for unemployment benefits after the initial interview for a period longer than the other two subgroups (mean = 11.87 weeks). However, inspection revealed that the mode was identical (mode = 8.00) to the other groups and that a few extreme scores exerted a disproportionate effect. Also in common with the other groups, the majority (87%) did not register again for unemployment benefits. Overall, comparison of the three groups at follow-up indicated that surprisingly, the period of registration for unemployment was roughly the same.

Chapter VI (Longitudinal Results)

Causal Analysis of the Relationship Between Employment Status and Emotional Health

The following chapter reports the use of longitudinal data to examine the relationship between unemployment and the deterioration of emotional health, and the transition from unemployment to employment and the improvements in emotional health. The first investigation involves 43 respondents who were unemployed at the follow-up interview, and was designed to evaluate the learned-helplessness and frustrated-motivation theory as explanations for the relationship between unemployment and emotional health. The second investigation combines the 43 unemployed and 100 employed people to investigate the learned-helplessness theory as an account for the reduction in depression often associated with the transition from unemployment to employment.

Unemployment and Emotional Health

The first investigation with the longitudinal data examined the ability of the learned-helplessness and frustrated-motivation theories to provide an explanation for the relationship between unemployment and emotional health. The 43 unemployed people contacted at follow-up consisted of 18 who had been continually unemployed, and 15 who had been employed but were again unemployed. The small sample size raised concern about the validity of conducting a causal analysis. Although studies have used sample sizes as low as 54 (Crano & Mendoza, 1987), and even down to 35 (Bornstein & Benasich, 1986), the practice of using small samples in a causal analysis has been questioned (Boomsma, 1987; Tanaka, 1987).

Monte Carlo statistical procedures have been used to investigate the impact of sample size on the structural coefficients and model-fit statistics calculated during a causal analysis (Cuttance, 1987). A Monte Carlo study involves specifying population parameters in a computer simulation, taking random samples of different sizes, and evaluating each attempt to recreate the population parameters from the sample. The findings were, unfortunately, inconclusive (Tanaka, 1987). For example, Geweke and Singleton (1980) reported that although χ^2 model-fit statistics were appropriate for a sample size of 25-30 respondents using a relatively simple five-variable model, Boomsma (1987) reported in contrast, however, that maximum likelihood parameter estimates became unstable when the sample size fell below 100. Tanaka (1987, p. 136) in reviewing the literature concluded that "it would be difficult to establish a precise decision rule for determining sample size based on the existing Monte Carlo evidence."

Tanaka (1987), nevertheless, stated that a balance must be struck between the complexity of a model and the sample size under consideration. The causal models in the present study were relatively simple, due to the absence of multiple indicators and causal feedback loops, providing a causal structure identical to *path analysis* (Pedhazur, 1982). Because path analysis has been traditionally based on multiple regression procedures (i.e., Duncan, 1966), the “rule-of-thumb” 10:1 ratio between the number of subjects and variables in multiple regression appeared applicable in the present study (Tanaka, 1987). The rule-of-thumb ratio indicated that a causal model using exogenous and endogenous variables would constitute too many variables for the size of the unemployed group. However, if the analysis was confined to the theoretically specified endogenous variables, then the ratio between variables and sample size would be acceptable. Consequently, the exogenous variables used in the cross-sectional analysis were omitted in the present analysis.

Although a causal analysis for the unemployed group at follow-up was acceptable, a further concern was the reduction of statistical power when calculating structural coefficients and model-fit statistics using a small sample (Boomsma, 1987; Tanaka, 1987). The strategy used by Winefield, Tiggemann and Smith (1987) and adopted in the present study, was to increase α and boost the power of the statistical tests (Howell, 1982, p. 153-154; Hays, 1981, p. 252). Nevertheless, the extra power gained by increasing α from 0.05 to 0.10 was achieved at the cost of increasing Type I error rates and the possibility of falsely accepting a structural coefficient in the causal model as significant must be acknowledged when interpreting the results (Guilford & Fruchter, 1982; Howell, 1982; Kirk, 1984). Unfortunately, the model-fit statistics were not as susceptible to resolution due to the complexity of the relevant sampling distributions (Boomsma, 1987; Tanaka, 1987), and the only solution was to keep in mind the reduced ability of the data to reject the causal model during the analysis.

In summary, consideration of the small sample size prior to analysis resulted in confining the causal model to endogenous variables, specifying an α rate of 0.10, and noting the reduced power of model-fit statistics to reject the model. The description of the causal analysis of the relationships between unemployment and emotional health begins with a brief overview of the descriptive statistics, and then details a causal analysis of the learned-helplessness and frustrated-motivation theory.

Descriptive Statistics

Table 6.1 reports the range, mean, and standard deviation scores for the endogenous variables for the unemployed at follow-up. All are change scores calculated by subtracting the follow-up score from the initial-contact score, and an examination of the frequency distribution for the change scores revealed no evidence of significant outliers or skewed distributions.

Table 6.1

Descriptive Statistics for Endogenous Variables in
Longitudinal Study of Unemployed at Follow-Up

Variables	Statistics
Cognitive Change Variables	
Job Importance	
Range	-4.00 to 6.00
Mean (S.D.)	0.33 (1.85)
Job Expectancy	
Range	-19.00 to 34.00
Mean (S.D.)	2.04 (11.39)
Unemployment Attributions (Internality)	
Range	-1.00 to 1.00
Mean (S.D.)	0.05 (0.53)
Attributional Style	
Range	-30.00 to 38.00
Mean (S.D.)	0.57 (16.50)
Affective Change Variables	
General Depression	
Range	-3.79 to 3.57
Mean (S.D.)	0.21 (1.66)
Unemployment Frustration	
Range	-5.00 to 8.00
Mean (S.D.)	-0.54 (3.01)
Behavioural Change Variables	
Enquiries per Week	
Range	-6.75 to 12.00
Mean (S.D.)	0.60 (3.72)

The large range and standard deviation for most of the variables indicated a substantial intraindividual change between initial and follow-up interviews. For instance, the scores over time for attributional style indicated that some individuals experienced a drop of 30.00 points in attributional style, and others an increase of 38.00 points. The standard deviation (16.50) indicated a large intraindividual change for a high proportion of respondents and supports the observation by Winefield, Tiggemann and Winefield (1990) that attributions for the unemployed change over time. In contrast, however, the mean score for many of the variables were near zero and points to little average change for the 43 unemployed people. For example, the mean score of 0.57 provides little evidence for a change in the average attributional style for the unemployed between interviews. Overall, the descriptive statistics indicated that individual scores changed dramatically between interviews while group scores remained relatively stable.

A polychoric and polyserial intraindividual correlation matrix for the change scores was calculated and is reported in Table 6.2. (The correlation matrix in Table 6.2 and the LISREL

Table 6.2

Polychoric and Polyserial Intraindividual Correlation Matrix for
Causal Analysis in Longitudinal Study of Unemployed at Follow-Up

Variables	1	2	3	4	5	6	7
1. Job Importance	1.0000						
2. Job Expectancy	-.1204	1.0000					
3. Unemployment Attributions (Internality)	.2988	.2274	1.0000				
4. Attributional Style	.1193	-.1590	-.2203	1.0000			
5. General Depression	.2951	-.3457	.0148	.2174	1.0000		
6. Unemployment Frustration	.5242	-.2969	-.0287	-.2066	.3877	1.0000	
7. Enquiries per Week	.2186	.1331	.0652	-.2372	-.1993	-.0744	1.0000

command files in Appendix F provide sufficient information to enable the following analysis to be reproduced.) The variation in correlation values listed in Table 6.2 indicated a broad range of relationships between change scores. An apparently aberrant finding was the high correlation between job importance and unemployment frustration ($r = 0.52$), especially when considering the poor reliability of the unemployment-frustration scale listed in Table 6.2 (Cronbach's $\alpha = 0.38$). The moderately high correlation raised queries about the accuracy of the data, as poor reliability imposes an upper limit on potential correlations (Allen & Yen, 1979; Ferguson, 1976; Guilford & Fruchter, 1982; Pedhazur, 1982). The ability of the unemployment-frustration scale to generate the correlation with job importance can be examined by modifying the *correction for attenuation* formula (Ferguson, 1976, p. 432). The correction for attention formula reported by Allen and Yen (1979, p. 98) is:

$$\rho_{T_X T_Y} = \frac{\rho_{XY}}{\sqrt{\rho_{XX} \rho_{YY}}}$$

In the formula, $\rho_{T_X T_Y}$ is the correlation between the true X and Y scores; ρ_{XY} is the correlation between the observed X and Y scores; and ρ_{XX} and ρ_{YY} is the reliability of X and Y. Because the correlation between two sets of true scores cannot exceed unity, then $\rho_{T_X T_Y} = 1.00$. By assuming that the maximum correlation between the true scores is unity, the correction for attenuation formula can be modified to provide a formula that calculates the highest possible correlation between two fallible measures:

$$\rho_{XY} = \sqrt{\rho_{XX} \rho_{YY}}$$

The formula indicated that the maximum correlation between two scales is determined by the square root of the reliability for the X scores, multiplied by the reliability for the Y scores. The formula was used to examine the possibility that the correlation between job importance and unemployment frustration was unreasonably high. When the Cronbach's α of the one-item job importance scale was presumed to be 1.00 (i.e., no measurement error), and the Cronbach's α difference score reliability of the unemployment frustration scale was taken as 0.38 (see Table 6.2), then the maximum possible correlation was 0.62. As the observed correlations between job importance and unemployment frustration was 0.52 and the maximum possible correlation was 0.62, there was no evidence of a miscalculation in the change-score data. A more likely explanation for the moderately high correlation between job importance and unemployment frustration would be the large sampling fluctuation in a relatively small sample (Ferguson, 1976; Guilford & Fruchter, 1982; Howell, 1982; Kirk, 1984). Discussion now turns to applying the change scores to test the learned-helplessness and frustrated-motivation theory.

Learned-Helplessness Theory

The cross-sectional analysis reported in Chapter IV revealed that a modified learned-helplessness theory provided a viable explanation for the variation in depression associated with unemployment. The longitudinal data collected during the follow-up interviews also provided an opportunity to evaluate the extent that the model account for the dynamic social processes associated with the impact of unemployment. The causal analysis and associated final causal structure are first reported, followed by a discussion of the results.

A Causal Analysis of Intraindividual Change

The causal structure accepted in Chapter IV and tested with the longitudinal data is presented in Figure 6.1. The exogenous variables in the cross-sectional causal model have been dropped and the α for individual paths has been set at 0.10 due to the limited sample size.

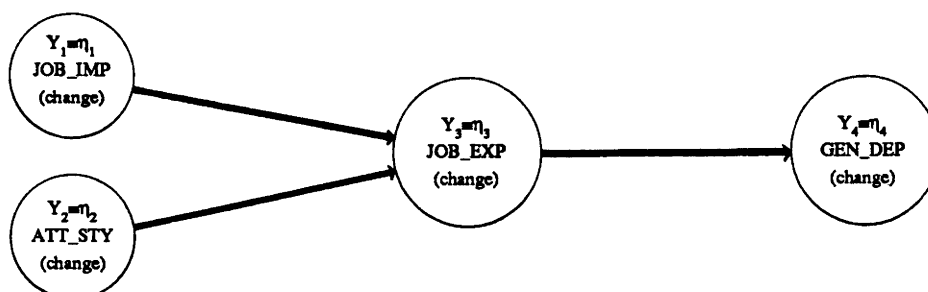


Figure 6.1 Causal Model specified by Learned-Helplessness Theory in Longitudinal Study of the Unemployed. (JOB_IMP (change), Job Importance; ATT_STY (change), Attributional Style; JOB_EXP (change), Job Expectancy; GEN_DEP (change), General Depression.)

The statistical analysis using LISREL to evaluate the causal theory outlined in Chapter II was applied, except for the omission of the iterative procedure due to an absence of exogenous variables. The LISREL analysis applied to the causal structure outlined in Figure 6.1 indicated an equivocal fit between model and data ($\chi^2[3] = 4.84, p = 0.184, AGFI = 0.811$). While the probability estimate (p) was acceptable, the AGFI (Adjusted Goodness of Fit) had not reached the 0.90 recommended by Hill (1987). The causal structure of Figure 6.1 was therefore rejected, and the normalized residuals examined to provide a guide to a model more acceptable with the data. The highest normalized residual and modification index value indicated that the maximum gain in model-fit could be obtained by freeing $\beta_{4,1}$. The new model provided an acceptable fit with the data ($\chi^2[2] = 1.61, p = 0.447, AGFI = 0.908$).

The final causal model developed during the iterative procedure to test the learned-helplessness theory using difference-score data is provided in Figure 6.2. Contrary to predictions, job importance and attributional style did not significantly predict job expectancy. The absence of a direct relationship between job importance and job expectancy ($\beta_{3,1} [43] = -.10, p > 0.10$) was inconsistent with the causal model developed during the cross-sectional analysis. Also absent was the direct relationship between attributional style and job expectancy ($\beta_{3,2} [43] = -.15, p > 0.10$). The job importance and job expectation variables, in contrast, performed in a manner consistent with the original model. The relationship between job importance and general depression introduced during the longitudinal analysis was particularly interesting ($\beta_{4,1} [43] = .26, p < 0.10$), because the cross-sectional analysis indicated a relationship in the opposite direction. The longitudinal analysis using the change-score data indicated that increasing values placed on getting a job are related to increasing levels of general depression. The other finding is the negative relationship between job expectancy and general depression ($\beta_{4,3} [43] = -.32, p < 0.10$). The levels of expectation of getting a job fluctuate in accordance with the levels of general depression for the unemployed.

In summary, the initial causal model developed during the cross-sectional analysis was rejected. The model was amended by introducing a direct causal link between job importance and general depression. Although changes in job importance and job expectancy were associated with changes in general depression, there was little evidence that job expectancy acted as a mediating variable for variations in job importance and attributional style.

Discussion

The final causal model developed during the longitudinal analysis revealed that changes in the importance of getting a job, and the expectations placed on getting a job, were instrumental in

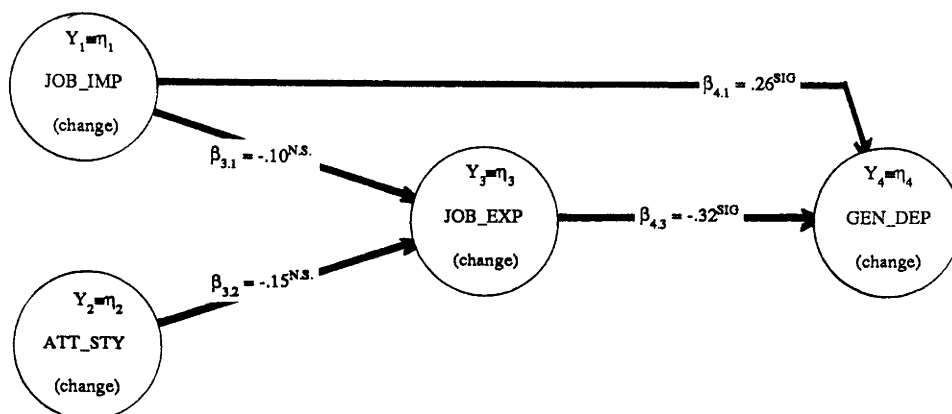


Figure 6.2 Final Causal Model for Learned-Helplessness Theory developed during Longitudinal Study of the Unemployed. (JOB_IMP (change), Job Importance; ATT_STY (change), Attributional Style; JOB_EXP (change), Job Expectancy; GEN_DEP (change), General Depression.)

generating depression in the young unemployed. The causal model indicated that the individuals who were most likely to become depressed during unemployment tended to value a job more, and had lower expectations of getting a job in the future. The final causal model developed during the longitudinal analysis has a number of implications for the learned-helplessness theory used to guide the study.

The learned-helplessness theory outlined at the beginning of the cross-sectional study (see Chapter I) proposed that individuals exposed to repeated and uncontrollable life-events, who tended to attribute internal, stable and global factors for negative life-events, and external, unstable and specific factors for positive life-events, would be most likely to exhibit low expectations for future control and high levels of depression. Furthermore, the model specified by the theory proposed that the greater the value placed on the life-event, the greater the depressive response (Abramson, Seligman & Teasdale, 1978; Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984). Although the model specified by the learned-helplessness theory was generally consistent with the cross-sectional data, the model developed during the cross-sectional analysis indicated that job importance had a direct and positive impact on job expectancy, indicating that high levels of job importance was directly related to high levels of job expectancy (refer Figure 4.1).

The model developed during the longitudinal analysis was very different to the cross-sectional model. The only concordance between the cross-sectional model and the model developed during the longitudinal analysis was the negative and direct relationship between job expectancy and general depression, indicating that changes towards low expectations of getting a job in the future was related to changes towards high levels of general depression. But the longitudinal model and the cross-sectional model were different on a number of accounts. The difference in performance of the job importance variable between the two models was particularly notable and indicated a complex relationship. In the cross-sectional model, the impact of job importance on general depression was mediated by job expectancy. However, during the longitudinal study, the mediated link via job expectancy was found to be inactive. Hence, the prediction at the beginning of the longitudinal analysis that job importance and job expectancies were linked together in a "network of coherent beliefs", and that high job importance was related with high job expectations, was not supported.

But more unexpected, was the new causal pathway between job importance and general depression that was necessary during the longitudinal analysis to provide an adequate fit between model and data. The new pathway rejected the causal model developed during the cross-sectional analysis because the causal influence of job importance upon general depression was in a direction opposite to that indicated by the cross-sectional model. Whereas the cross-sectional model had indicated that high job importance was associated with low general depression, the longitudinal model indicated that high job importance was related with high general depression. In other words, the higher the value an unemployed person placed on getting a job, the higher the levels of general depression.

Although the unexpected relationship between job importance and general depression clearly rejects the cross-sectional model, the finding supports the learned-helplessness theory originally outlined in Chapter I on two points. First, the impact of job importance upon general depression is direct, and independent of the cognitive processes that generate depression. Second, the greater the value placed on a desired goal, the greater the levels of depression. The discrepant results support the claim that cross-sectional studies may lead to misleading conclusions in social research, and that longitudinal data are necessary to adequately investigate the processes that generate human behaviour (Baltes & Nesselrode, 1973; Rogosa, 1979).

Another difference to the cross-sectional model concerns the absence of a relationship between attributional style and job expectancy. The cross-sectional model indicated that the more internal, stable and global the attributional style for negative life-events, and the more external, unstable and

specific the attributional style for positive life-events, the lower the expectations for getting a job in the future. There was, however, no evidence in the longitudinal analysis that attributional style influenced future expectations of getting a job. The absence of a relationship is also inconsistent with the learned-helplessness theory, as the theory states that attributional style is a primary determinant of future expectancies on any given task.

A potential explanation for the absence of a relationship between attributional style and expectations of a job in the future was the designation of attributional style as a dynamic instead of a stable variable. Attributional style is sometimes considered a trait, sometimes considered dynamic (Peterson & Seligman, 1984), but the present study followed recent findings that attributional styles in the young unemployment are dynamic and change according to circumstance (Winefield, Tiggemann & Winefield, 1990). However, a *post-hoc* causal analysis with attributional style as a stable variable also failed to find a relationship between attributional style and job expectancy.

Overall, the causal model developed during the longitudinal analysis rejected the cross-sectional model on a number of points. First, job importance and attributional style were found not to have an influence on job expectancy. Second, job importance was found to have a direct influence upon general depression that was not included in the cross-sectional model. Third, the direct influence of job importance was in the opposite direction to that found in the cross-sectional model, with high job importance being related with high general depression. Nevertheless, the learned-helplessness theory as formulated in Chapter I did receive some support on three issues. First, low levels of expectation were associated with high levels of general depression. Second, the direct relationship between job importance and general depression supports the proposition in the original theory, that job importance has a direct impact upon general depression that is independent of the other cognitive processes involved in generating depression. Third, the greater the importance of gaining a goal that remains out-of-reach, the greater the depression.

A more general and unexpected finding, however, was the absence of evidence concerning the increased depression that has been commonly reported in the literature. The learned-helplessness theory was proposed as a theoretical explanation for the accumulating depression that has been consistently reported in the literature (i.e., Eisenberg & Lazarsfeld, 1938; Hepworth, 1980; Hill, 1977; Warr, 1983). The observation that depression increases during unemployment has been particularly prevalent in the literature, and is often assumed as an explanation for the emotional differences between the young who are employed and unemployed (i.e., Jahoda, 1979). However, the evidence available in the present longitudinal study, failed to support the increasing group levels of depression during the period of unemployment. Examination of the descriptive statistics

for the difference score variables indicated little evidence for an average change in group scores over time (refer Table 6.1). For example, the statistics for general depression revealed large intraindividual variations as indicated by that range (-3.79 to 3.57) and standard deviation (1.66) of the difference scores, but virtually no evidence of a mean score shift in general depression between the initial and follow-up interviews (0.21).

The absence of evidence for a mean score shift in difference scores was not only confined to the measure of general depression. Examination of the group-change scores for other variables such as job importance, attributional style and job expectancy, are identical. A number of methodological explanations can be formulated to account for the failure to find evidence for the deterioration of emotional health during unemployment. A potential explanation for the failure to detect uniform changes in general depression is the moderate reliability of the difference scores (Ferguson, 1976). However, the Cronbach's α for the instruments used to measure change in general depression (refer Table 6.2) are acceptable (Pedhazur, 1982), and the absence of a difference is evident in the other cognitive and affect measures. Besides, the substantial intraindividual covariation was evident during the analysis of the causal structure outlined by the learned-helplessness theory.

The failure to replicate the finding so commonly reported in the unemployment literature, suggests that unequivocal statements are dangerous. But the general picture appears to be that there is little evidence for a uniform response to unemployment. The finding supports the observation of a great variation in emotional reactions to unemployment (i.e., Bakke 1933), but fails to support the usual finding of a consistent relationship between length of unemployment and level of general depression (i.e., Jahoda, Lazarsfeld & Zeisel, 1933/1972). The most tangible conclusion with the data available, is that unemployment does not have the overall detrimental impact that has been often reported in the literature. However, the range of individual responses to unemployment is great and that some individuals appear to be emotionally bruised by the experience while others are unaffected.

In conclusion, the learned-helplessness theory met with limited success in accounting for changes in levels of general depression over time. Surprisingly, there was little evidence to support the proposition often supported in the literature that unemployment leads to increased levels of depression. Unfortunately, the small sample size excluded the opportunity to explore the relationship between background variables and dynamic endogenous variable, and the ability of the causal processes envisaged by the learned-helplessness to link with environmental event could not be ascertained.

Frustrated-Motivation Theory

The cross-sectional analysis revealed that an amended frustrated-motivation theory provided an account for the variation in depression associated with the impact of unemployment. The causal model was again evaluated, but with longitudinal data to test the extent that the model could provide an account of the dynamic and detrimental processes associated with unemployment. The section begins by discussing the causal analysis and final causal structure, followed by an examination of the results.

A Causal Analysis of Intraindividual Change

The causal analysis of the frustrated-motivation theory proceeded with the 43 unemployed respondents at follow-up. As with the learned-helplessness analysis, causal analysis was restricted to endogenous variables and the α levels was set at 0.10 due to the small sample size. The causal structure was identical to the structure found successful in the cross-sectional analysis and is presented in Figure 6.3.

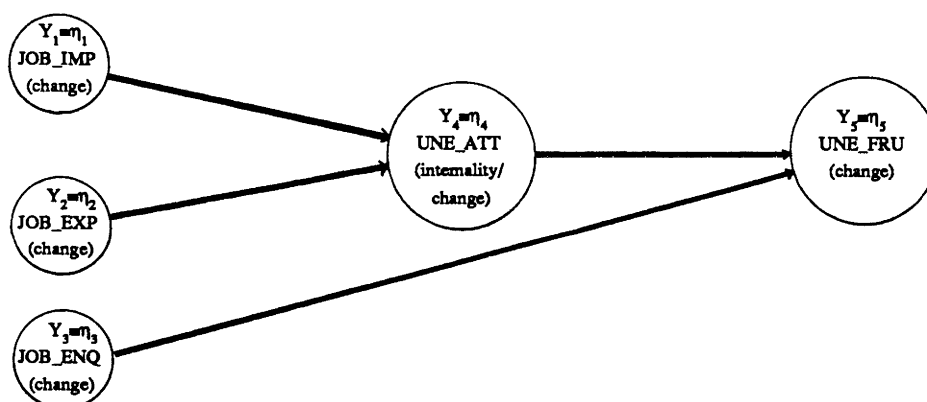


Figure 6.3 Causal Model specified by Frustrated-Motivation Theory in Longitudinal Study of the Unemployed. (JOB_IMP (change), Job Importance; JOB_EXP (change), Job Expectancy; JOB_ENQ (change), Job Enquiries; UNE_ATT (internality/change), Internal-External Unemployment Attributions; UNE_FRU (change), Unemployment Frustration.)

The LISREL analysis of the causal structure in Figure 6.3 was rejected ($\chi^2[6] = 23.40$, $p = 0.001$, AGFI = 0.600). Examination of the normalized residuals and modification indices indicated that the addition of a causal path between unemployment frustration and job importance ($\beta_{5,1}$) would improve the fit between model and data. The analysis was repeated and the results were marginal ($\chi^2[5] = 5.57$, $p = 0.350$, AGFI = 0.864). Although marginal, the causal model was retained because p was acceptable, AGFI was borderline, and the results were consistent with the causal model established in the cross-sectional analysis.

The successful causal model and structural parameter estimates are presented in Figure 6.4. The structural parameter estimates in the model met with equivocal success, as the relationship between unemployment frustration and job enquiries ($\beta_{5,3}$ [43] = $-.20$, $p < 0.10$) and between unemployment frustration and unemployment attributions ($\beta_{5,4}$ [43] = $-.20$, $p < 0.10$) were borderline significant. For example, the relationship between unemployment frustration and job enquiries ($\beta_{5,3}$) has a $t = -1.56$ when the significant t value is plus or minus 1.68. The same applies to the relationship between unemployment frustration and internal-unemployment attributions ($\beta_{5,4}$), where the t value for the parameter is $t = -1.60$ and the significant value is plus or minus 1.68. Although the two parameters are technically nonsignificant, because of the small sample size and relatively large number of parameters (five), the results were deemed significant to avoid crossing-out a promising line of enquiry (Kirk, 1984).

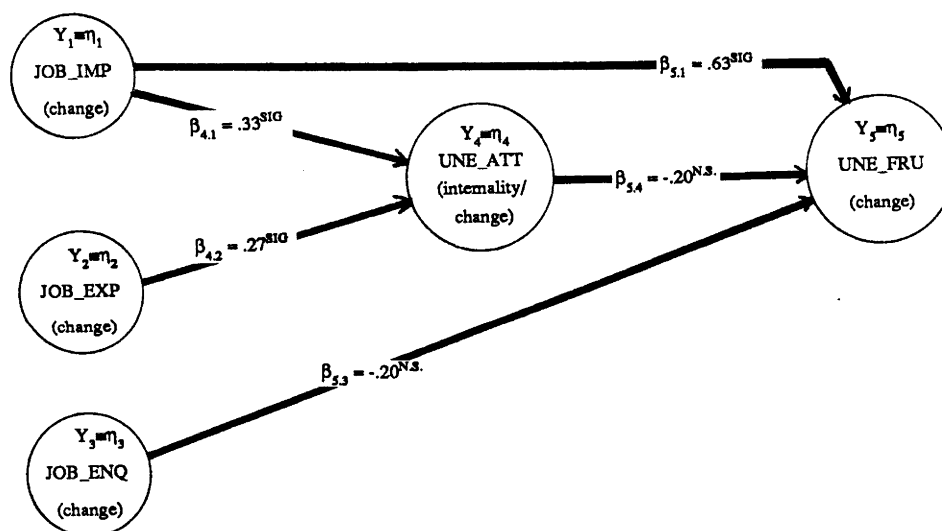


Figure 6.4 Final Causal Model for Frustrated-Motivation Theory developed during Longitudinal Study of the Unemployed. (JOB_IMP (change), Job Importance; JOB_EXP (change), Job Expectancy; JOB_ENQ (change), Job Enquiries; UNE_ATT (intemality/change), Internal-External Unemployment Attributions; UNE_FRU (change), Unemployment Frustration.)

Examination of the longitudinal model indicated that the cross-sectional model failed to account for a direct relationship between job importance and unemployment frustration importance ($\beta_{5,1}$ [43] = $.63$, $p < 0.10$), indicating that an increase of job importance was directly related with higher levels of unemployment frustration. The indirect relationship between unemployment frustration and job importance mediated by internal unemployment attributions also departed from the cross-

sectional model. Although more external attributions were associated with higher levels of unemployment frustration consistent with the original predictions ($\beta_{5,4}$ [43] = -.20), higher job importance was related to more internal explanations for not having a job and was contrary to prediction ($\beta_{4,1}$ [43] = .33, $p < 0.10$). The direct relationship revealed that higher levels of job importance were associated with higher levels of unemployment frustration, while the indirect relationship mediated by unemployment attributions indicated that an increase in job importance decreased unemployment frustration. The direct causal link was substantially more influential. According to the multiplicative rule of path analysis (Bohrstedt & Knoke, 1982; Saris & Stronkhorst, 1984), the direct impact of job importance accounted for roughly 40% of the variance in unemployment frustration, while the indirect effect was virtually nonexistent (less than 0.01%).

The relationship between unemployment frustration and job enquiries also ran contrary to predictions. In the original causal model developed during the cross-sectional analysis, high levels of job enquiries were found to be associated with high levels of unemployment frustration. However, in the present analysis using change-score data, the structural estimates indicated the opposite influence, with increasing levels of job enquiries associated with decreasing levels of frustration ($\beta_{5,3}$ [43] = -.20).

In conclusion, the original model met with mixed success. Although *post-hoc* modifications to the causal structure provided a model that fitted the data, the structural estimates did not perform according to predictions. For instance, increasing levels of importance placed on getting a job were found to be associated with higher levels of unemployment frustration, but the relationships were not mediated by the variables in the model. Furthermore, although job importance and job expectancy combined to determine unemployment attributions, the indirect impact did not increase the levels of frustration in a manner consistent with original predictions, but instead resulted in a decrease in the levels of frustration.

Discussion

The causal model developed when evaluating the frustrated-motivation theory using cross-sectional data indicated that respondents who become more frustrated with unemployment tended to place more value on having a job, view external factors as thwarting their attempts to gain employment, have lower expectations of getting a job in the future, and initiate more job applications. The causal structure of the cross-sectional model was generally successful in the longitudinal analysis, although a direct causal relationship between job importance and unemployment frustration was necessary before an acceptable fit between model and data was obtained. The new causal relationship indicated that high levels of job importance were associated

with high levels of unemployment frustration. Although the new causal relationship indicated a change in the causal structure that generated unemployment frustration, the new model was still consistent with the "frustration theme" inherent in the frustrated-motivation theory, as the high levels of value placed on getting a job and the presumed high motivation, were still associated with the high levels of unemployment frustration.

A number of the structural coefficients estimated from the longitudinal data also supported the cross-sectional causal model. For example, the longitudinal model confirmed the prediction that individuals with high expectations of getting a job, would be predisposed to formulate internal attributions when asked to explain the reason for their unemployment. The finding is consistent with the view proposed during the cross-sectional analysis that an individual with high expectations of getting a job also believes that a contingency exists between job-seeking behaviour and job acquisition, and that the appropriate job-seeking behaviour can be performed when necessary. The longitudinal model also confirmed the prediction that people who cite external factors for being unemployed are more likely to express frustration at being unemployed. The finding supports the proposal that external factors are often cited as factors that thwart or block the individual's attempts to gain employment, and are instrumental in generating frustration (Feather & Barber, 1983; Feather & Davenport, 1981).

Nevertheless, a number of structural coefficients estimated in the causal model were inconsistent with predictions. The most notable discrepancy between predictions and results occurred for the relationship between job importance and internal-external unemployment attributions. The prediction based on theory and findings in the cross-sectional analysis was that high levels of job importance would be associated with more external unemployment attributions. In contrast, however, the longitudinal model indicated that high levels of job importance were associated with more internal unemployment attributions. The unanticipated relationship between job importance and unemployment attributions also modified the mediational impact of job importance upon unemployment frustration. Instead of high job importance being associated with high frustration, high job importance was found to be associated with low frustration.

The frustrated-motivation theory needs to be revised to account for the new role that job importance has been found to have in the generation of unemployment frustration. The original causal relationship between job importance and unemployment attributions in the cross-sectional model was based on the proposal by Feather and Davenport (1981) that individuals who place a high importance on getting a job, would be more motivated to seek employment, less likely to view their unemployment as due to lack of motivation (an internal factor), and more likely to cite

external factors as explanations for their present unemployment. Therefore, high job importance would be associated with more external unemployment attributions. However, the direction of the relationship was found to be the opposite in the longitudinal model, with high levels of job importance being associated with more internal unemployment attributions. A potential explanation for the unexpected relationship between job importance and internal-external unemployment attributions is that the more importance placed on getting a job, the greater the chance that an individual engages in self-examination (hence internal attributions) to isolate the reasons for past failures to get a job.

But the major theoretical ramification of the unexpected relationship between job importance and unemployment attributions, stems from the altered mediational influence that job importance has upon unemployment frustration. A major tenet of frustrated-motivation theory is that increasing levels of job importance generate higher levels of unemployment frustration. The theoretical prediction was supported during the cross-sectional analysis, although the relationship was found to be mediated by unemployment attributions. In other words, high levels of importance placed on obtaining a job were found to be associated with more external unemployment attributions, and more external unemployment attributions were found to be related with high levels of unemployment frustration. However, the reversed relationship between job importance and unemployment attributions revealed in the longitudinal analysis indicates that, contrary to prediction, rising levels of job importance were associated with decreasing levels of unemployment frustration.

The new relationship between job importance and unemployment frustration as mediated by unemployment attributions, indicates that job importance plays the unanticipated role of reducing unemployment frustration. The breakdown in the frustrated-motivation theory is primarily located with the factors that generate unemployment attributions. The revised theoretical account is that job importance and job expectancy have a major role in generating unemployment attributions that results in the amelioration of unemployment frustration. As previously outlined, high job importance initiates self-examination, and high job expectations indicates a belief in environmental contingency, predisposing an individual to make more internal attributions when citing the reason for their unemployment. For example, an individual who values and expects to get a job, will generally make internal attributions about his or her failure to get a job. As the individual does not cite external attributes and favours internal factors to explain the situation, he or she is unlikely to express frustration with being unemployed.

The new mediational influence of job importance upon unemployment attributions also complicates attempts to interpret the overall causal model. The complication arises due to the presence of a direct and indirect relationship between job importance and unemployment frustration. The direct causal link is from job importance to unemployment frustration, while the indirect influence of job importance upon unemployment frustration is mediated by unemployment attributions. Moreover, the direct and indirect impact of job importance upon unemployment frustration work in opposite directions. The direct relationship reveals that higher levels of job importance are associated with higher levels of unemployment frustration, while the indirect relationship indicates that an increase in job importance decreases unemployment frustration.

The new relationship between job importance and unemployment attributions indicates that job importance has a more complex role in generating unemployment frustrations than envisaged by the frustrated-motivation theory. On the one hand is the direct impact of job importance on unemployment frustration, and on the other, is the indirect process mediated via unemployment attributions. However, the direct impact of job importance is more influential than the indirect influence when accounting for the development of unemployment frustration in the unemployed. The total impact of unemployment attributions in the longitudinal model comes to about 4% of the variance in unemployment frustration, while the direct causal link between job importance and unemployment frustration accounts for about 40% of the variance. The findings indicate that attributional variables have a limited role in the development of unemployment frustration, and add weight to similar results reported by Feather and Barber (1983, p. 193), who also state that "one should not give sovereign status to attributional variables in studies of the psychological impact of unemployment."

The frustrated-motivation theory as portrayed in the cross-sectional model indicated that aside from cognitions, job-enquiry rates had a direct impact upon unemployment frustration. The cross-sectional model indicated that high levels of job enquiries would be associated with high levels of unemployment frustration. In contrast, however, the structural estimates from the longitudinal data indicated the opposite, in that increasing levels of job enquiries were associated with decreasing levels of frustration. The relationship between job-enquiry rates and frustration suggests a different role for the rate of job enquiries in generating frustration. The explanation offered during the cross-sectional analysis was consistent with the "frustrated-motivation" theme, that blocked access to a goal would lead to frustration. When translated to the job-enquiry measure, the explanation was that exposure to more job rejections, demonstrated to an increasing degree that the desired goal of obtaining a job remains beyond reach. An alternative explanation to account for the unexpected results is that the number of job-enquiries might have more to do with confidence about getting a job, so that the higher the number of applications to get a job, the lower the frustration.

The descriptive statistics for the data used to test the frustrated-motivation theory indicated a longitudinal trend identical to the data used to test the learned-helplessness theory (refer Table 6.1). In essence, there were large variations in the individual responses to unemployment with little evidence of a uniform change over time. However, the theoretical implications are not as grave as for the learned-helplessness theory, because there is little evidence in the descriptive or scientific literature that frustration for the unemployed accumulates with time. Moreover, the frustrated-motivation theory as applied in the present study has been formulated as a situation-specific process that is confined to unemployment.

In conclusion, the causal analysis provides limited support for the frustrated-motivation theory outlined in the cross-sectional model. The longitudinal analysis revealed that increasing levels of importance placed on getting a job were associated with higher levels of unemployment frustration, but the relationship was not mediated by variables nominated by the moderated frustrated-motivation theory. Furthermore, although job importance and job expectancy combined to determine internal-external unemployment attributions, the indirect impact did not increase the levels of frustration in a manner consistent with the theory, but instead resulted in a decrease in the levels of frustration. The revised role for attributions is that high job importance initiates self-examination and high job expectations indicate a strong belief in environmental contingency, with individuals more likely to make internal attributions when explaining their unemployment.

Finally, although job-enquiry rates had a direct impact upon unemployment frustration, the influence was opposite to initial predictions, indicating that increasing levels of job enquiries were associated with decreasing levels of frustration. One explanation is that job-enquiries might function more as an indication of confidence in getting a job. A caveat in closing, however, is that the number of parameters and the relatively small sample size makes interpretation of the results speculative, and further investigations with a more substantial sample size are necessary to confirm the interpretations.

The Transition from Unemployment to Employment and Changes in Emotional Health

The second investigation with longitudinal data examined the success of the learned-helplessness theory to account for changes in emotional health that are commonly associated with the transition from unemployment to employment. The analysis combined the 43 unemployed and the 100 employed respondents contacted at the follow-up interviews. The analysis was guided by the learned-helplessness theory outlined in Chapter IV, and was designed to investigate the processes leading to the reduction of depression often associated with gaining employment. The descriptive statistics are initially presented, followed by details of the causal analysis.

Table 6.3

Descriptive Statistics for Exogenous and Endogenous in
Longitudinal Study of Unemployed and Employed at Follow-Up

Variables	Statistics
Exogenous Variables	
Biographic and Demographic	
Age (stable) ^a	
Range	16 to 24
Mean (S.D.)	19.50 (2.19)
Sex (stable)	
Female	39.20%
Male	60.80%
Qualifications (stable)	
Range	1 to 6
Mean (S.D.)	3.48 (1.32)
Residence (dynamic) ^b	
Range	-1 to 1
Mean (S.D.)	-0.18 (0.44)
Number of Co-residents (dynamic)	
Range	-7 to 8
Mean (S.D.)	-0.12 (2.03)
Father's Occupation (stable)	
Range	1 to 6
Mean (S.D.)	2.46 (1.66)
Employment Status	
Employed or Unemployed (dynamic)	
Unemployed	30.10%
Employed	69.90%
Social Comparison	
Number of Unemployed Friends (dynamic)	
Range	-22 to 22
Mean (S.D.)	-2.43 (6.69)
Time with Unemployed Friends (dynamic)	
Range	-11 to 11
Mean (S.D.)	-0.34 (3.31)
Family Members Unemployed (dynamic)	
Range	-1 to 1
Mean (S.D.)	-0.04 (0.39)
Endogenous Variables	
Cognitive Variables	
Job Importance (dynamic)	
Range	-6.00 to 6.00
Mean (S.D.)	-0.01 (2.01)
Attributional Style (dynamic)	
Range	-67.00 to 38.80
Mean (S.D.)	-1.54 (19.92)
Job Expectancy (dynamic)	
Range	-38.00 to 36.00
Mean (S.D.)	1.67 (12.54)
Affective Variables	
General Depression (dynamic)	
Range	-4.82 to 3.91
Mean (S.D.)	0.02 (1.66)

(a) assessed at initial contact.

(b) assessed as a change score by subtracting initial from follow-up score.

Descriptive Statistics

All the exogenous variables used in the cross-sectional analysis were initially considered for use in the longitudinal analysis. However, a number of variables were dropped when closer inspection revealed that they were unsuitable for the employed respondents at the follow-up. Variables omitted from the analysis included length of unemployment registration, number of enquiries per week, breadth of job applications, having a job before unemployment, holding a part-time job and having something lined up. The means, standard deviations, minimum and maximum scores of the endogenous and exogenous variables used in the longitudinal analysis are reported in Table 6.3. Examination of the variable frequencies revealed no need to alter the data to account for outliers or skewed distributions. The variables listed in Table 6.3 were also classified as stable or dynamic. Because learned-helplessness theory provides a dynamic account of psychological processes that are presumed to be active during the transition from unemployment to employment, all endogenous cognitive and affect variables were treated as dynamic. Table 6.4 reports the polychoric and polyserial correlation matrix for the variables selected in the causal analysis.

Table 6.4

**Polychoric and Polyserial Intraindividual Correlation Matrix for
Causal Analysis in Longitudinal Study of Unemployed and Employed at Follow-Up**

Variables	1	2	3	4	5	6	7
1. Job Importance	1.0000						
2. Attributional Style	.0285	1.0000					
3. Job Expectancy	.0203	-.0388	1.0000				
4. General Depression	.0679	.1733	-.4496	1.0000			
5. Age	.0857	.0043	.1697	.0105	1.0000		
6. Sex	.2879	-.1987	.3062	-.1068	.0150	1.0000	
7. Qualifications	.0569	-.0049	.0146	.0022	.4704	-.0826	1.0000
8. Residence	-.0893	-.0490	.0453	-.0479	.1391	-.1775	.0310
9. Number of Co-residents	-.0833	.0229	.0575	-.0005	.0567	-.1139	.0090
10. Father's Occupation	-.1469	.0667	-.0893	.1015	-.1256	.0512	-.3269
11. Employment Status	-.1487	-.0960	-.0261	-.0990	.0784	-.1497	.1829
12. Number of Unemployed Friends	.0455	-.0062	.0613	-.1331	.0455	-.0323	-.0589
13. Time with Unemployed Friends	.0297	.0010	-.0343	.0838	-.0179	-.0963	-.0058
14. Family Members Unemployed	.0887	-.0542	-.0691	.0656	.0572	-.0644	.0662
Variables	8	9	10	11	12	13	14
8. Residence	1.0000						
9. Number of Co-residents	.1823	1.0000					
10. Father's Occupation	-.1272	.0313	1.0000				
11. Employment Status	.1006	-.1153	-.2023	1.0000			
12. Number of Unemployed Friends	.0744	.0676	.0471	-.1943	1.0000		
13. Time with Unemployed Friends	.0776	.0177	.0009	-.1585	.2414	1.0000	
14. Family Members Unemployed	.0367	-.0243	-.0429	-.2065	.0638	.2401	1.0000

Learned-Helplessness Theory

The learned-helplessness theory provided a viable explanation for the variation in depression associated with unemployment, but is investigated in the present analysis to provide a plausible account for the dynamic processes associated with the transition from unemployment to employment. The causal analysis and associated final causal structure is first reported, followed by a discussion of the results.

A Causal Analysis of Intraindividual Change

The scores for the unemployed and employed respondents in the follow-up interview were brought together to enable an examination of the learned-helplessness theory as an account for the reduction of general depression often associated with obtaining a job. The causal model based on the successful analysis in Chapter III is presented in Figure 6.5.

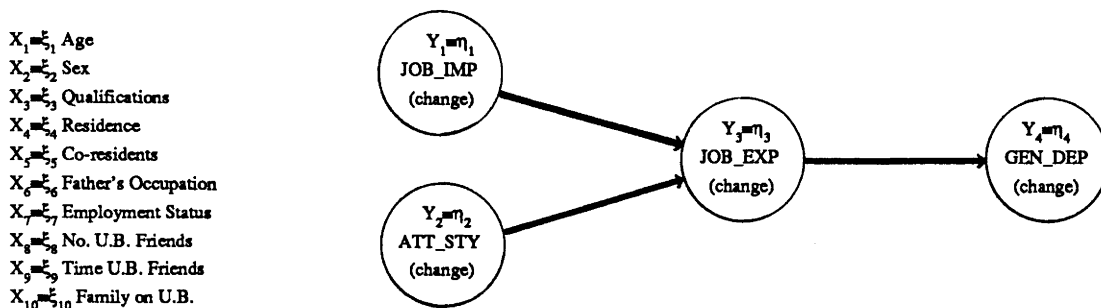


Figure 6.5 Causal Model specified by Learned-Helplessness Theory in Longitudinal Study of the Unemployed and Employed. (JOB_IMP (change), Job Importance; ATT_STY (change), Attributional Style; JOB_EXP (change), Job Expectancy; GEN_DEP (change), General Depression.)

Although the causal analysis with the unemployed group excluded exogenous variables due to the small sample size, the 143 individuals in the present analysis provided sufficient data to include all eligible exogenous variables. The causal analysis proceeded in the manner outlined in Chapter III. The analysis began with a specification of the causal relationships between the endogenous variables (the β relationships) determined by learned-helplessness theory, but with no specification of the causal relationships between the exogenous and endogenous variables (the γ relationships). The analysis then proceeded by freeing the γ relationships in accordance with the recommendations provided by LISREL in the modification and normalized residual tables. When all the modification indices were below 5.00, any discrepancy between the causal model and the data was then attributable to the causal structure specified by the learned-helplessness theory. The results of the iterative analysis are reported in Table 6.5.

Table 6.5

Causal Analysis using Iterative Procedure to Evaluate
Learned-Helplessness Theory in Longitudinal Study
of Unemployed and Employed at Follow-Up

	Free	<i>d.f.</i>	χ^2	<i>p</i>	GFI	AGFI	RMR
step 1	null	43	73.25	<i>p</i> = 0.003	0.938	0.848	0.066
step 2	$\gamma_{3,2}$	42	58.63	<i>p</i> = 0.046	0.947	0.868	0.062
step 3	$\gamma_{1,2}$	41	46.34	<i>p</i> = 0.261	0.956	0.888	0.054
step 4	$\gamma_{2,2}$	40	40.63	<i>p</i> = 0.443	0.961	0.897	0.051

The iterative procedure was continued until the AGFI was comparable to the 0.90 specified by Hill (1987). Examination of the print-out at step 5 indicated that a large number of the exogenous variables were unrelated to the cognitive and affective change variables in the causal model. These variables included age, qualifications, residence, number of co-residents, father's occupation, number of unemployed friends, time with unemployed friends, family members unemployed, and were dropped from further analysis. The only exogenous variables remaining was sex. The analysis was rerun after the removal of the inactive exogenous variables, with the new model fit statistics found to be acceptable ($\chi^2[4] = 6.91$ *p* = 0.141 AGFI = 0.926).

The final causal model developed during the iterative procedure to test the learned-helplessness theory using change-score data is provided in Figure 6.6. Although a fit between model and data was achieved, examination of the structural coefficients revealed that most of the causal paths were inactive. The two endogenous causal relationships that were not statistically significant, involved the relationship between job importance and job expectancy ($\beta_{3,1}$ [143] = -.08, *p* > 0.05), attributional style and job expectancy ($\beta_{3,2}$ [143] = .03, *p* > 0.05). The only significant endogenous causal path was between job expectancy and general depression ($\beta_{4,3}$ [143] = -.45, *p* < 0.05), indicating that higher levels of job expectation were related to decreasing levels of general depression.

The absence of relationships between exogenous and endogenous variables was also particularly evident. Of the ten exogenous variables, nine were redundant. Most unexpected was the absence of relationship between employment status and the cognitive or affect variables in the model, because descriptive studies (i.e., Marsden & Duff, 1975) and social research (i.e., Warr & Jackson, 1985) have reported that the transition from unemployment to employment was accompanied by improvements in emotional well-being. Sex was the only influential exogenous

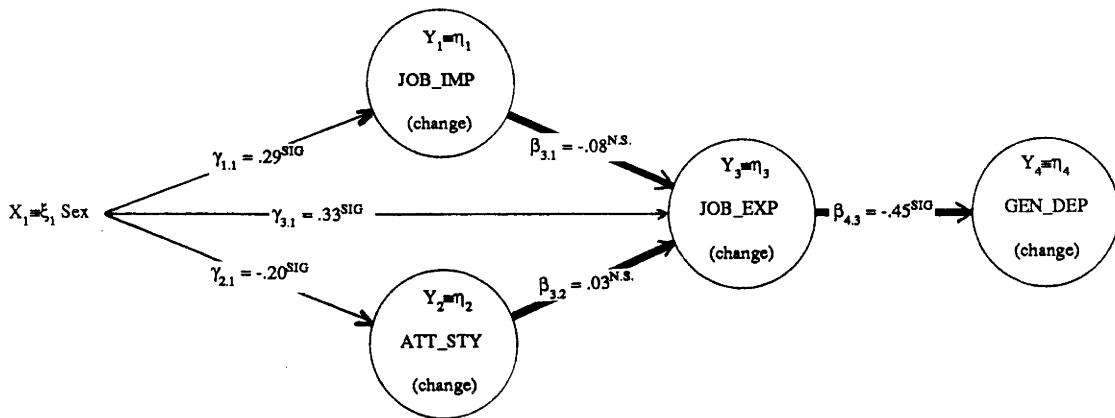


Figure 6.6 Final Causal Model for Learned-Helplessness Theory developed during Longitudinal Study of the Unemployed and Employed. Model includes γ paths added during iterative procedure. (JOB_IMP (change), Job Importance; ATT_STY (change), Attributional Style; JOB_EXP (change), Job Expectancy; GEN_DEP (change), General Depression.)

variable, and had an impact on changes in job importance ($\gamma_{1,1}$ [143] = .29, $p > 0.05$), changes in job expectancy ($\gamma_{3,1}$ [143] = .33, $p > 0.05$), and changes in attributional style ($\gamma_{2,1}$ [143] = -.20, $p > 0.05$). Over time and relative to females, males displayed an increase in the importance on getting a job, an increase in job expectations, and developed an attributional style that was more internal, stable and global.

Because of the poor results, the polychoric and polyserial correlation matrix for the 143 unemployed and employed people (refer Table 6.4) was examined for another lead in the analysis, but the matrix revealed few significant relationships to provide the foundations for a *post-hoc* model. Not only did the causal model cited appear to fail, but the variables appeared inappropriate. An exploratory course of action was to examine the polychoric and polyserial correlation matrix for the one hundred people who changed employment status from unemployment to employment for possible leads to an alternative course of action. However, again, there appeared few relationships upon which a model could be built.

Discussion

The forty-three unemployed and one hundred employed individuals interviewed at follow-up, provided the opportunity to investigate psychological explanations for the changes in emotional health that accompany the transition from unemployment to employment. The social research

literature and causal model developed during the cross-sectional analysis indicated that learned-helplessness theory might provide a successful theoretical explanation for the variation in emotional health.

The causal model developed during the cross-sectional analysis indicated a number of causal relationships involved in generating depression (refer Figure 3.4). The first involved the relationship between job importance and job expectancy, a relationship believed to be founded on an individual's attempt to maintain a consistent set of beliefs. If an individual believed that getting a job was important, to maintain a coherent set of beliefs, he or she would also have strong expectations of getting a job in the future. Another causal relationship was between attributional style and job expectancy, and postulated that an individual's general style of interpreting events has implications for his or her expectations of getting a job in the future. In particular, an individual who has low expectations of getting a job in the future, tends to attribute bad events to internal, stable and global factors and good events to external, unstable and specific factors. The final causal relationship was between job expectancy and general depression, founded on the proposal that individuals' low expectations of getting a job in the future were directly related to high levels of depression.

The final consideration concerned the impact of the change in employment status upon the cognitive processes outlined by learned-helplessness theory. The causal model developed during the cross-sectional study cited a number of variables instrumental in generating depression in the unemployed, and that could be influenced by the transition to employment. Employment-status change may have had an impact upon job importance, attributional style and job expectancy. Alteration of one or more of these variables would have implications for the levels of depression during the transition from unemployment to employment.

The application of learned-helplessness theory to account for the reduction in general depression for employed and unemployed individuals in the longitudinal study was unsuccessful. Although a fit between the theory and data was achieved, examination of the structural coefficients revealed that most causal paths were inactive. The two endogenous causal relationships not statistically significant included the relationship between job expectancy and job importance, and job expectancy and attributional style. The only significant endogenous causal path was between job expectancy and general depression, indicating that higher levels of job expectation were related to decreasing levels of general depression.

The absence of relationships between exogenous and endogenous variables was also particularly evident. Of the ten exogenous variables, nine were redundant and consisted of respondent's age, qualifications, place of residence, number of co-residents, father's occupation, employment status, number of unemployed friends, time in the company of unemployed friends and number of family members unemployed. Most unexpected was the absence of relationship between employment status and the cognitive or affect variables in the model, because both descriptive studies (i.e., Marsden & Duff, 1975) and social research (i.e., Warr & Jackson, 1985) have reported that the transition from unemployment to employment is accompanied by improvements in emotional well-being. Sex was the only influential exogenous variable, and had an impact on changes in job importance, job expectancy, and attributional style. Males compared to females displayed an increase in the importance on getting a job, an increase in job expectations, and developed an attributional style that was more internal, stable and global.

The results were generally disappointing and provided few promising leads. Examination of the polychoric and polyserial intraindividual correlation matrix for the one hundred and forty-three unemployed and employed people (refer Table 6.4) revealed few significant relationships to provide the foundations for a *post-hoc* model. Not only did the causal model cited appear to fail, but the variables appeared inappropriate. An exploratory course of action was to examine the polychoric and polyserial correlation matrix for the one hundred people who changed employment status from unemployment to employment for leads to an alternative course of action. Again, however, there appeared few relationships upon which a model could be built. Attempts to develop causal models that account for individual changes in psychological health that purportedly accompany changes in employment status will need to look elsewhere.

Conclusion

A social-cognition perspective was used in a longitudinal study to provide two theories to account for the relationship between employment status and emotional health. The first investigation used learned-helplessness and frustrated-motivation theory to explain the relationship between unemployment and emotional health. The learned-helplessness theory met with reasonable support, although there was no evidence that the influence of job importance and attributional style upon general depression was mediated by job expectancy. The modified frustrated-motivation theory also received limited support. As predicted by theory, high levels of importance placed on having a job were directly related with high levels of frustration. However, the mediational processes provided by internal-external unemployment attributions did not increase the levels of frustration in a manner consistent with the theory, but resulted in a decrease in the levels of

frustration. Nevertheless, the number of structural coefficients estimated from the relatively small sample size makes interpretation of the results speculative, and further investigations with a larger sample size would be necessary to substantiate the conclusions.

The second investigation evaluated the success of the learned-helplessness theory in explaining changes in emotional health associated with the transition from unemployment to employment. Results were unsupportive as the causal model specified by learned-helplessness theory failed and the variables appeared inappropriate. Additional attempts to develop a causal model based on the available data were unsuccessful. In summary, the learned-helplessness and frustrated-motivation theories provided limited explanations for the negative emotional reactions to unemployment, but the learned-helplessness theory was unsuccessful in accounting for the changes in emotional health that accompany the transition from unemployment to employment.

Chapter VII

General Discussion

The primary objective in the present study was to investigate the psychological processes involved in the relationship between employment status and emotional health. Two strategies were used: first, a causal modelling approach to explore the causes of individual variation in emotional health; second, a social-cognition perspective to provide psychological explanations for the emotional impact of unemployment and employment. The following discussion examines the success of the causal modelling strategy and social-cognition perspective, provides suggestions for programmes designed to assist the unemployed, and makes recommendations for research with the unemployed in the future.

Causal Analysis in Cross-Sectional and Longitudinal Research

The statistical approach adopted in the cross-sectional and longitudinal studies were based on recent developments in causal analysis (Bentler, 1986) and life-span developmental psychology (Baltes, Reese & Nesselroade, 1977). The causal analysis involved using social theory in a causal-process form to nominate the variables and specify the causal structure believed to generate emotional health. The social theory was then translated into a causal model and evaluated by assessing the compatibility between the model and the data. Life-span developmental psychology provided the concepts of interindividual differences and intraindividual change that laid the foundation for a statistical procedure to evaluate the causal models in the cross-sectional and longitudinal studies.

The present study provided the opportunity to contrast findings when using cross-sectional and longitudinal research methods. The data collected in the cross-sectional study recorded the differences between individuals at one point in time and enabled a causal analysis of interindividual differences, while the longitudinal study provided data that assessed individual change over time and enabled a causal analysis of intraindividual change. Although the causal analysis of interindividual differences has previously been used to investigate the emotional impact of unemployment (i.e., Brenner & Bartell, 1983), the approach taken in the present study of using change-score data to provide a measure of intraindividual change was new.

Interestingly, the causal analysis of interindividual differences using cross-sectional data and the causal analysis of intraindividual change using longitudinal data often provided similar results. For example, job expectancy, job importance and attributions tended to remain as important

determinants of behaviour in both cross-sectional and longitudinal studies. However, results with the job importance variable did vary. Although the performance of the job-importance variable remained consistent across studies in accounting for the development of unemployment frustration (compare Figure 3.7 and 6.4), the nature of the relationship between job importance and general depression changed in the cross-sectional and longitudinal studies (compare Figure 3.4 and 6.2). In the cross-sectional study of the learned-helplessness theory, the impact of job importance upon general depression was mediated by job expectancy, and high levels of job importance were related with low levels of general depression. In the longitudinal study, however, the impact of job importance upon general depression was not mediated by job expectancy, and high levels of job importance were related with high levels of general depression.

The performance of the job-importance variable between the cross-sectional and longitudinal studies indicates that different results can be obtained when using measures of interindividual differences and intraindividual change. When comparing results in the cross-sectional and longitudinal studies, however, an emphasis must be given to the causal analysis of intraindividual change for two reasons. First, a causal analysis of interindividual differences is based on cross-sectional data that expresses the differences between people, and the covariation of differences between people may be due to many factors that are unrelated to the process under investigation (Rogosa, 1979). Second, if a causal-process theory and the associated causal model are presumed to specify the causal mechanisms that "force" a change in human behaviour (Blalock, 1964), then only the data collected in a longitudinal study that measures intraindividual change and provides a measure that captures the dynamics of change over time.

In conclusion, a causal analysis was conducted using data collected in a cross-sectional and longitudinal study. The cross-sectional study provided data that recorded the differences between people, while the longitudinal study used procedures that measured change within individuals over time. The causal analysis of interindividual differences and intraindividual change provided results that were generally consistent, except for the measure of job importance. The different findings support the proposition that longitudinal data are necessary to provide a full test of causal models that purportedly account for the changes in human behaviour over time.

The Social-Cognition Perspective

Recent literature reviews of the relationship between employment status and emotional health indicate that most research has evaluated emotional outcome, but failed to examine the processes that generate emotional health (Kelvin & Jarrett, 1985). A central tenet in the present study was

that a social-cognition perspective could provide comprehensive causal-process explanations for the relationship between employment status and emotional health. The *social-cognition perspective* is an umbrella term for theories postulating that much human thought is social in origin, and is a major contributor to human behaviour (Argyle, 1988; Bandura, 1986). The success of applying a social-cognition perspective to providing theoretical explanations for the relationship between employment status and emotional health is now explored.

Unemployment and Emotional Health

The results in the present study supported the proposal by Feather and Davenport (1981) that reactions to unemployment can be considered as situation-specific or general. Although the measures for general depression and unemployment frustration were correlated, the different variables and causal structures developed during the analysis endorsed the policy of pursuing different causal explanations for the two emotions. The finding also supports the more general proposal by Akiskal (1979), Beck (1967), Depue and Monroe (1978) and Jacobson (1971) that affective reactions to negative life events need to be considered in terms of situation-specific and general reactions.

Learned-Helplessness Theory

Learned-helplessness theory was proposed as an explanation for the levels of depression in the unemployed. The theory predicts that individuals exposed to repeated and unsuccessful attempts to gain employment will experience a loss of control that, when attributed to personal factors, results in increased depression and loss of self-esteem ("general depression"). The causal structure specified by learned-helplessness theory was initially rejected during the cross-sectional analysis, but *post-hoc* modifications consistent with the theory provided an acceptable model fit.

A major departure from the predictions provided by learned-helplessness theory was the failure to find a relationship between job rejections and levels of depression (see Figure 3.4). The finding may not be inconsistent with learned-helplessness theory, however, as a primary function of exposure to uncontrollable events is to trigger the search for attributions to account for the loss of control (Abramson, Seligman & Teasdale, 1978; Abramson, Garber & Seligman, 1980; Peterson & Seligman, 1984). Consequently, the primary determinate of levels of depression may not be an extended exposure to uncontrollability as represented by the number of job rejections, but factors that trigger and determine the attributional process. Unfortunately, the learned-helplessness theory is silent about the processes that determine life-event attributions (Abramson, Garber & Seligman, 1980).

The present analysis was unable to throw light on the environmental events experienced by the unemployed that trigger or determine the attributions that lead to increased levels of general depression. The situation was dramatically demonstrated by the absence of a relationship between the exogenous variables and the attributional style measure in the cross-sectional analysis (Figure 3.4). One explanation is that the attributional style measure was too general, and that a measure more specific to unemployment would be more successful. However, a situation-specific measure relevant to unemployment was initially included but appeared unrelated to the processes specified by the learned-helplessness theory (compare Figure 3.1, 3.2 and Figure 3.2). The conclusion is that while the cognitive processes indicated by learned-helplessness are consistent with the data in the present study, the theory fails to provide an indication of the events that are important in triggering and determining the attributional processes that generate depression in the unemployed.

The inability of the analysis to unearth aspects of unemployment that feed into the cognitive processes proposed by learned-helplessness theory highlights a major theoretical deficit. The cross-sectional analysis started with sixteen exogenous variables that included seven measures relevant to the ongoing exposure to unemployment (refer Table 3.1). However, the majority of variables in the final model were biographic and demographic in nature, and length of unemployment was the only ‘‘unemployment’’ variable related to the cognitive processes (refer Figure 3.4). A fundamental principle of the social-cognition perspective is that environmental, cognitive and behavioural events are related (Bandura, 1986). However, the present application using learned-helplessness theory failed to find a satisfactory link between the immediate experience of unemployment and the levels of general depression.

Two additional features relating to learned-helplessness theory became apparent during the longitudinal analysis (refer Figure 6.2). The first was that attributional style was not a significant predictor of depression, corroborating the observation by Feather and Barber (1983) that attributional variables may have a limited role in accounting for the emotional impact of unemployment. The second feature was the failure of job expectancy to act as a mediational variable. The performance of the attributional style and job expectancy variables throw some question on the learned-helplessness theory as an account for the development of depression in the unemployed. However, the ability of the longitudinal analysis to provide a comprehensive test of the theory is questionable, because of the small sample ($n = 43$) and the poor internal reliability of the attributional style questionnaire in the longitudinal analysis (refer Table 5.2). A substantive evaluation of the learned-helplessness theory to account for the dynamic processes that generate depression in the unemployed awaits further longitudinal research with a larger sample and more sensitive instruments.

An unexpected general finding in the longitudinal study was the absence of evidence to indicate a long-term deterioration of emotional health (refer Table 6.1). The unexpected finding was also consistent with the results in the cross-sectional study that length of unemployment had little impact upon the levels of general depression in the unemployed (refer Figure 3.4). The finding indicated that although there was tremendous individual variation in general depression in the unemployed, and that learned-helplessness theory can account for some of the variation, the duration of unemployment is not a major determinate as is commonly supposed. There are, however, reasons why the conclusion must be interpreted with care. First, the results are inconsistent with previous descriptive (i.e., Bakkes, 1933; Jahoda, Lazarsfeld & Zeisel, 1933/1972) and scientific research (i.e., Hepworth, 1980) that report a deterioration of emotional health over time. Second, only 18 of the 43 individuals who comprised the follow-up group of unemployed had been continually unemployed. The relatively small sample may not have enabled a sensitive enough evaluation of the long term impact of unemployment upon emotional health. Third, there is evidence that measures such as the General Health Questionnaire may be more sensitive to measuring the emotional impact of unemployment as they evaluate the current life situation, whereas the Beck Depression Inventory and Rosenberg Self-Esteem Scale used in the present study tend to evaluate more enduring aspects of affect (Feather, 1990).

In sum, a social-cognition perspective in the form of learned-helplessness theory was useful in explaining the variation in general depression for the unemployed in the cross-sectional and longitudinal study. The most notable achievement was the specification of the causal relationships between the cognitive variables that may generate depression in the unemployed. The primary deficit, however, was an inability to specify the "environmental triggers" associated with unemployment that precipitate general depression. Until specified, the learned-helplessness theory cannot provide a full account of the relationship between unemployment and general depression. Also noted was the absence of support for the learned-helplessness theory provided by the attributional style and job expectancy variables during the longitudinal analysis, and the failure to detect a deterioration of emotional health in the unemployed. Nevertheless, the conclusions in the longitudinal study must be considered tentative due to the small sample and low inter-item reliability for some of the instruments used.

Frustrated-Motivation Theory

The frustrated-motivation theory was proposed as an account for the situation-specific negative reactions to unemployment. The theory proposes high expectations and high job valence combine to produce high levels of motivation to seek employment, that when thwarted by repeated job rejections, lead to negative situation-specific reactions to unemployment ("unemployment

frustration’’). The initial causal structure specified by frustrated-motivation theory was unusual, because the behavioural measure of job rejections was proposed as a mediating variable (Feather & Barber, 1983; Feather & Davenport, 1981), whereas cognitions typically provide the mediating link in the social-cognition perspective (Argyle, 1988).

The initial causal model failed to provide an adequate fit with the data and was rejected on two grounds. First, the cross-sectional analysis revealed the behavioural measure of job enquiries did not act as a mediating variable and, moreover, the number of job enquiries appeared to be unrelated to the cognitive variables nominated by the theory (compare Figure 3.5 and Figure 3.6). Second, high levels of expectation did not produce high levels of frustration. Indeed, the opposite appeared to be the case, with high levels of expectation being a strong determinant of low levels of frustration. The relationship between job expectations and unemployment frustration was more complicated than initially anticipated, and was found to proceed in a two stage process that was mediated by internal-external unemployment attributions. In the first stage, high job expectations generated more internal unemployment attributions, and in the second stage, the more external the unemployment attributions the greater the levels of frustration. Consequently, the frustrated-motivation theory was restructured with internal-external unemployment attributions acting as a mediational link, and found to have a satisfactory fit with the data collected in the cross-sectional and longitudinal studies.

However, the sample of unemployed individuals interviewed in the present study may not have provided a suitable test for the ‘‘behavioural-mediation’’ frustrated-motivation theory. The respondents in the cross-sectional and longitudinal studies were registered for government unemployment benefits, and must provide evidence that they are applying for jobs to remain eligible for financial assistance. Consequently, the job-enquiry rates may not have been a true expression of levels of motivation generated by job importance and job expectancy as specified by the theory, because applying for jobs may have had more to do with remaining eligible for government benefits than expectations of job-hunting success. Indeed, discussions with some of the unemployed after filling out the questionnaires revealed that some believed that they had to apply for at least two jobs per week to remain eligible for financial support from the government. The consequence is that unemployment research using people registered for unemployment benefits may limit the opportunity to test predictions that job-search behaviour acts as a mediating variable.

Nevertheless, the successful ‘‘cognitive’’ frustrated-motivation theory remains within the social-cognition perspective as the cognitive variables are social in origin and are strong predictors of unemployment frustration. Interestingly, the revised theory suffered the same difficulty of

specifying environmental events associated with unemployment that trigger the cognitive processes that generate unemployment frustration as did the learned-helplessness theory. Like the learned-helplessness theory during the cross-sectional study, the analysis began with sixteen exogenous variables that included seven measures relevant to the ongoing exposure to unemployment (refer Table 3.1). But the final model revealed that the majority of variables were biographic and demographic in nature, with only length of unemployment found to related (refer Figure 3.7).

Although the frustrated-motivation theory when evaluated during the longitudinal study was largely supported, the conclusions must remain tentative. The present study used the "rule-of-thumb" of a 10:1 ratio between the number of subjects and the number of structural coefficients estimated in the model (Tanaka, 1987). However, in the present investigation, the sample at follow-up who were unemployed was relatively small ($n = 43$) and five structural coefficients were estimated from the data (refer Figure 6.4). Although not a severe departure, the causal analysis does violate the rule-of-thumb and serves notice that the estimates in the causal model are likely to be unstable. Although the conclusions are informative, further research with a larger sample would be necessary to derive more substantive conclusions.

In conclusion, the revised frustrated-motivation theory conforms with the social-cognition perspective, and was generally successful in the cross-sectional and longitudinal studies at predicting the levels of unemployment frustration in the unemployed. However, identical to the learned-helplessness theory, there appears to be little link between environmental events associated with unemployment and the cognitive processes generating unemployment frustration. There is also the need to replicate the longitudinal study with a larger sample of unemployed individuals.

The Transition from Unemployment to Employment and Changes in Emotional Health

The one hundred employed and forty-three unemployed people interviewed at follow-up provided the opportunity to explore variations in emotional health during the transition from unemployment to employment. The few descriptive (i.e., Marsden & Duff, 1975) and scientific reports (i.e., Warr & Jackson, 1985) available indicate that the transition to employment is typically accompanied by an improvement in emotional health. The observation is also consistent with the accepted view that unemployed people are lower in emotional health than the employed (Jahoda, 1988; Warr, 1983). Although learned-helplessness theory was originally chosen to account for the detrimental impact of unemployment, the proposal in the present study was that learned-helplessness might also account for the reduction in depression when the unemployed become employed.

The causal analysis of the learned-helplessness theory using the longitudinal data indicated a successful model fit, but there was no evidence that the predicted causal relationships were active (see Figure 6.6). The polychoric and polyserial correlations matrix for the employed and unemployed sample at follow-up also revealed few relationships on which a *post-hoc* model could be constructed (Table 6.4). Overall, the social-cognition perspective failed to nominate mechanisms that were responsible for the variation in emotional health during the transition from unemployment to employment.

A particularly unexpected finding, however, was the absence of a relationship between employment status and emotional health in the longitudinal study. The causal analysis failed to find evidence consistent with previous research conducted in England that the transition from unemployment to employment is accompanied by an improvement in emotional health (Banks & Jackson, 1982; Jackson, Stafford, Banks & Warr, 1983). But the results in the present study are consistent with research conducted in Australia using a large sample of school leavers (Feather, 1990; Feather & O'Brien, 1986a, 1986b, 1987). Feather (1990) suggested that the difference in results between the English and Australian studies may have been due to different samples and measures. The same difference in measures and sample is also evident between the English research and the present study, and could account for the divergent results. The English studies tended to sample less-qualified school leavers in the 16 to 17 years age bracket, while the present study surveyed individuals with a range of qualifications in the 16 to 24 years age bracket. The better qualified young people in the present study may have been more optimistic about future job prospects than their English counterparts. Furthermore, the English studies generally used measures of emotional health such as the General Health Questionnaire that indicate an individual's current life situation, while the present study used the Beck Depression Inventory and Rosenberg Self-Esteem Scale that measure a more enduring form of emotional health. The measures used in the English studies may have been more sensitive to the variations in emotional health associated with the changes in employment status.

In conclusion, few studies have investigated the changes in emotional health that accompanies the transition from unemployment to employment, although the evidence generally indicates that the change from unemployment to employment is associated with improvements in emotional health. The present study proposed that learned-helplessness could account for the reduction in depression when the unemployed become employed. However, the social-cognition perspective failed to nominate the mechanisms responsible for the variation in emotional health during the transition from unemployment to employment. The study also failed to find evidence of a direct relationship between employment status and emotional health, and supports the finding in previous

research that samples and measures may be an important consideration when investigating the emotional impact of unemployment and employment.

Conclusion

Social research investigating the relationship between employment status and emotional health indicates that most research has focused on emotional outcome and not the processes that generate emotional health (Kelvin & Jarrett, 1985). A primary feature of the present investigation was to gauge the success of adopting a social-cognition perspective in attempting to account for changes in emotional health that accompany periods of unemployment and the transition from unemployment to employment.

The perspective had limited success in providing explanations for the relationship between unemployment and emotional health. The causal analysis of the learned-helplessness and frustrated-motivation theories revealed that social cognitions in the form of attributions, expectations and job importance played a role in determining general and situation-specific emotional reactions to unemployment. In contrast, however, the social-cognition perspective in the form of learned-helplessness failed to account for the range of emotional reactions during the transition from unemployment to employment. The absence of a relationship between employment status and emotional health also pointed to the importance of considering samples and measures used in unemployment research. In summary, the social-cognition perspective provided a limited theoretical account for the processes that generate differences in emotional responses for people experiencing unemployment, but not for the transition from unemployment to employment.

Implications for the Unemployed

The findings in the present study have implications for the treatment of the relationship between employment status and emotional health. The first concerns the prevention of the negative consequences, the second concerns therapeutic intervention.

Prevention

The most obvious form of preventing the negative emotional consequences of unemployment is to provide the unemployed with employment (Watson, 1985). However, the increasing introduction of labour saving technology and the decline of indigenous manufacturing may lead to rising levels of unemployment in Australia (Windschuttle, 1981), when an increasing number of community members may be willing to work when no employment is available (Jones, 1985; Jordan, 1982; Schumacher, 1979). The prospect of unemployment remaining at present levels or rising necessitates examining other means to prevent the negative emotional impact associated with unemployment.

The present study supports the observation by Bakke (1933) and reinforced in recent research (Feather, 1990; King, 1989) that individuals react differently to unemployment. The present study indicates that adopting a social-cognition perspective provides some insight into the factors that precipitate the variation in emotional reactions. Of the variables investigated from a social-cognition perspective, by far the most predominant was the high emphasis on job importance. The present study revealed that high levels of job importance were associated with high levels of depression, low self-esteem and high frustration. Porteous (1979) reports that one of the greatest interests for 15 year olds was to gain employment, and the high value placed on obtaining employment may be predisposing young people to bouts of depression and frustration. One way that the community may aid in decreasing the negative impact of unemployment, is to deemphasise the importance of obtaining paid work in the community. The "protestant work ethic" is a strong factor in the Australian community and because every member in the community may not be required to work, the emphasis placed on employment might be inappropriate (Jones, 1985).

Therapeutic Intervention

The social-cognition perspective provides an explanation for the etiology of depression and frustration in the unemployed and has implications for developing intervention programmes to aid the unemployed. A primary benefit of the social-cognition perspective is the provision of a theoretical framework upon which therapeutic interventions for the unemployed can be based. The discussion initially focusses on therapeutic intervention for high levels of depression in the unemployed.

The opportunity to develop therapeutic intervention programmes has been enhanced in recent years due to the increasingly close alliance between the social-cognitive perspective and therapeutic perspectives that focus on intervention at the cognitive level. Mahoney and Arnkoff (1978, p. 691-692) comment that with . . .

. . . the mid-1960s there came an explicit shift to cognitive and information-processing models of behavior change. This revolutionary development was ushered in by Bandura's (1969) classic text, *Principles of Behavior Modification*. While emphasizing the role of behavioral *procedures* in effective psychotherapy, Bandura argued that the basic *processes* of behavior change involve central (cognitive-symbolic) mechanisms.

Cognitive intervention treatments come under the name of *cognitive* (Rimm & Somerville, 1977), *cognitive behaviour* (Gelder, 1989) and *cognitive learning* therapies (Mahoney & Arnkoff, 1978). General clinical psychology texts also focus on the social-cognition perspective in the form of learned-helplessness as a means of understanding the etiology of depression (i.e., Craighead, Kazdin & Mahoney, 1981; Davison & Neale, 1982; Rimm & Somerville, 1977; Rimm & Masters,

1979), but also as a means of providing a theoretical framework for therapeutic intervention (Hollon & Garber, 1980; Rimm & Masters, 1979; Young, 1986).

Reattribution and cognition-expectancy are two theories of therapy directed towards the cognitive processes deemed important in learned-helplessness and self-efficacy theory. Reattribution therapy (Abramson, Garber & Seligman, 1980; Rimm & Masters, 1979; Rimm & Somervill, 1977; Young, 1986) is oriented towards changing the individual's attributions concerning the event that precipitated the depression. Rimm and Somervill (1977, p. 475) provide an example of such an approach:

Suppose, for example, that a student is far behind in his course work, and examination time is rapidly approaching. He works for 36 solid hours in the solitude of his room, and toward the end of this extremely fatiguing experience, he finds that he is beginning to hear voices. Now, suppose he is concerned and seeks help from a therapist. If the therapist informs him that he *is* schizophrenic, this will be an internal attribution leading to a variety of unfortunate consequences: extreme worry, perhaps hospitalization and the associated stigma. On the other hand, suppose the therapist suggests that, given his client's severe sleep deficit, such an experience is hardly surprising. Such an interpretation implies an external attribution. The student may now say to himself, "I'm not really crazy after all . . . it was just the lack of sleep." The consequences of believing this are not frightening, nor is there any reason for the student to believe he is in need of some help.

The findings of the present study indicate that people who cite internal, stable and global factors for their unemployment are more likely to be depressed than people who cite external, unstable and specific factors. For example, a person who attributes their unemployment to lack of intelligence or personal competence is more likely to be depressed than a person who cites the world economy. The approach suggested by reattribution theory is for the therapist to confront the client with information to re-evaluate their attributions. For example, the client could be informed about the high rates of unemployment for young people, that most school-leavers spend about six months unemployed before obtaining employment, and other information to transfer the person's attributions about unemployment from internal, stable and global to more external, unstable and specific factors.

The cognitive-expectancy therapy is also consistent with the social-cognition perspective, but focuses on a different part of the process generating depression. In contrast to reattribution therapy that focuses on altering attributions, proponents supporting cognitive-expectancy therapy argue that greater efficiency and efficacy is achieved by intervening directly at expectations (Abramson, Garber, & Seligman, 1980). As stated by Hollon and Garber (1980, p. 193):

We would concur that attributional processes are central to the onset of the disorder but would argue that expectations play an equally large role in the maintenance of the disorder and that the explicit disconfirmation of those expectations provides the most efficient means of reversing all the various dysfunctional cognitive processes.

Hollon and Garber (1980, pp. 182-188) provide an example of applying the procedure by reversing the expectations of an unemployed person. In accordance with learned-helplessness as developed in the present study, the person expects that future opportunities to gain employment are poor. The therapeutic intervention focuses directly on disconfirming the negative expectation. "The emphasis is on altering the patient's expectation, or at least on questioning the certainty with which the client holds that expectation" (Hollon & Garber, 1980, p. 187). Although the patient might be reluctant, if expectations improve, then there is an increased chance of getting a job. When a job is obtained, the original attribution is challenged and the depression is alleviated.

The reattribution and cognitive-expectancy theories of therapy are consistent with the social-cognition perspective adopted in the present study. Although the predominate focus in the clinical literature towards reducing depression has been reflected in the present review by examining depression in the unemployed, the frustrated-motivation theory is also consistent with the social-cognition perspective and there appears to be no reason why reattribution and cognitive-expectancy could not be used to reduce the levels of frustration in the unemployed.

Future Research

The present study provides an impetus for the examination of a number of methodological and theoretical issues in future research. One of the most interesting features of the present investigation was the support for a distinction between situation-specific and general responses to unemployment (Feather & Davenport, 1981; Feather & Barber, 1983). An avenue for future investigation would be to explore the utility of the distinction with respect to other negative life-events. Silver and Wortman (1980) point out the enormous variability in individual responses to negative life-events, and the distinction between situation-specific and general emotional reactions could provide an extra conceptual tool to tackle the broad range of emotional responses.

A notable limitation in the present investigation, was the poor reliability of the unemployment frustration scale in the longitudinal study (Cronbach's α of 0.38). Although a number of change-score scales were of less than desirable reliability (refer Table 5.2), the unemployment frustration scale was particularly notable because of the pivotal distinction made in the study between situation-specific and general responses to unemployment. A profitable line of enquiry would be to explore and develop the psychometric properties of the unemployment frustration scale. The reliability of the scale could be enhanced by adding further items (the original only contained three items) and conducting an item analysis (Allen & Yen, 1979; Anastasi, 1982; Cronbach, 1964).

The validity of the unemployment frustration scale could be explored at two levels (Allen & Yen, 1979; Anastasi, 1982). The first concerns predictive validity of the scale and particularly, the relationship between unemployment frustration and human behaviour. The Beck Depression Inventory (Beck, 1967) and Rosenberg Self-Esteem Scale (Rosenberg, 1965) used to evaluate general depression have good predictive validity, but no such investigation for the unemployment frustration scale has been conducted. The second level of enquiry refers to construct validity. The unemployment frustration scale was based on a single "depressive affect" item originally used by Feather and Davenport (1981). The present study accepted the recommendation by Feather and Barber (1983, p. 188) that the item could "also reflect differences in anger and resentment about being unemployed." To explore this possibility, the single item was integrated with two other items that evaluated anger about being unemployed (refer Appendix A, B, C and D). Future research with a scale of superior internal reliability could use the *multitrait-multimethod* procedure (Campbell & Fiske, 1959) to plot the domain of the scale and explore the possibility that other negative situation-specific emotional reactions might be related.

A major limitation in the present study was the small follow-up sample of unemployed individuals. A primary focus of the study was to examine the impact of unemployment upon emotional health in a longitudinal study, however, the 43 unemployed individuals interviewed at follow-up restricted the analysis to endogenous variables and reduced the power of the model-fit and structural coefficient significance tests (Saris & Stronkhorst, 1984). Procedures to enlarge the sample size could include increasing the initial sample size and decreasing the time lag between initial and follow-up interviews. However, both procedures have drawbacks. A larger initial sample involves greater time conducting the initial interviews, resulting in a greater time lag between initial and follow-up interviews, and leading to less likelihood of tracking people down at a later date for the follow-up interviews. Meanwhile, decreasing the time between interviews, while increasing the chances to contact people at follow-up because of the small time lag, limits the number of people contacted during the initial interviews. The recommended solution is for a number of interviewers to collect a large sample at one point in time and to simultaneously conduct and large scale follow-up, or concurrently conduct the initial and follow-up interviews while specifying a small time lag between interviews.

A particularly interesting line of enquiry would be to investigate the relationship between the transition from unemployment to employment and changes in emotional health. The learned-helplessness theory failed as an account for the changes in emotional health associated with the change in employment status. An avenue for future theoretical work would be to accept that the social-cognition perspective in the form of learned-helplessness theory is unable to account for the

increase of emotional health commonly reported in the literature. Two courses of action are recommended. The first is that researchers may have more success by exploring the mechanisms that precipitate improvements in emotional health. Warr and Jackson (1985, p. 807) in following people during the transition from unemployment to employment noted that “the mediating variables which tend to be important in respect of health gains after re-employment (. . .) differ to some extent from those which are influential in respect of continuing unemployment.” The possibility is that the processes generating improvement in mental health may be quite apart from the processes that generate a deterioration in mental health.

The second speculation relating to improvements in emotional health during the transition from unemployment to employment, concerns the use of separate measures for negative and positive emotional health (Warr, 1984). The measures used in the present study included the Beck Depression Inventory (Beck, 1967) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Review of the items in both scales (refer Appendix A, B, C and D) and especially the Beck Depression Inventory (B.D.I.), clearly indicate that the scales are oriented towards evaluating negative affect. Consequently, a promising direction for future research investigating the transition from unemployment to employment and the purported improvement of emotional health, would be to assume that separate processes generate negative and positive emotional health and that separate measures are necessary.

An additional line of enquiry would be to investigate the absence of a direct relationship in the longitudinal study between employment status and emotional health. The causal analysis failed to find evidence consistent with results in previous research that the transition from unemployment to employment is accompanied by an improvement in emotional health (Banks & Jackson, 1982; Jackson, Stafford, Banks & Warr, 1983). Although other research has failed to find a relationship between employment status and emotional health (Feather & O’Brien, 1986a, 1986b, 1987), the difference in findings may be attributable to the samples and measures often used (Feather, 1990). Future research could be directed at finding out the extent that different samples influence the relationship between employment status and emotional health, and investigate the most suitable measures when evaluating the emotional impact of unemployment and the transition from unemployment to employment.

An interesting direction for future research comes from a general finding in the present study. The group scores for the unemployed at follow-up provided little evidence of a general deterioration in emotional health, while the group scores for the individuals who had made the transition from unemployment to employment failed to indicate a general improvement in

emotional health. Yet a finding across all groups at follow-up was the large individual change in emotional health during the course of the study (see Table 6.1 and Table 6.3). The different results for the group and individual scores suggests that more research could be directed at understanding the mechanisms that generate the large individual variations in emotional health. The focus in unemployment research would be not so much, “is unemployment detrimental to emotional health?”, or “is the transition from unemployment beneficial to emotional health?”, but more “how does employment status have an impact upon the social and psychological processes that generate the individual variations in emotional health?” The present study has to some extent provided explanations for the variation in emotional health for the individuals who were unemployed at follow-up, but failed for the employed at follow-up. Further research that examines the impact of employment status upon individual variations in emotional health is needed.

Conclusion

The primary objective in the present study was to investigate the processes that determine changes in emotional health that accompany extended periods of unemployment and the transition from unemployment to employment. The first theme was to adopt causal modelling procedures to investigate the factors that generate the changes in emotional health in the employed and unemployed. Both cross-sectional and longitudinal designs were used to evaluate the causal-process explanations. The primary deficit of cross-sectional method was an inability to provide data that enabled a measure of intraindividual change. The primary benefit of longitudinal methodology was the collection of data that offers an unambiguous evaluation of intraindividual change. The cross-sectional data in a causal analysis of interindividual differences, and the longitudinal data in a causal analysis of intraindividual change provided results that were generally consistent, although some differences in findings supported the idea that longitudinal data are necessary to provide a full test of causal models.

The second theme guiding the study was to use a social-cognition perspective to provide theoretical explanations for the relationship between employment status and emotional health. Analysis of the learned-helplessness and frustrated-motivation theories revealed that social cognitions in the form of attributions, expectations and job importance were successful in predicting general and situation-specific emotional reactions to unemployment. The social-cognition perspective was unproductive, however, in providing an insight into the increase in emotional health that purportedly occurs during the transition from unemployment to employment.

The findings of the present study have ramifications for the therapeutic interventions conducted with the unemployed and the direction for future research. A particular benefit of the social-cognition perspective is the provision of a theoretical framework on which to base therapeutic interventions with the unemployed. The reattribution and cognitive-expectancy theories of therapy are consistent with the social-cognition perspective used in the present study. Four avenues for future research are proposed. First, the enhancement and development of the unemployment frustration scale and the concept of situation-specific and general reactions to negative life-events. Second, the use of longitudinal methods that enable a larger number of unemployed people to be interviewed at follow-up. Third, a closer examination of the psychological processes and measures used when investigating the changes in emotional health associated with the transition from unemployment to employment. Fourth, more research that examines the impact of employment status upon the processes that generate individual variations in emotional health.

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Appendix A

Questionnaire used for Unemployed in Cross-Sectional Study

SURVEY OF THE UNEMPLOYED

Questionnaire: Location: Date:

PART A

1. Age: Years 2. Sex: Male Female

3. Country of Birth? _____

If not Australia, how many years have you lived in Australia?

Years:

4. How many years of education did you receive? _____

5. What is the highest qualification you have achieved? _____

6. How long have you been currently registered as unemployed?

Years Months Weeks 7. How many times in a week do you **enquire about job vacancies** (i.e., situations vacant section in the newspaper; check positions available at C.E.S., and ask friends about vacancies)?No. of enquiries . 8. How many times in a week would you **make an application for a job** (i.e. job interview; application forms; phoning)?No of enquiries .

9. Since you became unemployed, could you state as accurately as possible, the total number of applications you have made to get a job.

Total number of applications 10. Looking into the future, when do you **realistically** expect that you will get a job?Never Years Months Weeks

11. Before becoming unemployed, did you have a full/part time job of any kind?

Yes No

If yes: i) full-time part time
 ii) could you give title and description _____

iii) did you: quit sacked
 retrenched work finished

12. Do you have friends who are looking for work:

Yes No

If yes: i) how many
 ii) are your unemployed friends experiencing difficulty in getting a job?
 Yes No
 iii) On the average, how much time in a day would you spend in the
 company of your unemployed friends?

Hours Minutes

13. Do you feel that unemployed people generally experience difficulty in getting a job?

Yes No

14. Marital Status: Single Married/Defacto
 Separated Divorced

15. Do you live?

i) on your own
 ii) with spouse/defacto partner
 iii) independently, but in a group house
 iv) at home with family

If iii) or iv); what is the composition of your household?

16. What does or did your father (stepfather) do at work? Could you give both title and description.

17. What does or did your mother (stepmother) do at work? Could you give both title and description.

18. Is there anybody in your family besides yourself, who is not working but would like a job?

Yes No

If yes, whom? _____

19. Is there anyone in your family besides yourself, at present receiving unemployment benefits?

Yes No

If yes, whom? _____

20. At the moment, are you doing some form of part-time work?

Yes No

If yes, how many hours per week? Hours

21. Do you receive some financial support other than that provided by unemployment benefits?

Yes No

If yes, what would that be in a week? \$

22. Are you doing some form of part/full time study?

Yes No

If yes: i) part-time full-time

ii) name of course _____

23. Will you be beginning an apprenticeship, a job, school, University, or the like, in the near future?

Yes No

If yes: i) what will it be? _____

ii) when begin? _____

PART B

For the following statements, please indicate whether you **Strongly Agree**, **Agree**, **Disagree** or **Strongly Disagree** by **circling** the appropriate number.

	Strongly Agree	Agree	Disagree	Strongly Disagree
On the whole, I am satisfied with myself	1	2	3	4
At times I think that I am no good at all	1	2	3	4
I feel that I have a number of good qualities	1	2	3	4
I am able to do things as well as most other people	1	2	3	4
I feel that I do not have much to be proud of	1	2	3	4
I certainly feel useless at times	1	2	3	4
I feel that I am a person of worth, at least on an equal plane with others	1	2	3	4
I wish I could have more respect for myself	1	2	3	4
All in all, I am inclined to feel that I am a failure	1	2	3	4
I take a positive attitude to myself	1	2	3	4

The following questions consist of statements. Please read each group of statements carefully, then pick out the one statement in each group which best describes the way you have been feeling the **past week, including today!** Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad.
1 I feel sad.
2. 1 I am sad all the time and I can't snap out of it.
3. I am so sad or unhappy that I can't stand it.
2. 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.
3. 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.
4. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything any more.
3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
 1 I feel guilty a good part of the time.
 2 I feel quite guilty most of the time.
 3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.
 1 I feel I may be punished.
 2 I expect to be punished.
 3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.
 1 I am disappointed in myself.
 2 I am disgusted with myself.
 3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.
 1 I am critical of myself for my weaknesses or mistakes.
 2 I blame myself all the time for my faults.
 3 I blame myself for everything bad that happens.
9. 0 I don't have any thoughts of killing myself.
 1 I have thoughts of killing myself, but I would not carry them out.
 2 I would like to kill myself.
 3 I would kill myself if I had the chance.
10. 0 I don't cry any more than usual.
 1 I cry more now than I used to.
 2 I cry all the time now.
 3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.
 1 I get annoyed or irritated more easily than I used to.
 2 I feel irritated all the time now.
 3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
 1 I am less interested in other people than I used to be.
 2 I have lost most of my interest in other people.
 3 I have lost all of my interest in other people.
13. 0 I make decisions as well as I ever could.
 1 I put off making decisions more than I used to.
 2 I have greater difficulty in making decisions than before.
 3 I can't make decisions at all any more.
14. 0 I don't feel I look any worse than I used to.
 1 I am worried that I am looking old or unattractive.
 2 I feel that there are permanent changes in my appearance that make me look unattractive.
 3. I believe that I look ugly.
15. 0 I can work about as well as before.
 1 It takes an extra effort to get started at doing something.
 2 I have to push myself very hard to do anything.
 3 I can't do any work at all.
16. 0 I can sleep as well as usual.
 1 I don't sleep as well as I used to.
 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
 3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don't get more tired than usual.
 1 I get tired more easily than I used to.
 2 I get tired from doing almost anything.
 3 I am too tired to do anything.

18. 0 My appetite is no worse than usual.
 1 My appetite is not as good as it used to be.
 2 My appetite is much worse now.
 3 I have no appetite at all any more.

19. 0 I haven't lost much weight, if any lately.
 1 I have lost more than 5 pounds (or 2.0 Kg).
 2 I have lost more than 10 pounds (or 5.0 Kg).
 3 I have lost more than 15 pounds (or 7.0 Kg).

I am purposely trying to lose weight
 by eating less

Yes No

20. 0 I am no more worried about my health than usual.
 1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
 2 I am very worried about physical problems and it's hard to think of much else.
 3 I am so worried about my physical problems, that I cannot think about anything else.
21. 0 I have not noticed any recent change in my interest in sex.
 1 I am less interested in sex than I used to be.
 2 I am much less interested in sex now.
 3 I have lost interest in sex completely.

PLEASE PROCEED TO NEXT PAGE

The following questions examine the causal explanations you use to explain everyday life.

Please try to vividly imagine yourself in the situations that follow. If such a situation happened to you, what would you feel would have caused it? While events may have causes, we want you to pick only one - the **major** cause if this event happened to you. Please write this cause in the blank provided after each event. Next we want you to answer some questions about the **cause**.

To summarise, we want you to:

1. Read each situation and vividly imagine it happening to you.
2. Decide what you feel would be the **major** cause of the situation if it happened to you.
3. Write one cause in the blank provided.
4. Answer three questions about the **cause**.
5. Go on to the next situation.

You meet a friend who compliments you on your appearance.

1. Write down the **one** major cause _____
2. Is the cause for your friend's compliment due to something about you or to something about your friend, other people, or circumstances? (**Circle one number**)

Totally due to friend, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when you meet your friend, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your friend, or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You have been looking for a job unsuccessfully for some time.

1. Write down the **one** major cause _____
2. Is the cause for your unsuccessful job search due to something about you or to something about other people or circumstances? (**Circle one number**)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when looking for a job, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences looking for a job or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You become very rich.

1. Write down the one major cause _____
2. Is the cause for you becoming very rich due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future will the cause of you becoming very rich be present again? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

A friend comes to you with a problem and you don't try to help.

1. Write down the one major cause _____
2. Is the cause for you not helping your friend due to something about you or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to my friend, other people or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when your friend comes to see you with a problem, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You give an important talk in front of a group and the audience reacts negatively.

1. Write down the one major cause _____
2. Is the cause for the audience reacting negatively due to something about you or to something about the audience, other people or circumstances? (Circle one number)

Totally due to the audience, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when talking in front of a group, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the reactions of the audience or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You do a project (i.e., school assignment) that is highly praised.

1. Write down the one major cause _____
2. Is the cause for the praise you received due to your project or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when completing a project, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your project, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You meet a friend who acts hostilely towards you.

1. Write down the one major cause _____
2. Is the cause for your friend's hostility due to something about you, or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to your friend, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when meeting your friend, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your friend or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You can't get all the work done that others expect of you.

1. Write down the one major cause _____
2. Is the cause for you not being able to get the work done due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when others expect you to complete your work, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the work done that others expect of you or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

Your spouse (boy/girl friend) has been treating you more lovingly.

1. Write down the **one** major cause _____
2. Is the cause of your spouse (boy/girl friend) treating you more lovingly due to something about you or to something about your spouse (boy/girl friend), other people, or circumstances? (**Circle one number**)

Totally due to your spouse (boy/girl friend), other people, or other circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when meeting your spouse (boy/girl friend), will the cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the relationship with your spouse (boy/girl friend), or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You apply for a position that you want very badly (e.g., important job, university admission) and get it.

1. Write down the **one** major cause _____
2. Is the cause for you getting the position you want due to something about you or to something about other people or circumstances? (**Circle one number**)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when applying for a position, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your application for the position or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You go out on a date and it does badly.

1. Write down the **one** major cause _____
2. Is the cause of your unsuccessful date due to something about you or to something about your date, other people, or circumstances? (**Circle one number**)

Totally due to your date, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when on a date, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your date, or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You get a raise.

1. Write down the **one** major cause _____
2. Is the cause of your raise due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when you get a raise, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences getting a raise or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

The following questions relate specifically to unemployment. Please mark down to what extent you agree or disagree with each of the following statements.

1. Of the jobs you have applied for, have you:

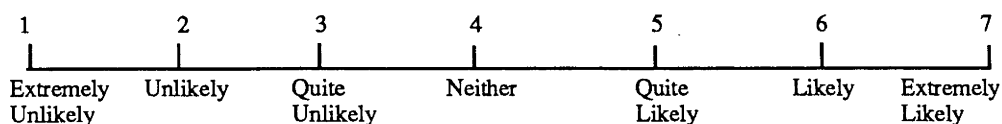
	<i>(tick which applies)</i>
i) confined them to your area of interest/training	<input type="checkbox"/>
ii) applied for jobs somewhat related to your area of interest/training	<input type="checkbox"/>
iii) applied for every job possible	<input type="checkbox"/>
2. When you think about being unemployed, how does it make you feel? (Not all people feel the same about being unemployed). (Circle the appropriate number)

1	2	3	4	5	6	7	
----- ----- ----- ----- ----- -----							
Very Glad						Very Depressed	
3. How often do you feel angry with yourself for not having a job?

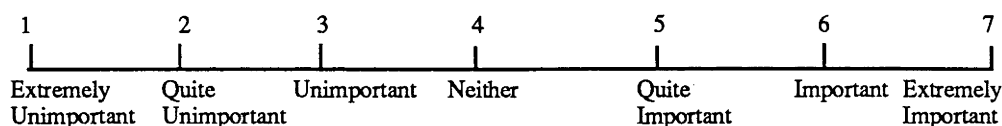
1	2	3	4	5	6	7
----- ----- ----- ----- ----- -----						
Never	Almost never	Sometimes	Quite Often	Often	Almost Always	Always
4. How often do you feel angry with society (the world around you) for not having a job?

1	2	3	4	5	6	7
----- ----- ----- ----- ----- -----						
Never	Almost never	Sometimes	Quite Often	Often	Almost Always	Always

5. What do you think is the likelihood that your future job seeking efforts will get you work?



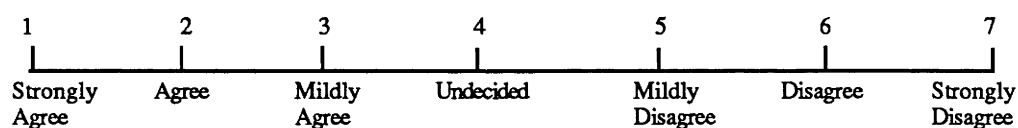
6. Getting a job is more important to some than others. How important is getting a job to you?



The following questions relate to your expectations of getting work. Read each item, and circle the number which best describes your response.

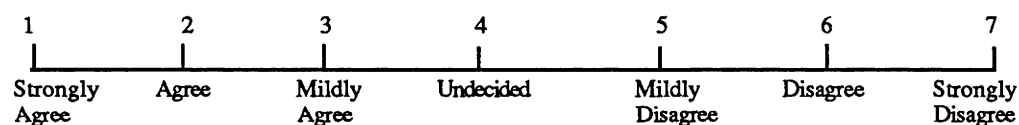
1. I look forward to my future in the workforce with hope and enthusiasm.

Do you:



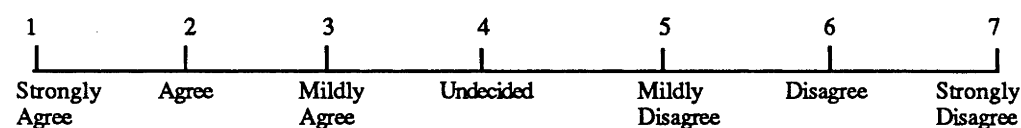
2. Because of the difficulty involved in trying to get a job, I sometimes feel like giving up.

Do you:



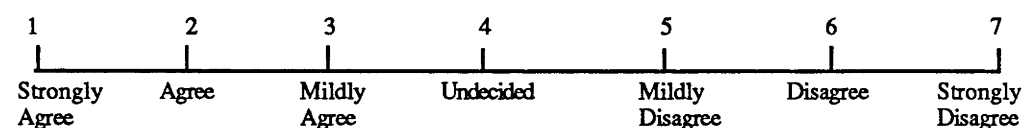
3. When I don't get a job, I am helped by knowing that things will get better.

Do you:



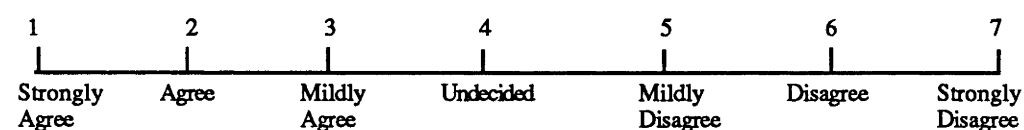
4. I can't imagine being jobless in 10 years time.

Do you:



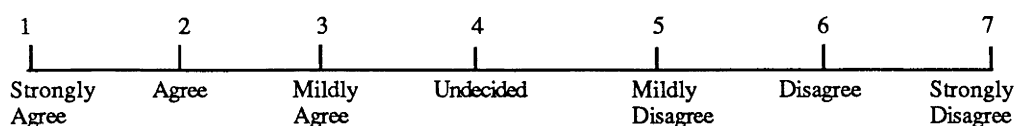
5. My job prospects seem dark to me.

Do you:



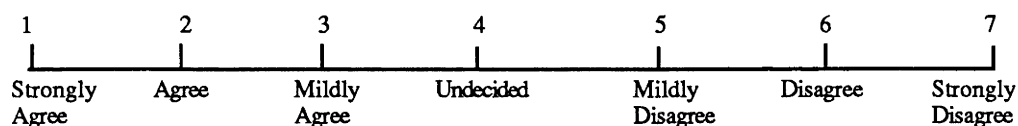
6. I expect to have more opportunities to get a job than the average person.

Do you:



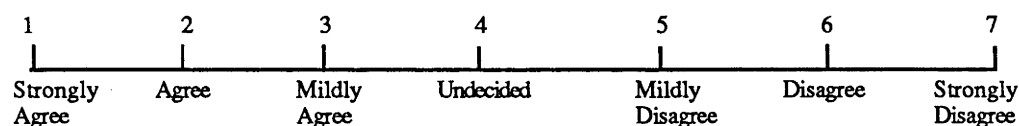
7. I just don't get the breaks when I apply for jobs, and there's no reason to believe that I will in the future.

Do you:



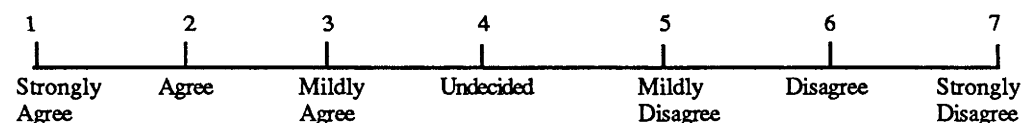
8. In terms of employment, all I can see ahead of me is unpleasantness rather than pleasantness.

Do you:



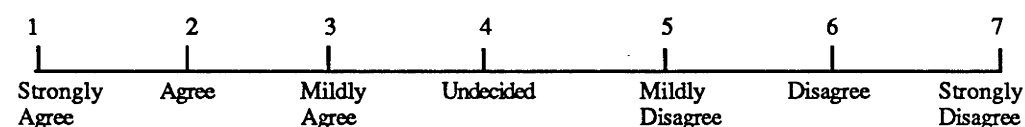
9. When I look ahead to the future, I expect to have a good job.

Do you:



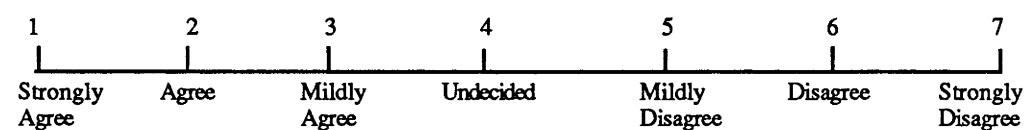
10. When I apply for a job, things just won't work out the way I want them to.

Do you:



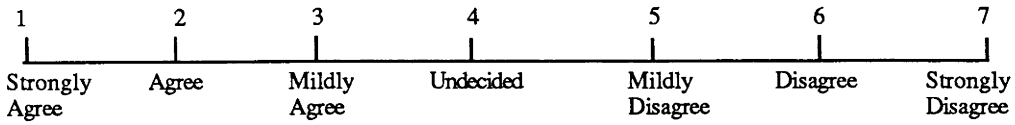
11. I have great faith in my prospects of getting a job.

Do you:



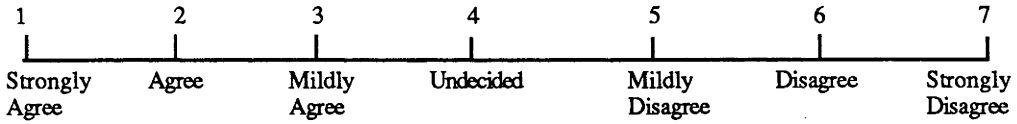
12. My future in the workforce seems vague and uncertain to me.

Do you:



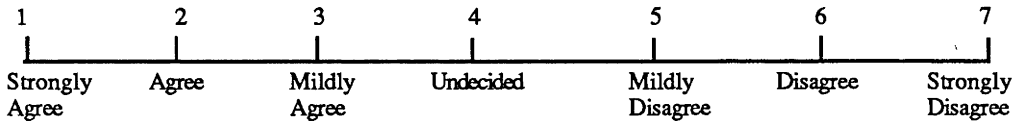
13. I can look forward to positive consideration by potential employers.

Do you:



14. There's no use in really trying to get a job because I probably won't get it.

Do you:



What is the single, most important, cause of your unemployment?

Could you in your own words and in a few sentences, provide an example of when this cause has hindered your application for work.

In addition to the above, could you cite another cause for your unemployment.

Appendix B

Questionnaire used for Unemployed in Longitudinal Study

Hello

You may remember that I approached you outside a Canberra Social Security Office a number of months ago and asked you some questions regarding your experience of unemployment. You may also remember that you gave me your permission to contact you at a later date to ask some questions about how things had turned out. Well, this is it.

I would like you to fill in the following questionnaire as soon as possible and return it to me in the enclosed envelope **within the next week**. It is very important for the success of this project that everyone completes the questionnaire and returns it to me straight away. I'd be very grateful for your help with this. I apologise for the length of the questionnaire, but it was not possible to reduce its size any further without jeopardising its ability to assess how things had turned out for people.

If you have any questions, feel free to phone me during work hours on 249 4003. Thank you very much.

Regards.

Robert Lynd-Stevenson
Australian National University

INSTRUCTIONS

1. Please answer all questions yourself and in the order that you come to them.
2. In answering the questions, you will be asked sometimes to fill in a box. For example, if you were 17 years old:

Age?

Years

--	--

Sometimes you will be asked to circle your answer. For example, if you were a male:

Sex (please circle)?

MALE

FEMALE

Other times you will be asked to write your answer. For example, if you have on the average three meals a day:

How many times a day on the average do you have a meal?

3. Don't spend a lot of time working out your answers - just be as honest and quick as you can without rushing. Please give **your own answers**.
4. When you have finished, check that you have not missed anything, and post the booklet to me in the extra envelope provided.

It should take you about 35 minutes to complete the whole set of questions.

SURVEY OF THE UNEMPLOYED

(Follow up: Receiving Unemployment Benefits)

OFFICE USE ONLY

Questionnaire: Location: Date:

This questionnaire is for people who at the moment are registered for unemployment benefits. Please note that a "job" refers to any **paid** full or part-time work.

PART A

SECTION 1

To begin with, a number of general questions.

1. Since you turned 16 years of age, what would be the total number of months you have been registered as unemployed? *(Write number in box)*

Months

2. When I last interviewed you, were you involved in volunteer or non-paid work of some kind? *(Please circle).*

YES

NO

If yes: i) what kind? (Please write) _____

ii) how many hours per week on the average?

Hours

3. Are you presently engaged in volunteer or non-paid work of some kind? *(Please circle).*

YES

NO

If yes: i) what kind _____

ii) how many hours per week on the average?

Hours

PLEASE PROCEED TO SECTION 2.

SECTION 2

1. How many times in a month on the average do you enquire about job vacancies i.e., looking through the situations vacant section in the newspaper; checking positions available at CES, and asking friends about vacancies?

No. of enquiries in a month

2. How many times in a month on the average do you make an application for a job i.e., go for a job interview, fill out an application form?

No. of applications in a month

3. Since you became unemployed, could you state as accurately as possible the total number of applications you have made to get a job.

Total number of applications

4. Looking into the future, when do you realistically expect that you will get a job?

Years

Months

Weeks

5. Do you have friends that are looking for a job? *(Please circle)*

YES

NO

If yes: i) How many?

ii) Are your unemployed friends experiencing difficulty in getting a job? *(Please circle)*

YES

NO

COULDN'T SAY

iii) On the average, how much time in a day would you spend in the company of your unemployed friends?

Hours

Minutes

6. Do you feel that unemployed people generally experience difficulty in getting a job? *(Please circle)*

YES

NO

7. Marital status:

Single
Married/defacto
Separated
Divorced

(Please circle)

1
2
3
4

8. Do you live:

On your own?
With spouse/defacto partner?
Independently; but in a group house?
At home with family?

1
2
3
4

If (3) or (4); how many people are in the household (including yourself?)

People

--	--

9. Is there anyone in your parents' family besides yourself, who is jobless but would like a job?
(Please circle)

YES

NO

If yes: What relationship e.g. Father, Sister? _____

10. Is there anyone in your parents' family besides yourself, at present receiving unemployment benefits? (Please circle)

YES

NO

If yes: What relationship e.g. Father, Sister? _____

11. Do you receive some financial support other than that provided by unemployment benefits?
(Please circle)

YES

NO

If yes: What on the average would that be in a week? \$

--	--	--

12. Are you doing some form of study? (Please circle)

YES

NO

If yes: i) Is the study part-time or full time? (Please circle)

PART-TIME

FULL-TIME

ii) Name of course _____

iii) How many hours per week does your course take?

Hours

--	--

13. Have you got lined up (and will be beginning soon), an apprenticeship, a job, school, University, or the like? (Please circle)

YES

NO

If yes: i) What will it be? _____

ii) When will it begin? _____

WORK EXPERIENCE

The following questions are designed to provide a picture of your work experience since I last interviewed you. Could you examine the following sections and see if one or more is relevant to you. Please note that a "job" refers to any **paid** full or part-time work.

SECTION 3

Since I last interviewed you on the _____, have you been continually registered for unemployment benefits? *(Please circle)*

YES

NO

If yes: PLEASE PROCEED TO SECTION 4.

If no: i) When I interviewed you on the _____ you were registered for unemployment benefits. How long did it take before your registration, at that time, ceased?

Time _____

ii) Did you later re-register for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO SECTION 4.

If yes: i) How many times have you re-registered for unemployment benefits?

Number of times _____

ii) How long did each period of registration last?

1st time _____

2nd time _____

If more than 2 times, could you give your answer by writing it in the margin of this page.

iii) Are you at present registered for unemployment benefits? *(Please circle)*

YES

NO

PLEASE PROCEED TO SECTION 4.

SECTION 4

Do you have a full or part-time job at the moment? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO SECTION 5.

If yes: i) How many jobs do you hold at the moment?

Number of jobs _____

ii) How long have you held each job?

1st job _____

2nd job _____

If you have had more than 2 jobs, could you answer this question as well as parts iii, iv, v and vi, in a similar manner using the margin of the page.

iii) What kind of work is involved?

1st job _____

2nd job _____

iv) How many hours per week?

1st job _____

2nd job _____

v) Is the 1st job:

Circle a number

- permanent 1
- has some possibility of being permanent, but not sure 2
- is probably temporary, but not sure 3
- temporary 4

Is the 2nd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- is probably temporary, but not sure 3
- temporary 4

vi) Is the 1st job the kind of work you want to do? *(Please circle)*

YES

NO

Is the 2nd job the kind of work you want to do? *(Please circle)*

YES

NO

PLEASE PROCEED TO SECTION 5.

SECTION 5

Since I last interviewed you on the _____, have you had any full or part-time jobs that are now finished?

YES

NO

If no: PLEASE PROCEED TO SECTION 6.

If yes: i) How many full or part-time jobs did you have that are now finished?

Number of jobs _____

ii) How long did each of these jobs last?

1st job _____

2nd job _____

3rd job _____

If more than 3 jobs, could you give your answer to this and the following questions by writing in the margin of this page.

iii) What kind of work was involved?

1st job _____

2nd job _____

3rd job _____

iv) On the average how many hours per week?

1st job _____

2nd job _____

3rd job _____

v) Was the 1st job:

Circle a number

- permanent 1
- had some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 2nd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 3rd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 1st job the kind of work you wanted to do? *(Please circle)*

YES NO

Was the 2nd job the kind of work you wanted to do? *(Please circle)*

YES NO

Was the 3rd job the kind of work you wanted to do? *(Please circle)*

YES NO

vii) With the 1st job:

Circle

- | | |
|-----------------------|---|
| • did you quit | 1 |
| • were you sacked | 2 |
| • were you retrenched | 3 |
| • did the work finish | 4 |

With the 2nd job:

- | | |
|-----------------------|---|
| • did you quit | 1 |
| • were you sacked | 2 |
| • were you retrenched | 3 |
| • did the work finish | 4 |

with the 3rd job:

- | | |
|-----------------------|---|
| • did you quit | 1 |
| • were you sacked | 2 |
| • were you retrenched | 3 |
| • did the work finish | 4 |

PLEASE PROCEED TO SECTION 6.

SECTION 6

At the moment are you jobless, or engaged in unpaid work - and not registered for unemployment benefits? *(Please circle)*

YES NO

If no: PLEASE PROCEED TO SECTION 7.

If yes: i) How long has this been the case?

Time _____

ii) How come you have not registered for unemployment benefits?

iii) How do you support yourself financially?

iv) How much on the average does that come to in a week?

PLEASE PROCEED TO SECTION 7.

SECTION 7

Since I last interviewed you on the _____, have you gone through (and finished) a period of joblessness, or unpaid work - during which you were not registered for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO PART B OF THE QUESTIONNAIRE.

If yes: i) How many times were you jobless, or engaged in unpaid work, but not registered for unemployment benefits?

Number of times _____

ii) How long did each of these periods last?

If more than once, could you give your answer to this and the following questions by writing in the margin of the page.

iii) How come you did not register for unemployment benefits?

iv) How did you support yourself financially?

v) On the average how much did that come to in a week?

PLEASE PROCEED TO PART B OF THE QUESTIONNAIRE

PART B

For the following statements, please indicate whether you **Strongly Agree**, **Agree**, **Disagree** or **Strongly Disagree** by circling the appropriate number.

	Strongly Agree	Agree	Disagree	Strongly Disagree
On the whole, I am satisfied with myself	1	2	3	4
At times I think that I am no good at all	1	2	3	4
I feel that I have a number of good qualities	1	2	3	4
I am able to do things as well as most other people	1	2	3	4
I feel that I do not have much to be proud of	1	2	3	4
I certainly feel useless at times	1	2	3	4
I feel that I am a person of worth, at least on an equal plane with others	1	2	3	4
I wish I could have more respect for myself	1	2	3	4
All in all, I am inclined to feel that I am a failure	1	2	3	4
I take a positive attitude to myself	1	2	3	4

The following questions consist of statements. Please read each group of statements carefully, then pick out the one statement in each group which best describes the way you have been feeling the past week, including today! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad.
 1 I feel sad.
 2. I am sad all the time and I can't snap out of it.
 3. I am so sad or unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
 1 I feel discouraged about the future.
 2 I feel I have nothing to look forward to.
 3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
 1 I feel I have failed more than the average person.
 2 As I look back on my life, all I can see is a lot of failures.
 3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
 1 I don't enjoy things the way I used to.
 2 I don't get real satisfaction out of anything any more.
 3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.
9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.
10. 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.
13. 0 I make decisions as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all any more.
14. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3. I believe that I look ugly.
15. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.
16. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18. 0 My appetite is no worse than usual.
 1 My appetite is not as good as it used to be.
 2 My appetite is much worse now.
 3. I have no appetite at all any more.
19. 0 I haven't lost much weight, if any lately.
 1 I have lost more than 5 pounds (or 2.0 Kg).
 2 I have lost more than 10 pounds (or 5.0 Kg).
 3 I have lost more than 15 pounds (or 7.0 Kg).
- I am purposely trying to lose weight
by eating less
- Yes No
20. 0 I am no more worried about my health than usual.
 1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
 2 I am very worried about physical problems and it's hard to think of much else.
 3 I am so worried about my physical problems, that I cannot think about anything else.
21. 0 I have not noticed any recent change in my interest in sex.
 1 I am less interested in sex than I used to be.
 2 I am much less interested in sex now.
 3 I have lost interest in sex completely.

The following questions examine the causal explanations you use to explain everyday life.

Please try to vividly imagine yourself in the situations that follow. If such a situation happened to you, what would you feel would have caused it? While events may have causes, we want you to pick only one - the **major** cause if this event happened to you. Please write this cause in the blank provided after each event. Next we want you to answer some questions about the **cause**.

To summarise, we want you to:

1. Read each situation and vividly imagine it happening to you.
2. Decide what you feel would be the **major** cause of the situation if it happened to you.
3. Write one cause in the blank provided.
4. Answer three questions about the **cause**.
5. Go on to the next situation.

You meet a friend who compliments you on your appearance.

1. Write down the **one** major cause _____
2. Is the cause for your friend's compliment due to something about you or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to friend, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when you meet your friend, will this cause again be present?
(Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your friend, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You have been looking for a job unsuccessfully for some time.

1. Write down the **one** major cause _____
2. Is the cause for your unsuccessful job search due to something about you or to something about other people or circumstances? (**Circle one number**)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when looking for a job, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences looking for a job or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You become very rich.

1. Write down the **one** major cause _____
2. Is the cause for you becoming very rich due to something about you or to something about other people or circumstances? (**Circle one number**)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future will the cause of you becoming very rich be present again? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	5	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

A friend comes to you with a problem and you don't try to help.

1. Write down the **one** major cause _____
2. Is the cause for you not helping your friend due to something about you or to something about your friend, other people, or circumstances? (**Circle one number**)

Totally due to my friend, other people or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when your friend comes to see you with a problem, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You give an important talk in front of a group and the audience reacts negatively.

1. Write down the one major cause _____
2. Is the cause for the audience reacting negatively due to something about you or to something about the audience, other people or circumstances? (Circle one number)

Totally due to the audience, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when talking in front of a group, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the reactions of the audience or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You do a project (i.e., school assignment) that is highly praised.

1. Write down the one major cause _____
2. Is the cause for the praise you received due to your project or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when completing a project, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	---------------------------
4. Is the cause something that just influences your project, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You meet a friend who acts hostilely towards you.

1. Write down the one major cause _____
2. Is the cause for your friend's hostility due to something about you, or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to your friend, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when meeting your friend, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your friend or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You can't get all the work done that others expect of you.

1. Write down the one major cause _____
2. Is the cause for you not being able to get the work done due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when others expect you to complete your work, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the work done that others expect of you or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

Your spouse (boy/girl friend) has been treating you more lovingly.

1. Write down the one major cause _____
2. Is the cause of your spouse (boy/girl friend) treating you more lovingly due to something about you or to something about your spouse (boy/girl friend), other people, or circumstances? (Circle one number)

Totally due to your spouse (boy/girl friend), other people, or other circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when meeting your spouse (boy/girl friend), will the cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the relationship with your spouse (boy/girl friend), or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You apply for a position that you want very badly (e.g., important job, university admission) and get it.

1. Write down the one major cause _____
2. Is the cause for you getting the position you want due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when applying for a position, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your application for the position or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You go out on a date and it does badly.

- Write down the **one** major cause _____
- Is the cause of your unsuccessful date due to something about you or to something about your date, other people, or circumstances? (**Circle one number**)

Totally due to your date, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
- In the future when on a date, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
- Is the cause something that just influences your date, or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You get a raise.

- Write down the **one** major cause _____
- Is the cause of your raise due to something about you or to something about other people or circumstances? (**Circle one number**)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
- In the future when you get a raise, will this cause again be present? (**Circle one number**)

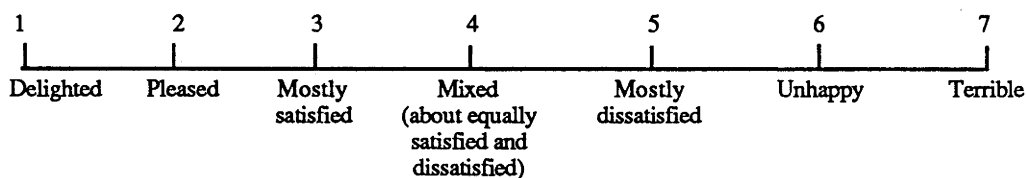
Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
- Is the cause something that just influences getting a raise or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

In the next section, the questions are related to how you feel about parts of your life. Please indicate your present feelings by circling the appropriate number.

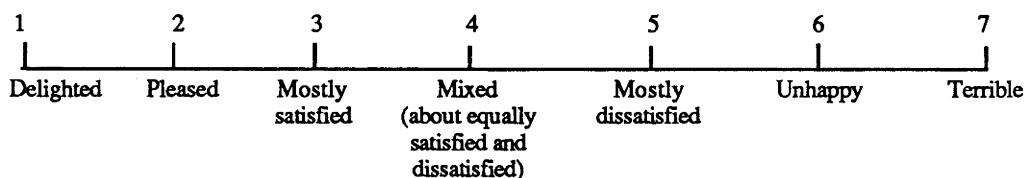
- How do you feel about the things you do and the times you have with your friends?

I feel:



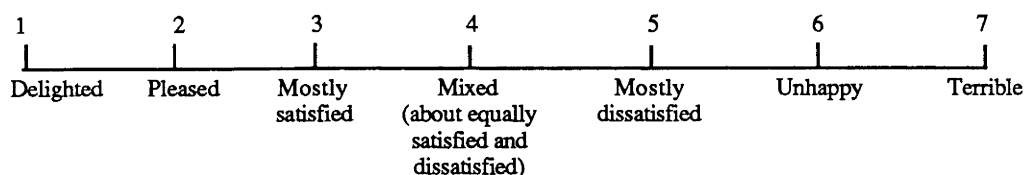
- How do you feel about your friends?

I feel:



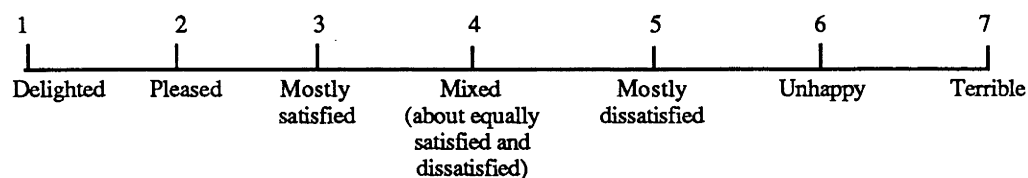
3. How do you feel about the people you see socially?

I feel:



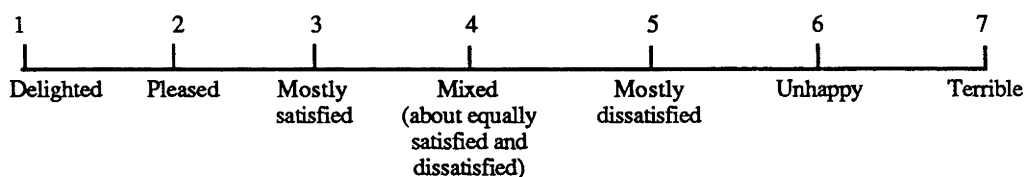
4. How do you feel about the way you get on with other people?

I feel:



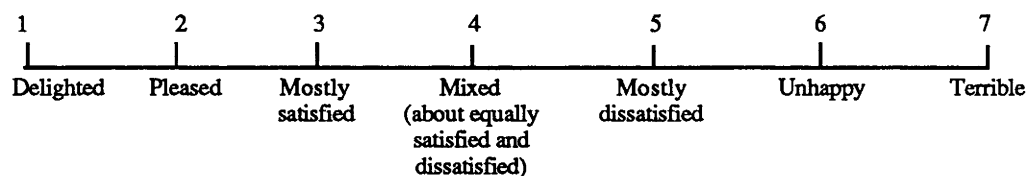
5. How do you feel about your close relatives - I mean people like parents, in-laws, brothers, and sisters?

I feel:



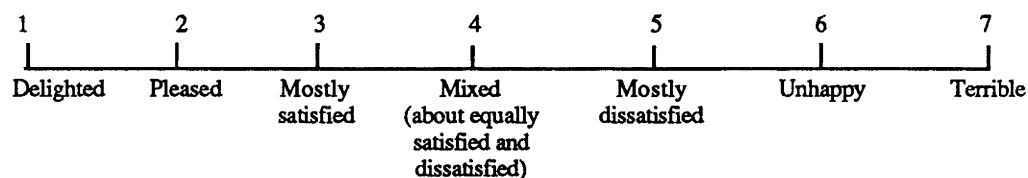
6. How do you feel about the things you and your family do together?

I feel:



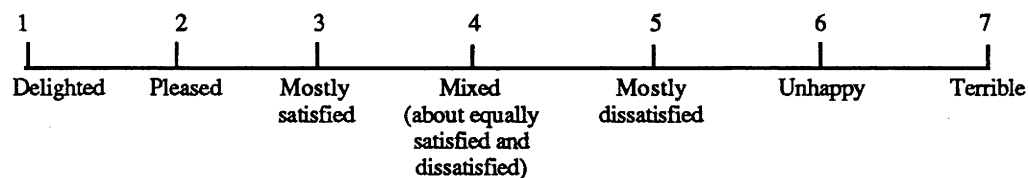
7. How do you feel about the way you spend your spare time, your non-working activities?

I feel:

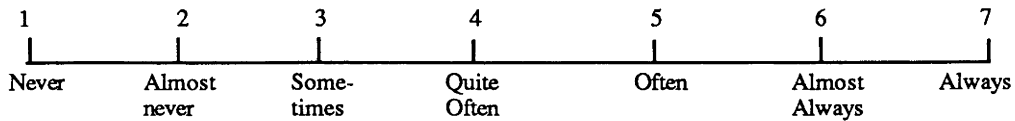


8. How do you feel about the amount of time you have for doing the things you want to do?

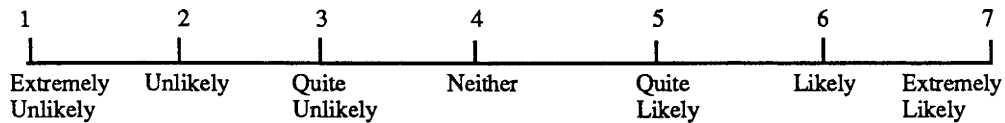
I feel:



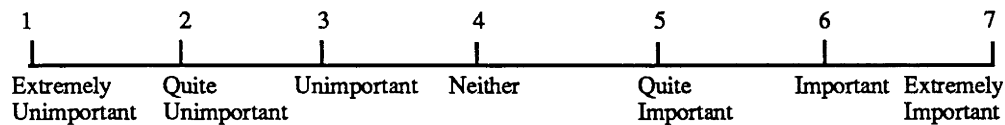
4. How often do you feel angry with **society** (the world around you) for not having a job?



5. What do you think is the likelihood that your future job seeking efforts will get you employment?



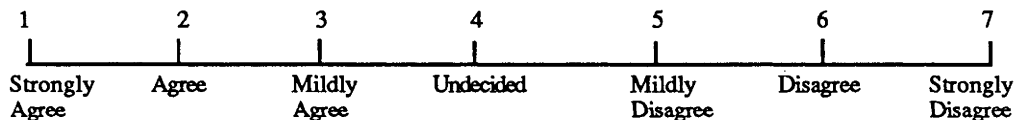
6. Getting a job is more important to some than others. How important is getting a job to you?



The following questions relate to your expectations of getting a job. Read each item, and circle the number which best describes your response.

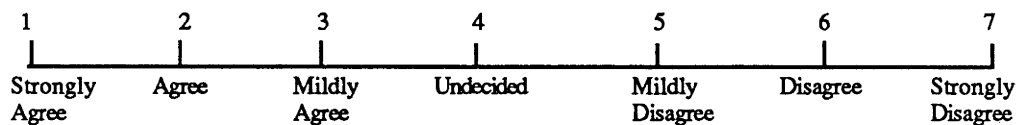
1. I look forward to my future in the workforce with hope and enthusiasm.

Do you:



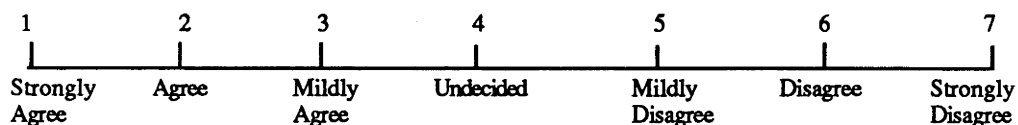
2. Because of the difficulty involved in trying to get a job, I sometimes feel like giving up.

Do you:



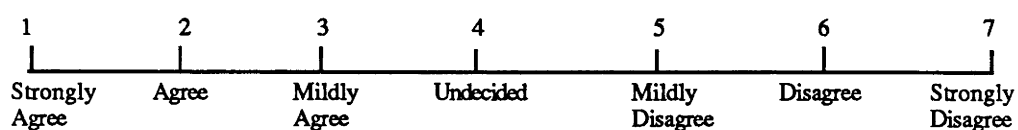
3. When I don't get a job, I am helped by knowing that things will get better.

Do you:



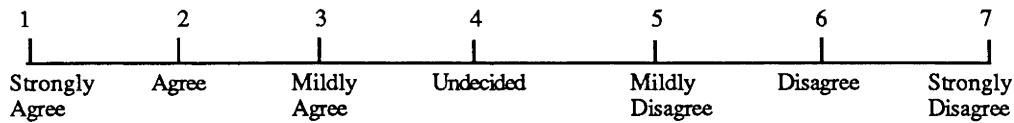
4. I can't imagine being jobless in 10 years time.

Do you:



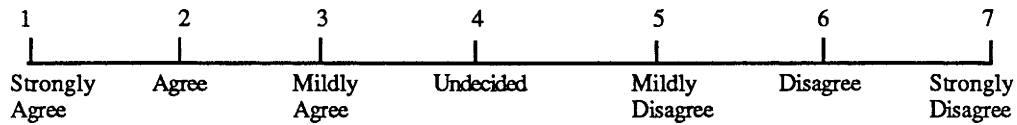
5. My job prospects seem dark to me.

Do you:



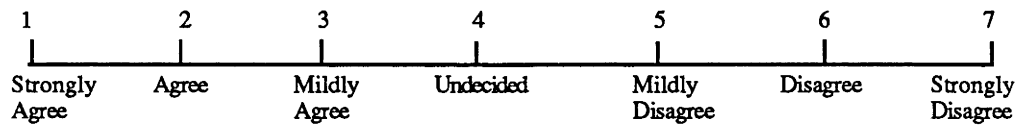
6. I expect to have more opportunities to get a job than the average person.

Do you:



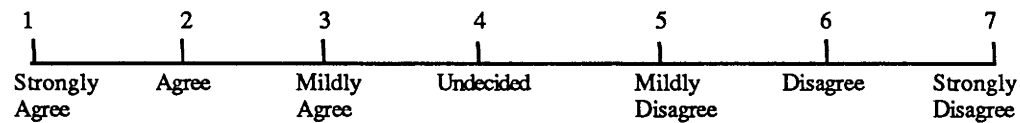
7. I just don't get the breaks when I apply for jobs, and there's no reason to believe that I will in the future.

Do you:



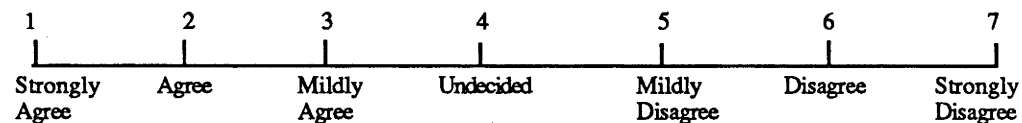
8. In terms of employment, all I can see ahead of me is unpleasantness rather than pleasantness.

Do you:



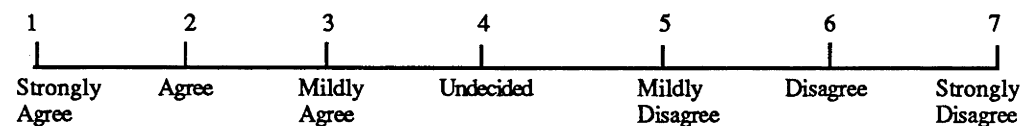
9. When I look ahead to the future, I expect to have a good job.

Do you:



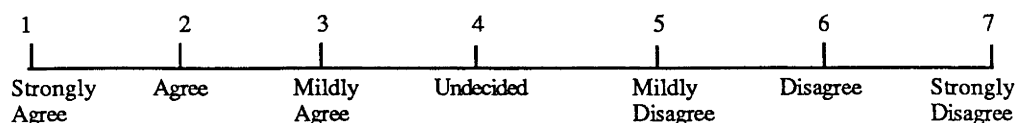
10. When I apply for a job, things just won't work out the way I want them to.

Do you:



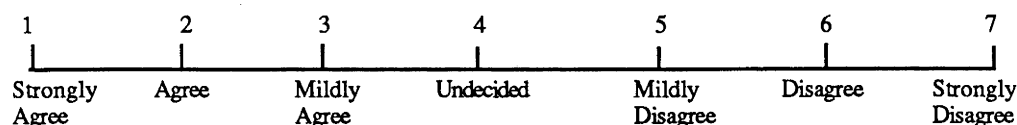
11. I have great faith in my prospects of getting a job.

Do you:



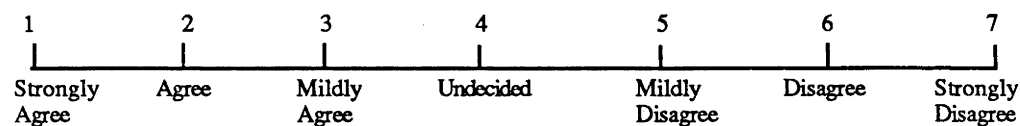
12. My future in the workforce seems vague and uncertain to me.

Do you:



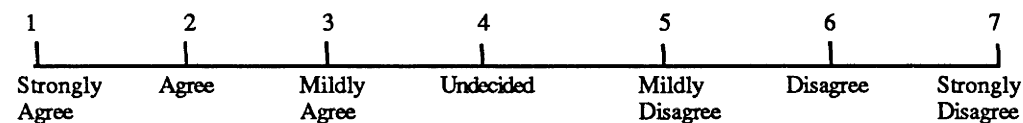
13. I can look forward to positive consideration by potential employers.

Do you:



14. There's no use in really trying to get a job because I probably won't get it.

Do you:



What is the single most important, cause of your unemployment?

Could you in your own words and in a few sentences, provide an example of when this cause has hindered your application for work.

In addition to above, could you cite another cause for your unemployment.

As before, could you in your own words and in a few sentences, provide an example of when this cause has hindered your application for work.

**THE END
THANK YOU VERY MUCH FOR YOUR COOPERATION
IN COMPLETING THIS QUESTIONNAIRE.
IT'S MUCH APPRECIATED.**

DON'T FORGET TO MAIL THIS RIGHT AWAY!!

Appendix C

Questionnaire used for Jobless and Unpaid Workers in Longitudinal Study

Hello

You may remember that I approached you outside a Canberra Social Security Office a number of months ago and asked you some questions regarding your experience of unemployment. You may also remember that you gave me your permission to contact you at a later date to ask some questions about how things had turned out. Well, this is it.

I would like you to fill in the following questionnaire as soon as possible and return it to me in the enclosed envelope **within the next week**. It is very important for the success of this project that everyone completes the questionnaire and returns it to me straight away. I'd be very grateful for your help with this. I apologise for the length of the questionnaire, but it was not possible to reduce its size any further without jeopardising its ability to assess how things had turned out for people.

If you have any questions, feel free to phone me during work hours on 249 4003. Thank you very much.

Regards.

Robert Lynd-Stevenson
Australian National University

INSTRUCTIONS

1. Please answer all questions yourself and in the order that you come to them.
2. In answering the questions, you will be asked sometimes to fill in a box. For example, if you were 17 years old:

Age?

Years

--	--

Sometimes you will be asked to circle your answer. For example, if you were a male:

Sex (please circle)?

MALE

FEMALE

Other times you will be asked to write your answer. For example, if you have on the average three meals a day:

How many times a day on the average do you have a meal?

3. Don't spend a lot of time working out your answers - just be as honest and quick as you can without rushing. Please give **your own answers**.
4. When you have finished, check that you have not missed anything, and post the booklet to me in the extra envelope provided.

It should take you about 35 minutes to complete the whole set of questions.

SURVEY OF THE UNEMPLOYED

(Follow up: Jobless, or in Unpaid Work)

OFFICE USE ONLY

Questionnaire:

Location:

Date:

This questionnaire is for people who at the moment are jobless or engaged in unpaid work - and are not registered for **unemployment benefits**. For example, a full-time student, or a person on supporting parents benefit. Please note that a "job" refers to any **paid** full or part-time work.

PART A

SECTION 1

To begin with, a number of general questions.

1. Since you turned 16 years of age, what would be the total number of months you have been registered as unemployed? *(Write number in box)*

Months

2. When I last interviewed you, were you involved in volunteer or non-paid work of some kind? *(Please circle)*.

YES

NO

If yes: i) what kind? (Please write) _____

ii) how many hours per week on the average?

Hours

3. Are you presently engaged in volunteer or non-paid work of some kind? *(Please circle)*.

YES

NO

If yes: i) what kind _____

ii) how many hours per week on the average?

Hours

PLEASE PROCEED TO SECTION 2.

SECTION 2

1. Do you have friends that are looking for a job? *(Please circle)*

YES NO

If yes: i) how many

ii) are your unemployed friends experiencing difficulty in getting a job? *(Please circle)*

YES NO COULDN'T SAY

iii) on the average, how much time in a day would you spend in the company of your unemployed friends?

Hours Minutes

2. Do you feel that unemployed people generally experience difficulty in getting a job? *(Please circle)*

YES NO

3. Marital status:

	<i>(Please circle)</i>
Single	1
Married/defacto	2
Separated	3
Divorced	4

4. Do you live:

On your own?	1
With spouse/defacto partner?	2
Independently; but in a group house?	3
At home with family?	4

If (3) or (4); how many people are in the household (including yourself)?

People

5. Is there anyone in your parents' family besides yourself, who is jobless but would like a job? *(Please circle)*

YES NO

If yes: What relationship e.g. Father, Sister? _____

6. Is there anyone in your parents' family besides yourself, at present receiving unemployment benefits? *(Please circle)*

YES NO

If yes: What relationship e.g. Father, Sister? _____

7. Are you doing some form of study? *(Please circle)*

YES NO

If yes: i) Is the study part-time or full time? (*Please circle*)

PART-TIME

FULL-TIME

ii) Name of course _____

iii) How many hours per week does your course take?

HOURS

--	--

8. Have you got lined up (and will be beginning soon), an apprenticeship, a job, school, University, or the like? (*Please circle*)

YES

NO

If yes: i) What will it be? _____

ii) When will it begin? _____

The three remaining questions are quite different, in that they focus on how you would respond if you were looking for a job again.

1. If you were looking for a job again, **how many times in a month** on the average do you think you would **enquire about job vacancies** i.e., looking through the situations vacant section in the newspaper; checking positions available at C.E.S., and asking friends about vacancies?

No. of enquiries in a month

--	--

2. If you were looking for a job again, **how many times in a month** on the average do you think you would **make an application for a job** i.e., go for a job interview, fill out an application form?

No. of applications in a month

--	--

3. If you were looking for a job again, when would you **realistically** expect to get a job?

Years

--	--

Months

--	--

Weeks

--	--

PLEASE PROCEED TO THE NEXT PAGE.

WORK EXPERIENCE

The following questions are designed to provide a picture of your work experience since I last interviewed you. Could you examine the following sections and see if one or more is relevant to you. Please note that a "job" refers to any paid full or part-time work.

SECTION 3

Since I last interviewed you on the _____, have you been continually registered for unemployment benefits? *(Please circle)*

YES

NO

If yes: PLEASE PROCEED TO SECTION 4.

If no: i) When I interviewed you on the _____ you were registered for unemployment benefits. How long did it take before your registration, at that time, ceased?

Time _____

ii) Did you later re-register for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO SECTION 4.

If yes: i) How many times have you re-registered for unemployment benefits?

Number of times _____

ii) How long did each period of registration last?

1st time _____

2nd time _____

If more than 2 times, could you give your answer by writing it in the margin of this page.

iii) Are you at present registered for unemployment benefits? *(Please circle)*

YES

NO

PLEASE PROCEED TO SECTION 4.

SECTION 4

Do you have a full or part-time job at the moment? (*Please circle*)

YES

NO

If no: PLEASE PROCEED TO SECTION 5.

If yes: i) How many jobs do you hold at the moment?

Number of jobs _____

ii) How long have you held each job?

1st job _____

2nd job _____

If you have had more than 2 jobs, could you answer this question as well as parts iii, iv, v and vi, in a similar manner using the margin of the page.

iii) What kind of work is involved?

1st job _____

2nd job _____

iv) How many hours per week?

1st job _____

2nd job _____

v) Is the 1st job:

Circle a number

- permanent 1
- has some possibility of being permanent, but not sure 2
- is probably temporary, but not sure 3
- temporary 4

Is the 2nd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- is probably temporary, but not sure 3
- temporary 4

vi) Is the 1st job the kind of work you want to do? (*Please circle*)

YES

NO

Is the 2nd job the kind of work you want to do? (*Please circle*)

YES

NO

PLEASE PROCEED TO SECTION 5.

SECTION 5

Since I last interviewed you on the _____, have you had any full or part-time jobs that are now finished?

YES

NO

If no: PLEASE PROCEED TO SECTION 6.

If yes: i) How many full or part-time jobs did you have that are now finished?

Number of jobs _____

ii) How long did each of these jobs last?

1st job _____

2nd job _____

3rd job _____

If more than 3 jobs, could you give your answer to this and the following questions by writing in the margin of this page.

iii) What kind of work was involved?

1st job _____

2nd job _____

3rd job _____

iv) On the average how many hours per week?

1st job _____

2nd job _____

3rd job _____

v) Was the 1st job:

Circle a number

- permanent 1
- had some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 2nd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 3rd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 1st job the kind of work you wanted to do? *(Please circle)*

YES NO

Was the 2nd job the kind of work you wanted to do? *(Please circle)*

YES NO

Was the 3rd job the kind of work you wanted to do? *(Please circle)*

YES NO

vii) With the 1st job:

Circle

- did you quit 1
- were you sacked 2
- were you retrenched 3
- did the work finish 4

With the 2nd job:

- did you quit 1
- were you sacked 2
- were you retrenched 3
- did the work finish 4

with the 3rd job:

- did you quit 1
- were you sacked 2
- were you retrenched 3
- did the work finish 4

PLEASE PROCEED TO SECTION 6.

SECTION 6

At the moment are you jobless, or engaged in unpaid work - and not registered for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO SECTION 7.

If yes: i) How long has this been the case?

Time _____

ii) How come you have not registered for unemployment benefits?

iii) How do you support yourself financially?

iv) How much on the average does that come to in a week?

PLEASE PROCEED TO SECTION 7.

SECTION 7

Since I last interviewed you on the _____, have you gone through (and finished) a period of joblessness, or unpaid work - during which you were not registered for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO PART B OF THE QUESTIONNAIRE.

If yes: i) How many times were you jobless, or engaged in unpaid work, but not registered for unemployment benefits?

Number of times _____

ii) How long did each of these periods last?

If more than once, could you give your answer to this and the following questions by writing in the margin of the page.

iii) How come you did not register for unemployment benefits?

iv) How did you support yourself financially?

v) On the average how much did that come to in a week?

PLEASE PROCEED TO PART B OF THE QUESTIONNAIRE

PART B

For the following statements, please indicate whether you **Strongly Agree**, **Agree**, **Disagree** or **Strongly Disagree** by **circling** the appropriate number.

	Strongly Agree	Agree	Disagree	Strongly Disagree
On the whole, I am satisfied with myself	1	2	3	4
At times I think that I am no good at all	1	2	3	4
I feel that I have a number of good qualities	1	2	3	4
I am able to do things as well as most other people	1	2	3	4
I feel that I do not have much to be proud of	1	2	3	4
I certainly feel useless at times	1	2	3	4
I feel that I am a person of worth, at least on an equal plane with others	1	2	3	4
I wish I could have more respect for myself	1	2	3	4
All in all, I am inclined to feel that I am a failure	1	2	3	4
I take a positive attitude to myself	1	2	3	4

The following questions consist of statements. Please read each group of statements carefully, then pick out the one statement in each group which best describes the way you have been feeling the past week, including today! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad.
 1 I feel sad.
2. 0 I am sad all the time and I can't snap out of it.
 1 I am so sad or unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
 1 I feel discouraged about the future.
 2 I feel I have nothing to look forward to.
 3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
 1 I feel I have failed more than the average person.
 2 As I look back on my life, all I can see is a lot of failures.
 3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
 1 I don't enjoy things the way I used to.
 2 I don't get real satisfaction out of anything any more.
 3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.
9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.
10. 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.
13. 0 I make decisions as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all any more.
14. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.
15. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.
16. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18. 0 My appetite is no worse than usual.
 1 My appetite is not as good as it used to be.
 2 My appetite is much worse now.
 3 I have no appetite at all any more.
19. 0 I haven't lost much weight, if any lately.
 1 I have lost more than 5 pounds (or 2.0 Kg).
 2 I have lost more than 10 pounds (or 5.0 Kg).
 3 I have lost more than 15 pounds (or 7.0 Kg).
- I am purposely trying to lose weight
by eating less
- Yes No
20. 0 I am no more worried about my health than usual.
 1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
 2 I am very worried about physical problems and it's hard to think of much else.
 3 I am so worried about my physical problems, that I cannot think about anything else.
21. 0 I have not noticed any recent change in my interest in sex.
 1 I am less interested in sex than I used to be.
 2 I am much less interested in sex now.
 3 I have lost interest in sex completely.

The following questions examine the causal explanations you use to explain everyday life.

Please try to vividly imagine yourself in the situations that follow. If such a situation happened to you, what would you feel would have caused it? While events may have causes, we want you to pick only one - the **major** cause if this event happened to you. Please write this cause in the blank provided after each event. Next we want you to answer some questions about the **cause**.

To summarise, we want you to:

1. Read each situation and vividly imagine it happening to you.
2. Decide what you feel would be the **major** cause of the situation if it happened to you.
3. Write one cause in the blank provided.
4. Answer three questions about the **cause**.
5. Go on to the next situation.

You meet a friend who compliments you on your appearance.

1. Write down the **one** major cause _____
2. Is the cause for your friend's compliment due to something about you or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to friend, other people, or circumstances 1 2 3 4 5 6 7 Totally due to me

3. In the future when you meet your friend, will this cause again be present? (Circle one number)

Will never again be present 1 2 3 4 5 6 7 Will always be present

4. Is the cause something that just influences your friend, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

You have been looking for a job unsuccessfully for some time.

1. Write down the one major cause _____
2. Is the cause for your unsuccessful job search due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when looking for a job, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences looking for a job or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You become very rich.

1. Write down the one major cause _____
2. Is the cause for you becoming very rich due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future will the cause of you becoming very rich be present again? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	5	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

A friend comes to you with a problem and you don't try to help.

1. Write down the one major cause _____
2. Is the cause for you not helping your friend due to something about you or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to my friend, other people or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when your friend comes to see you with a problem, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You give an important talk in front of a group and the audience reacts negatively.

1. Write down the **one** major cause _____
2. Is the cause for the audience reacting negatively due to something about you or to something about the audience, other people or circumstances? (Circle one number)

Totally due to the audience, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when talking in front of a group, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the reactions of the audience or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You do a project (i.e., school assignment) that is highly praised.

1. Write down the **one** major cause _____
2. Is the cause for the praise you received due to your project or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when completing a project, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	---------------------------
4. Is the cause something that just influences your project, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You meet a friend who acts hostilely towards you.

1. Write down the **one** major cause _____
2. Is the cause for your friend's hostility due to something about you, or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to your friend, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when meeting your friend, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your friend or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You can't get all the work done that others expect of you.

1. Write down the one major cause _____
2. Is the cause for you not being able to get the work done due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances 1 2 3 4 5 6 7 Totally due to me
3. In the future when others expect you to complete your work, will this cause again be present? (Circle one number)

Will never again be present 1 2 3 4 5 6 7 Will always be present
4. Is the cause something that just influences the work done that others expect of you or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

Your spouse (boy/girl friend) has been treating you more lovingly.

1. Write down the one major cause _____
2. Is the cause of your spouse (boy/girl friend) treating you more lovingly due to something about you or to something about your spouse (boy/girl friend), other people, or circumstances? (Circle one number)

Totally due to your spouse (boy/girl friend), other people, or other circumstances 1 2 3 4 5 6 7 Totally due to me
3. In the future when meeting your spouse (boy/girl friend), will the cause again be present? (Circle one number)

Will never again be present 1 2 3 4 5 6 7 Will always be present
4. Is the cause something that just influences the relationship with your spouse (boy/girl friend), or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

You apply for a position that you want very badly (e.g., important job, university admission) and get it.

1. Write down the one major cause _____
2. Is the cause for you getting the position you want due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances 1 2 3 4 5 6 7 Totally due to me
3. In the future when applying for a position, will this cause again be present? (Circle one number)

Will never again be present 1 2 3 4 5 6 7 Will always be present
4. Is the cause something that just influences your application for the position or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

You go out on a date and it does badly.

- Write down the one major cause _____
- Is the cause of your unsuccessful date due to something about you or to something about your date, other people, or circumstances? (Circle one number)

Totally due to your date, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
- In the future when on a date, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
- Is the cause something that just influences your date, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You get a raise.

- Write down the one major cause _____
- Is the cause of your raise due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
- In the future when you get a raise, will this cause again be present? (Circle one number)

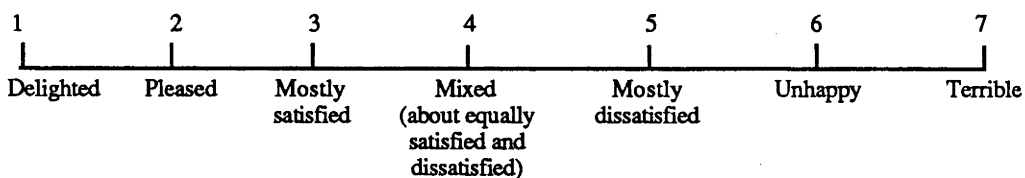
Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
- Is the cause something that just influences getting a raise or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

In the next section, the questions are related to how you feel about parts of your life. Please indicate your present feelings by circling the appropriate number.

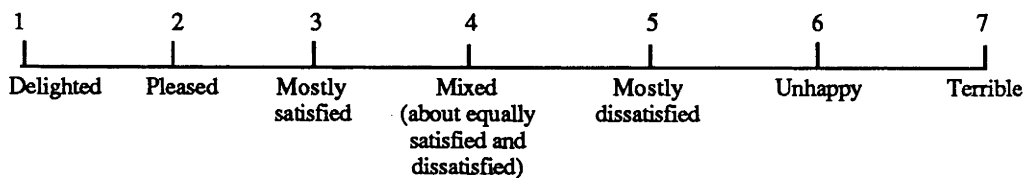
- How do you feel about the things you do and the times you have with your friends?

I feel:



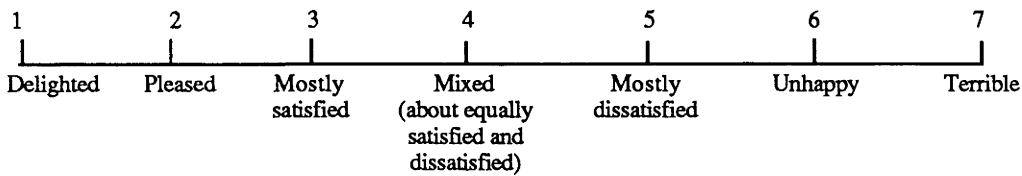
- How do you feel about your friends?

I feel:



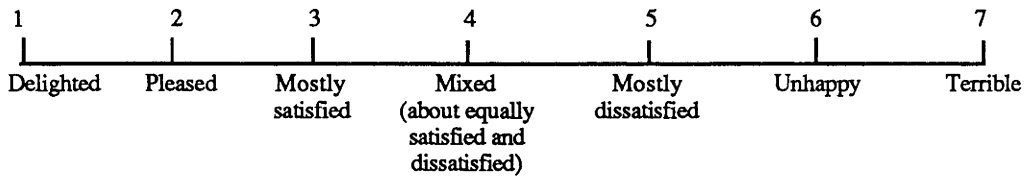
3. How do you feel about the people you see socially?

I feel:



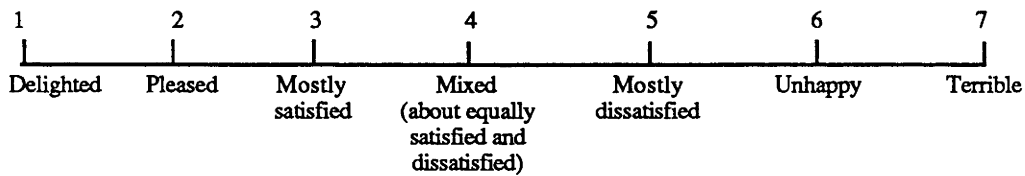
4. How do you feel about the way you get on with other people?

I feel:



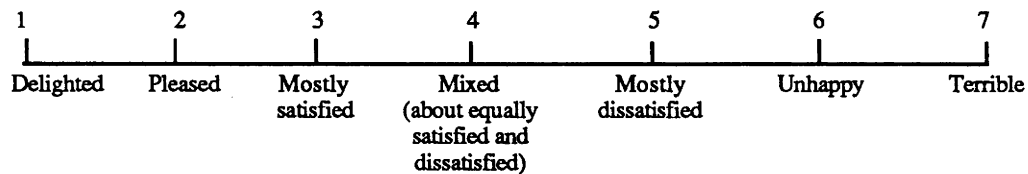
5. How do you feel about your close relatives - I mean people like parents, in-laws, brothers, and sisters?

I feel:



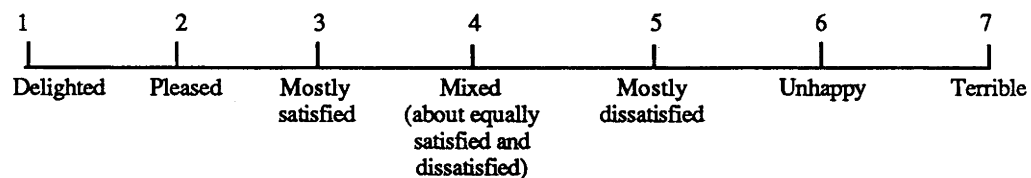
6. How do you feel about the things you and your family do together?

I feel:



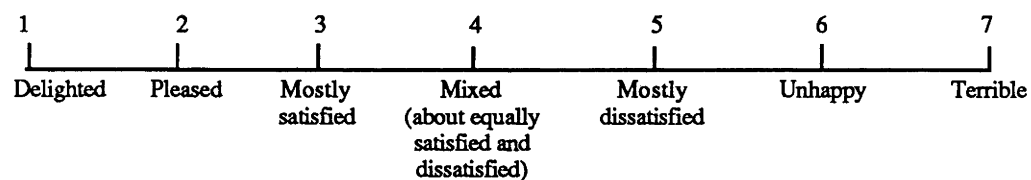
7. How do you feel about the way you spend your spare time, your non-working activities?

I feel:



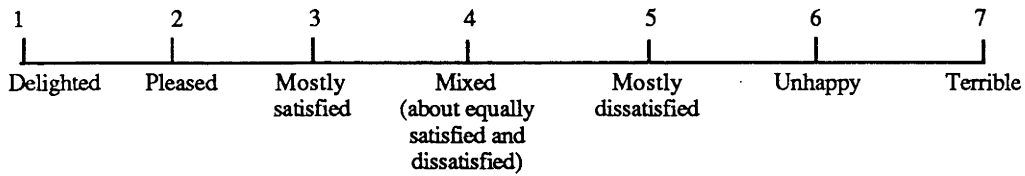
8. How do you feel about the amount of time you have for doing the things you want to do?

I feel:



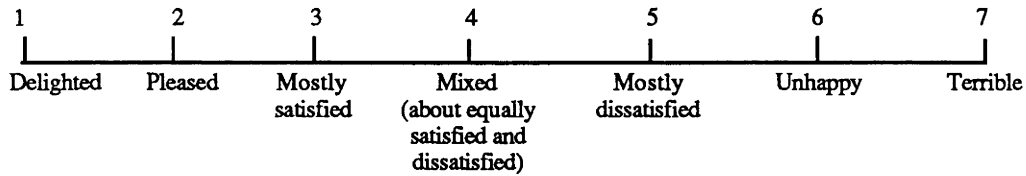
9. How do you feel about the outdoor places you can go in your spare time?

I feel:



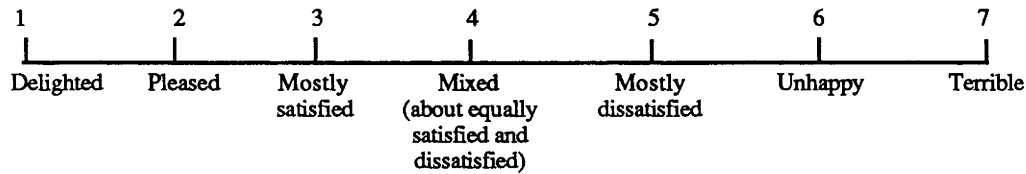
10. How do you feel about your chances for relaxation - even for a short time?

I feel:



11. How do you feel about the entertainment you get from TV., radio, movies, and local events and places?

I feel:

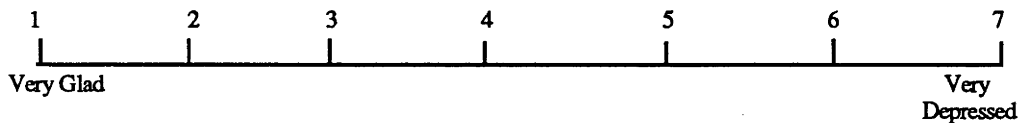


The following questions relate to how you would feel now, if you were looking for a job again.

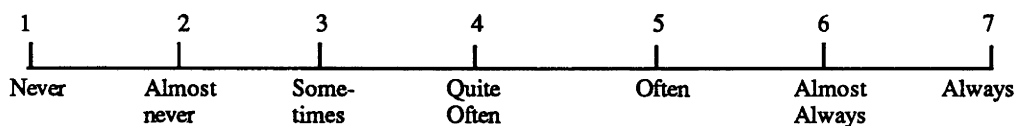
1. If looking for another job now, when applying would you:

- | | |
|---|------------------------|
| | <i>(Please circle)</i> |
| i) confine the applications to your area of interest/training | 1 |
| ii) apply for jobs somewhat related to your area of interest/training | 2 |
| iii) apply for every job possible | 3 |

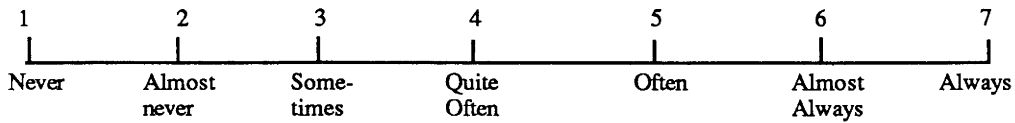
2. When you think about being unemployed now, how does it make you feel? (Not all people feel the same about being unemployed). (Circle the appropriate number)



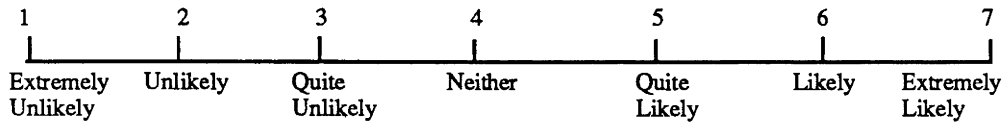
3. How often would you feel angry with yourself if you didn't have a job?



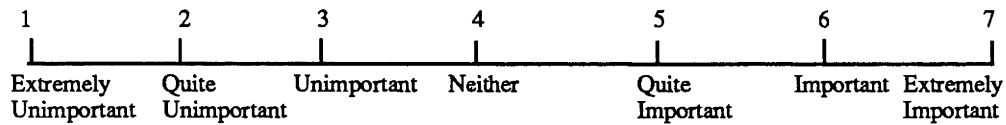
4. How often would you feel angry with society (the world around you) if you didn't have a job?



5. What do you think would be the likelihood that your future job seeking efforts would get you employment?



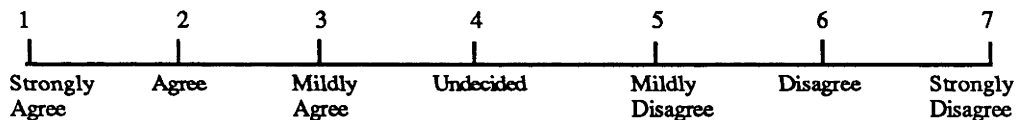
6. Getting a job is more important to some than others. How important would getting a job be to you?



The following questions relate to your expectations of getting a job in the future. Read each item, and circle the number which best describes your response.

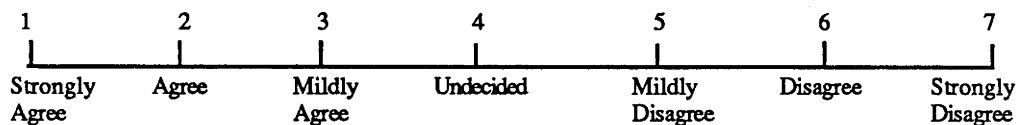
1. I look forward to my future in the workforce with hope and enthusiasm.

Do you:



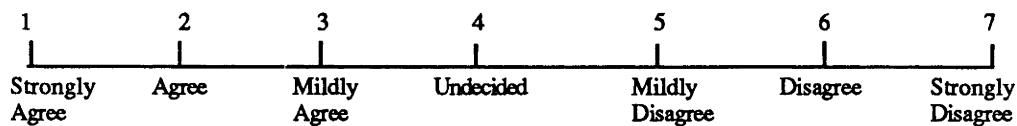
2. Because of the difficulty involved in trying to get a job, I sometimes feel like giving up.

Do you:



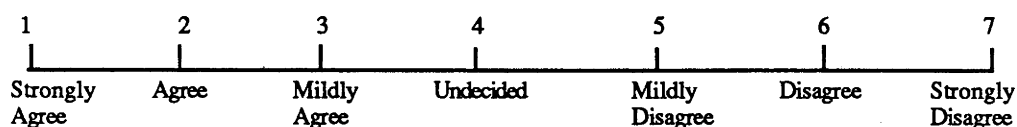
3. When I don't get a job, I would be helped by knowing that things would get better.

Do you:



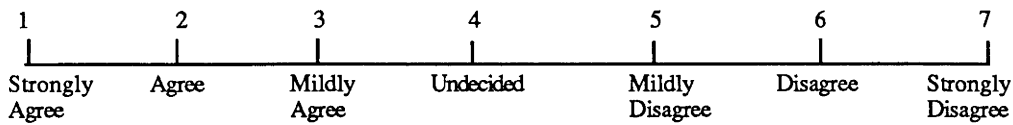
4. I can't imagine being jobless in 10 years time.

Do you:



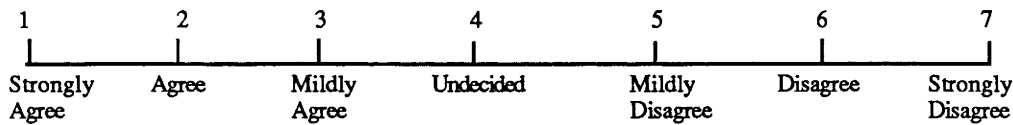
5. My job prospects seem dark to me.

Do you:



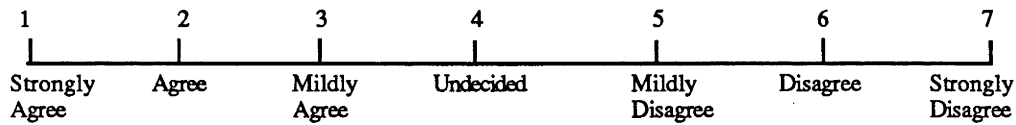
6. I expect to have more opportunities to get a job than the average person.

Do you:



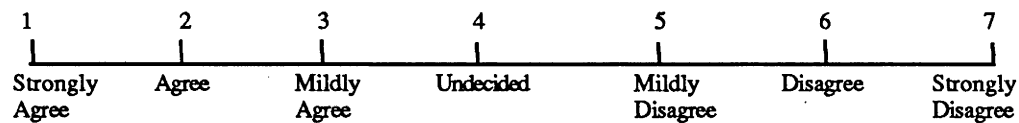
7. I just don't get the breaks when I apply for jobs, and there's no reason to believe that I will in the future.

Do you:



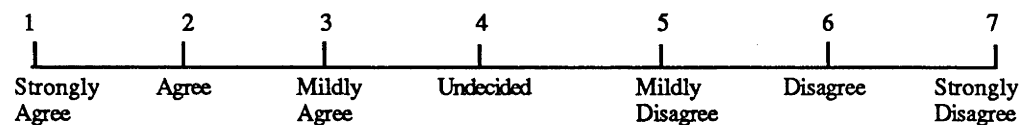
8. In terms of employment, all I can see ahead of me is unpleasantness rather than pleasantness.

Do you:



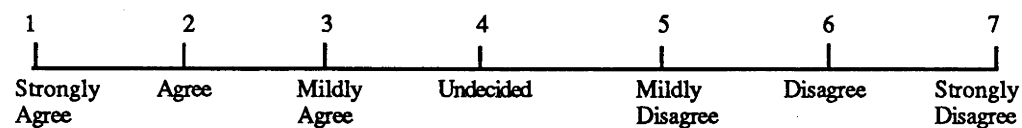
9. When I look ahead to the future, I expect to have a good job.

Do you:



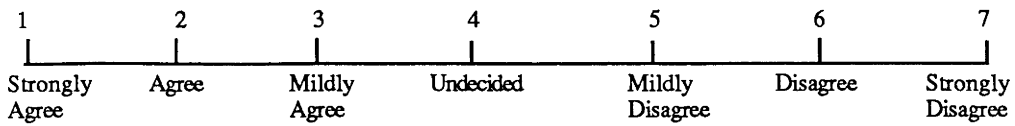
10. When I apply for a job, things just won't work out the way I want them to.

Do you:



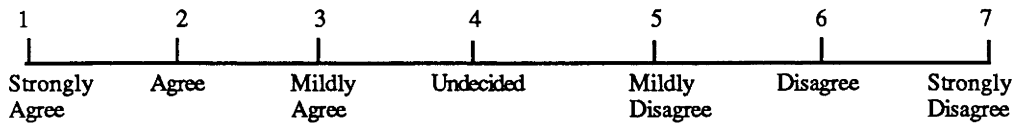
11. I have great faith in my prospects of getting a job.

Do you:



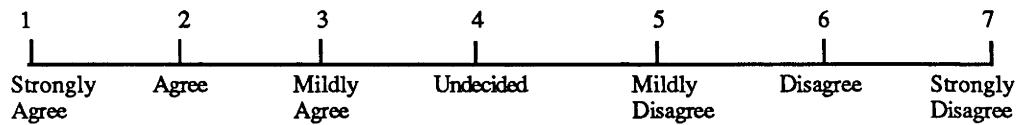
12. My future in the workforce seems vague and uncertain to me.

Do you:



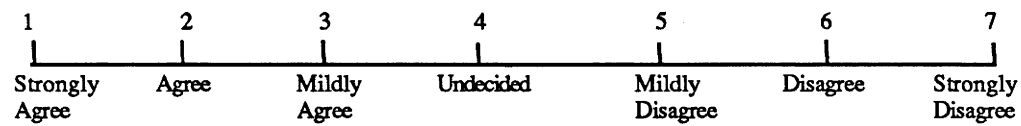
13. I can look forward to positive consideration by potential employers.

Do you:



14. There's no use in really trying to get a job because I probably won't get it.

Do you:



If registered for unemployment benefits again, what do you think would be the single most important, cause of your unemployment?

Could you in your own words and in a few sentences, provide an example of how this cause would hinder your application for work.

**THE END
 THANK YOU VERY MUCH FOR YOUR COOPERATION
 IN COMPLETING THIS QUESTIONNAIRE.
 IT'S MUCH APPRECIATED.**

DON'T FORGET TO MAIL THIS RIGHT AWAY!!

Appendix D

Questionnaire used for Full or Part-Time Employed in Longitudinal Study

Hello

You may remember that I approached you outside a Canberra Social Security Office a number of months ago and asked you some questions regarding your experience of unemployment. You may also remember that you gave me your permission to contact you at a later date to ask some questions about how things had turned out. Well, this is it.

I would like you to fill in the following questionnaire as soon as possible and return it to me in the enclosed envelope **within the next week**. It is very important for the success of this project that everyone completes the questionnaire and returns it to me straight away. I'd be very grateful for your help with this. I apologise for the length of the questionnaire, but it was not possible to reduce its size any further without jeopardising its ability to assess how things had turned out for people.

If you have any questions, feel free to phone me during work hours on 249 4003. Thank you very much.

Regards.

Robert Lynd-Stevenson
Australian National University

INSTRUCTIONS

1. Please answer all questions yourself and in the order that you come to them.
2. In answering the questions, you will be asked sometimes to fill in a box. For example, if you were 17 years old:

Age?

Years

--	--

Sometimes you will be asked to circle your answer. For example, if you were a male:

Sex (please circle)?

MALE

FEMALE

Other times you will be asked to write your answer. For example, if you have on the average three meals a day:

How many times a day on the average do you have a meal?

3. Don't spend a lot of time working out your answers - just be as honest and quick as you can without rushing. Please give **your own answers**.
4. When you have finished, check that you have not missed anything, and post the booklet to me in the extra envelope provided.

It should take you about 35 minutes to complete the whole set of questions.

SURVEY OF THE UNEMPLOYED

(Follow up: Full or Part-time Job)

OFFICE USE ONLY

Questionnaire:

Location:

Date:

This questionnaire is for people who have a full or part-time job at the moment. Please note that a "job" refers to any **paid** full or part-time work.

PART A

SECTION 1

To begin with, a number of general questions.

1. Since you turned 16 years of age, what would be the total number of months you have been registered as unemployed? *(Write number in box)*

Months

2. When I last interviewed you, were you involved in volunteer or non-paid work of some kind? *(Please circle).*

YES

NO

If yes: i) what kind? *(Please write)* _____

ii) how many hours per week on the average?

Hours

3. Are you presently engaged in volunteer or non-paid work of some kind? *(Please circle).*

YES

NO

If yes: i) what kind _____

ii) how many hours per week on the average?

Hours

PLEASE PROCEED TO SECTION 2.

SECTION 2

1. Do you have friends that are looking for a job? *(Please circle)*

YES NO

If yes: i) how many

ii) are your unemployed friends experiencing difficulty in getting a job? *(Please circle)*

YES NO COULDN'T SAY

iii) on the average, how much time in a day would you spend in the company of your unemployed friends?

Hours

Minutes

2. Do you feel that unemployed people **generally** experience difficulty in getting a job? *(Please circle)*

YES NO

3. Marital status:

(Please circle)

Single	1
Married/defacto	2
Separated	3
Divorced	4

4. Do you live:

On your own?	1
With spouse/defacto partner?	2
Independently; but in a group house?	3
At home with family?	4

If (3) or (4); how many people are in the household (including yourself?)

People

5. Is there anyone in your parents' family besides yourself, who is jobless but would like a job? *(Please circle)*

YES NO

If yes: What relationship e.g. Father, Sister? _____

6. Is there anyone in your parents' family besides yourself, at present receiving unemployment benefits? *(Please circle)*

YES NO

If yes: What relationship e.g. Father, Sister? _____

7. Are you doing some form of study? *(Please circle)*

YES NO

If yes: i) Is the study part-time or full time? (*Please circle*)

PART-TIME

FULL-TIME

ii) Name of course _____

iii) How many hours per week does your course take?

HOURS

--	--

The three remaining questions are quite different, in that they focus on how you would respond if you were looking for a job again.

1. If you were looking for a job again, **how many times in a month** on the average do you think you would **enquire about job vacancies** i.e., looking through the situations vacant section in the newspaper; checking positions available at C.E.S., and asking friends about vacancies?

No. of enquiries in a month

--	--

2. If you were looking for a job again, **how many times in a month** on the average do you think you would **make an application for a job** i.e., go for a job interview, fill out an application form?

No. of applications in a month

--	--

3. If you were looking for a job again, when would you **realistically** expect to get a job?

Years

--	--

Months

--	--

Weeks

--	--

PLEASE PROCEED TO THE NEXT PAGE.

WORK EXPERIENCE

The following questions are designed to provide a picture of your work experience since I last interviewed you. Could you examine the following sections and see if one or more is relevant to you. Please note that a "job" refers to any **paid** full or part-time work.

SECTION 3

Since I last interviewed you on the _____, have you been continually registered for unemployment benefits? *(Please circle)*

YES

NO

If yes: PLEASE PROCEED TO SECTION 4.

If no: i) When I interviewed you on the _____ you were registered for unemployment benefits. How long did it take before your registration, at that time, ceased?

Time _____

ii) Did you later re-register for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO SECTION 4.

If yes: i) How many times have you re-registered for unemployment benefits?

Number of times _____

ii) How long did each period of registration last?

1st time _____

2nd time _____

If more than 2 times, could you give your answer by writing it in the margin of this page.

iii) Are you at present registered for unemployment benefits? *(Please circle)*

YES

NO

PLEASE PROCEED TO SECTION 4.

SECTION 4

Do you have a full or part-time job at the moment? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO SECTION 5.

If yes: i) How many jobs do you hold at the moment?

Number of jobs _____

ii) How long have you held each job?

1st job _____

2nd job _____

If you have had more than 2 jobs, could you answer this question as well as parts iii, iv, v and vi, in a similar manner using the margin of the page.

iii) What kind of work is involved?

1st job _____

2nd job _____

iv) How many hours per week?

1st job _____

2nd job _____

v) Is the 1st job: *Circle a number*

- permanent 1
- has some possibility of being permanent, but not sure 2
- is probably temporary, but not sure 3
- temporary 4

Is the 2nd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- is probably temporary, but not sure 3
- temporary 4

vi) Is the 1st job the kind of work you want to do? *(Please circle)*

YES

NO

Is the 2nd job the kind of work you want to do? *(Please circle)*

YES

NO

PLEASE PROCEED TO SECTION 5.

SECTION 5

Since I last interviewed you on the _____, have you had any full or part-time jobs that are now finished?

YES

NO

If no: PLEASE PROCEED TO SECTION 6.

If yes: i) How many full or part-time jobs did you have that are now finished?

Number of jobs _____

ii) How long did each of these jobs last?

1st job _____

2nd job _____

3rd job _____

If more than 3 jobs, could you give your answer to this and the following questions by writing in the margin of this page.

iii) What kind of work was involved?

1st job _____

2nd job _____

3rd job _____

iv) On the average how many hours per week?

1st job _____

2nd job _____

3rd job _____

v) Was the 1st job:

Circle a number

- permanent 1
- had some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 2nd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 3rd job:

- permanent 1
- has some possibility of being permanent, but not sure 2
- was probably temporary, but not sure 3
- temporary 4

Was the 1st job the kind of work you wanted to do? *(Please circle)*

YES NO

Was the 2nd job the kind of work you wanted to do? *(Please circle)*

YES NO

Was the 3rd job the kind of work you wanted to do? *(Please circle)*

YES NO

vii) With the 1st job:

Circle

- did you quit 1
- were you sacked 2
- were you retrenched 3
- did the work finish 4

With the 2nd job:

- did you quit 1
- were you sacked 2
- were you retrenched 3
- did the work finish 4

with the 3rd job:

- did you quit 1
- were you sacked 2
- were you retrenched 3
- did the work finish 4

PLEASE PROCEED TO SECTION 6.

SECTION 6

At the moment are you jobless, or engaged in unpaid work - and not registered for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO SECTION 7.

If yes: i) How long has this been the case?

Time _____

ii) How come you have not registered for unemployment benefits?

iii) How do you support yourself financially?

iv) How much on the average does that come to in a week?

PLEASE PROCEED TO SECTION 7.

SECTION 7

Since I last interviewed you on the _____, have you gone through (and finished) a period of joblessness, or unpaid work - during which you were not registered for unemployment benefits? *(Please circle)*

YES

NO

If no: PLEASE PROCEED TO PART B OF THE QUESTIONNAIRE.

If yes: i) How many times were you jobless, or engaged in unpaid work, but not registered for unemployment benefits?

Number of times _____

ii) How long did each of these periods last?

If more than once, could you give your answer to this and the following questions by writing in the margin of the page.

iii) How come you did not register for unemployment benefits?

iv) How did you support yourself financially?

v) On the average how much did that come to in a week?

PLEASE PROCEED TO PART B OF THE QUESTIONNAIRE

PART B

For the following statements, please indicate whether you **Strongly Agree**, **Agree**, **Disagree** or **Strongly Disagree** by **circling** the appropriate number.

	Strongly Agree	Agree	Disagree	Strongly Disagree
On the whole, I am satisfied with myself	1	2	3	4
At times I think that I am no good at all	1	2	3	4
I feel that I have a number of good qualities	1	2	3	4
I am able to do things as well as most other people	1	2	3	4
I feel that I do not have much to be proud of	1	2	3	4
I certainly feel useless at times	1	2	3	4
I feel that I am a person of worth, at least on an equal plane with others	1	2	3	4
I wish I could have more respect for myself	1	2	3	4
All in all, I am inclined to feel that I am a failure	1	2	3	4
I take a positive attitude to myself	1	2	3	4

The following questions consist of statements. Please read each group of statements carefully, then pick out the one statement in each group which best describes the way you have been feeling the past week, **including today!** Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad.
1 I feel sad.
2. 1 I am sad all the time and I can't snap out of it.
3. 1 I am so sad or unhappy that I can't stand it.
2. 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.
3. 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.
4. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything any more.
3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
 1 I feel guilty a good part of the time.
 2 I feel quite guilty most of the time.
 3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.
 1 I feel I may be punished.
 2 I expect to be punished.
 3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.
 1 I am disappointed in myself.
 2 I am disgusted with myself.
 3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.
 1 I am critical of myself for my weaknesses or mistakes.
 2 I blame myself all the time for my faults.
 3 I blame myself for everything bad that happens.
9. 0 I don't have any thoughts of killing myself.
 1 I have thoughts of killing myself, but I would not carry them out.
 2 I would like to kill myself.
 3 I would kill myself if I had the chance.
10. 0 I don't cry any more than usual.
 1 I cry more now than I used to.
 2 I cry all the time now.
 3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.
 1 I get annoyed or irritated more easily than I used to.
 2 I feel irritated all the time now.
 3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
 1 I am less interested in other people than I used to be.
 2 I have lost most of my interest in other people.
 3 I have lost all of my interest in other people.
13. 0 I make decisions as well as I ever could.
 1 I put off making decisions more than I used to.
 2 I have greater difficulty in making decisions than before.
 3 I can't make decisions at all any more.
14. 0 I don't feel I look any worse than I used to.
 1 I am worried that I am looking old or unattractive.
 2 I feel that there are permanent changes in my appearance that make me look unattractive.
 3. I believe that I look ugly.
15. 0 I can work about as well as before.
 1 It takes an extra effort to get started at doing something.
 2 I have to push myself very hard to do anything.
 3 I can't do any work at all.
16. 0 I can sleep as well as usual.
 1 I don't sleep as well as I used to.
 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
 3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don't get more tired than usual.
 1 I get tired more easily than I used to.
 2 I get tired from doing almost anything.
 3 I am too tired to do anything.

18. 0 My appetite is no worse than usual.
 1 My appetite is not as good as it used to be.
 2 My appetite is much worse now.
 3 I have no appetite at all any more.
19. 0 I haven't lost much weight, if any lately.
 1 I have lost more than 5 pounds (or 2.0 Kg).
 2 I have lost more than 10 pounds (or 5.0 Kg).
 3 I have lost more than 15 pounds (or 7.0 Kg).
- I am purposely trying to lose weight
by eating less
- Yes No
20. 0 I am no more worried about my health than usual.
 1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
 2 I am very worried about physical problems and it's hard to think of much else.
 3 I am so worried about my physical problems, that I cannot think about anything else.
21. 0 I have not noticed any recent change in my interest in sex.
 1 I am less interested in sex than I used to be.
 2 I am much less interested in sex now.
 3 I have lost interest in sex completely.

The following questions examine the causal explanations you use to explain everyday life.

Please try to vividly imagine yourself in the situations that follow. If such a situation happened to you, what would you feel would have caused it? While events may have causes, we want you to pick only one - the **major** cause if this event happened to you. Please write this cause in the blank provided after each event. Next we want you to answer some questions about the **cause**.

To summarise, we want you to:

1. Read each situation and vividly imagine it happening to you.
2. Decide what you feel would be the **major** cause of the situation if it happened to you.
3. Write one cause in the blank provided.
4. Answer three questions about the **cause**.
5. Go on to the next situation.

You meet a friend who compliments you on your appearance.

1. Write down the **one** major cause _____
2. Is the cause for your friend's compliment due to something about you or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to friend, other people, or circumstances 1 2 3 4 5 6 7 Totally due to me

3. In the future when you meet your friend, will this cause again be present? (Circle one number)

Will never again be present 1 2 3 4 5 6 7 Will always be present

4. Is the cause something that just influences your friend, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

You have been looking for a job unsuccessfully for some time.

1. Write down the one major cause _____
2. Is the cause for your unsuccessful job search due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when looking for a job, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences looking for a job or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You become very rich.

1. Write down the one major cause _____
2. Is the cause for you becoming very rich due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future will the cause of you becoming very rich be present again? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	5	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

A friend comes to you with a problem and you don't try to help.

1. Write down the one major cause _____
2. Is the cause for you not helping your friend due to something about you or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to my friend, other people or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when your friend comes to see you with a problem, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences you becoming rich or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You give an important talk in front of a group and the audience reacts negatively.

1. Write down the one major cause _____
2. Is the cause for the audience reacting negatively due to something about you or to something about the audience, other people or circumstances? (Circle one number)

Totally due to the audience, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when talking in front of a group, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the reactions of the audience or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You do a project (i.e., school assignment) that is highly praised.

1. Write down the one major cause _____
2. Is the cause for the praise you received due to your project or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when completing a project, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	---------------------------
4. Is the cause something that just influences your project, or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You meet a friend who acts hostilely towards you.

1. Write down the one major cause _____
2. Is the cause for your friend's hostility due to something about you, or to something about your friend, other people, or circumstances? (Circle one number)

Totally due to your friend, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when meeting your friend, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your friend or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
--	---	---	---	---	---	---	---	---

You can't get all the work done that others expect of you.

1. Write down the one major cause _____
2. Is the cause for you not being able to get the work done due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when others expect you to complete your work, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the work done that others expect of you or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

Your spouse (boy/girl friend) has been treating you more lovingly.

1. Write down the one major cause _____
2. Is the cause of your spouse (boy/girl friend) treating you more lovingly due to something about you or to something about your spouse (boy/girl friend), other people, or circumstances? (Circle one number)

Totally due to your spouse (boy/girl friend), other people, or other circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when meeting your spouse (boy/girl friend), will the cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences the relationship with your spouse (boy/girl friend), or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You apply for a position that you want very badly (e.g., important job, university admission) and get it.

1. Write down the one major cause _____
2. Is the cause for you getting the position you want due to something about you or to something about other people or circumstances? (Circle one number)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when applying for a position, will this cause again be present? (Circle one number)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your application for the position or does it also influence other areas of your life? (Circle one number)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You go out on a date and it does badly.

1. Write down the **one** major cause _____
2. Is the cause of your unsuccessful date due to something about you or to something about your date, other people, or circumstances? (**Circle one number**)

Totally due to your date, other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
--	---	---	---	---	---	---	---	-------------------
3. In the future when on a date, will this cause again be present? (**Circle one number**)

Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences your date, or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

You get a raise.

1. Write down the **one** major cause _____
2. Is the cause of your raise due to something about you or to something about other people or circumstances? (**Circle one number**)

Totally due to other people, or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	-------------------
3. In the future when you get a raise, will this cause again be present? (**Circle one number**)

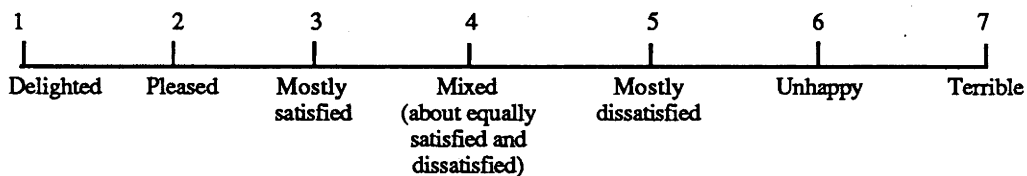
Will never again be present	1	2	3	4	5	6	7	Will always be present
-----------------------------	---	---	---	---	---	---	---	------------------------
4. Is the cause something that just influences getting a raise or does it also influence other areas of your life? (**Circle one number**)

Influences just this particular situation	1	2	3	4	5	6	7	Influences all situations in my life
---	---	---	---	---	---	---	---	--------------------------------------

In the next section, the questions are related to how you feel about parts of your life. Please indicate your present feelings by circling the appropriate number.

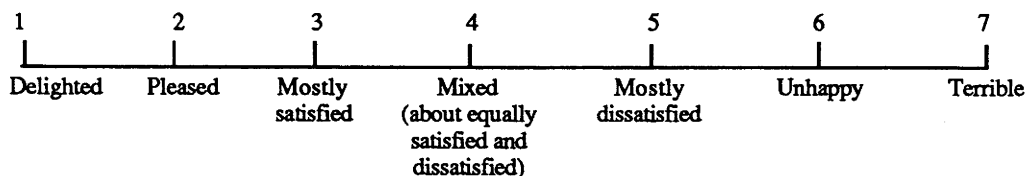
1. How do you feel about the things you do and the times you have with your friends?

I feel:



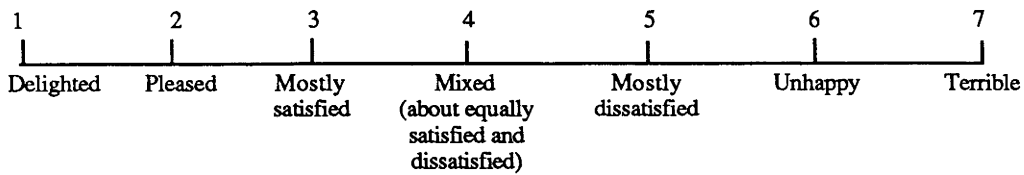
2. How do you feel about your friends?

I feel:



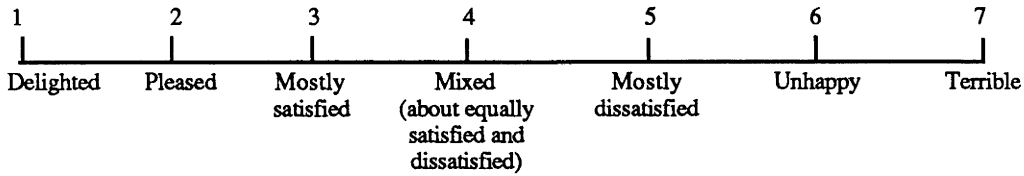
3. How do you feel about the people you see socially?

I feel:



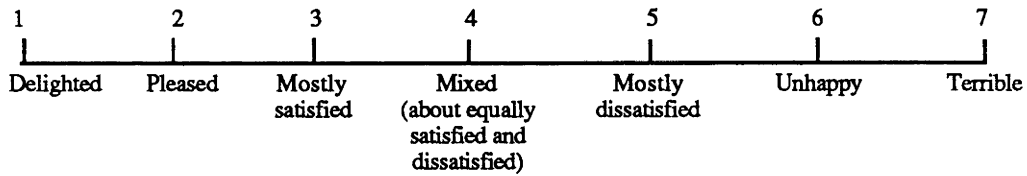
4. How do you feel about the way you get on with other people?

I feel:



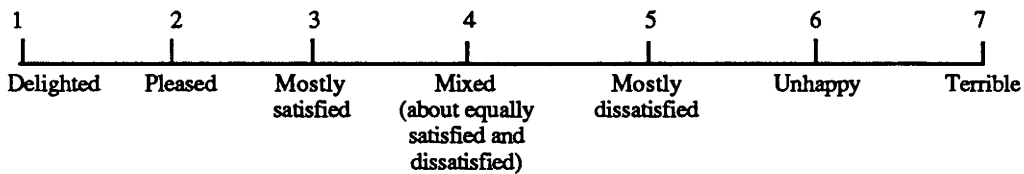
5. How do you feel about your close relatives - I mean people like parents, in-laws, brothers, and sisters?

I feel:



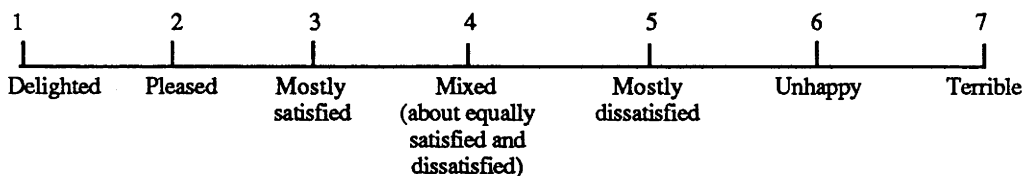
6. How do you feel about the things you and your family do together?

I feel:



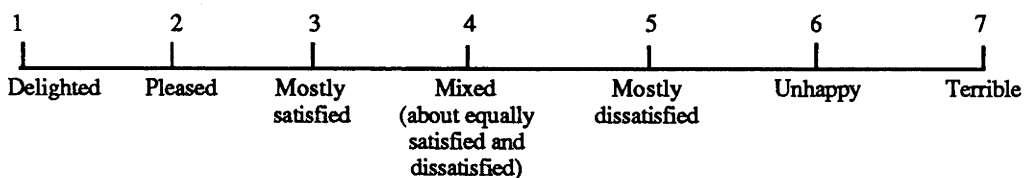
7. How do you feel about the way you spend your spare time, your non-working activities?

I feel:



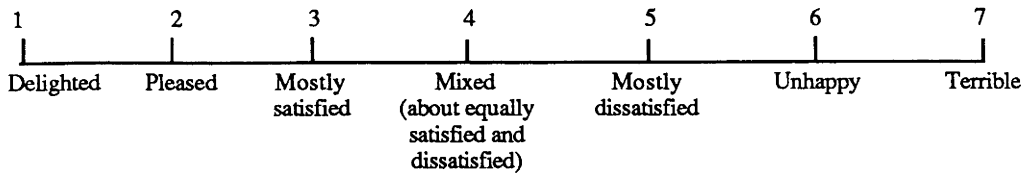
8. How do you feel about the amount of time you have for doing the things you want to do?

I feel:



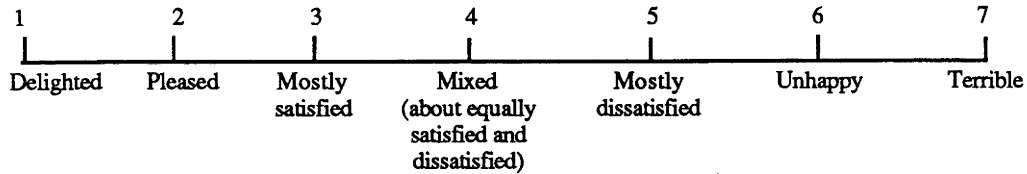
9. How do you feel about the outdoor places you can go in your spare time?

I feel:



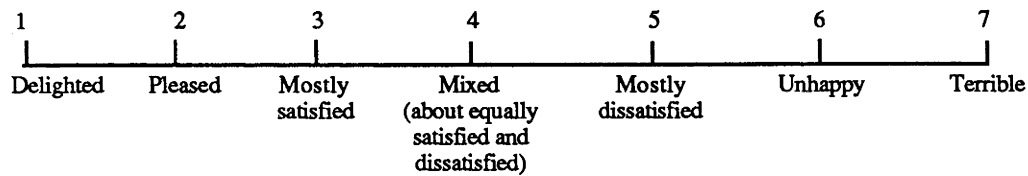
10. How do you feel about your chances for relaxation - even for a short time?

I feel:



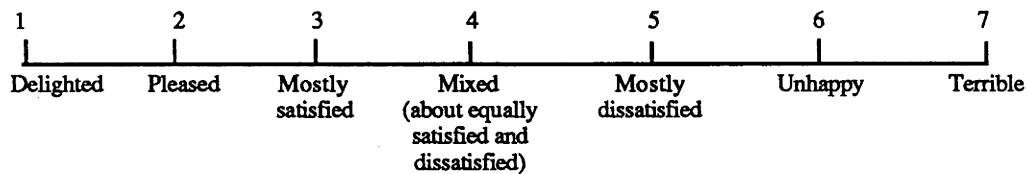
11. How do you feel about your job?

I feel:



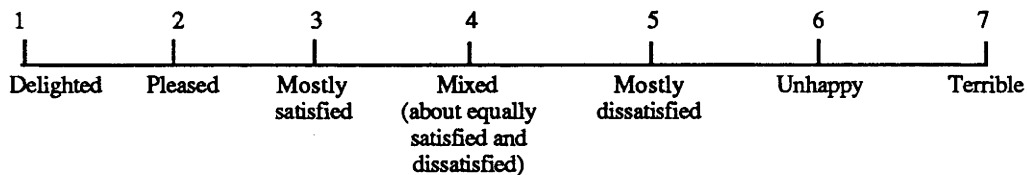
12. How do you feel about the people you work with - your co-workers?

I feel:



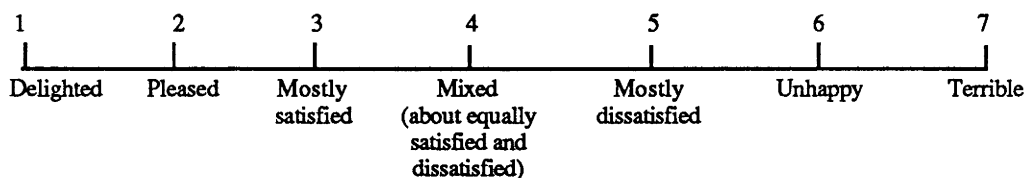
13. How do you feel about the work you do on your job - the work itself?

I feel:



14. How do you feel about the entertainment you get from TV., radio, movies, and local events and places?

I feel:

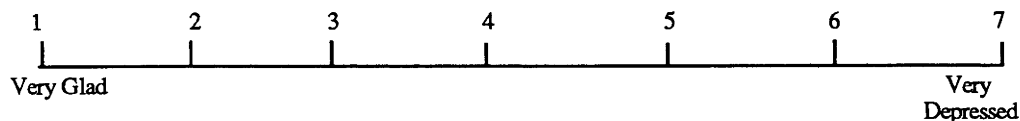


The following questions relate to how you would feel now, if you were looking for a job again?

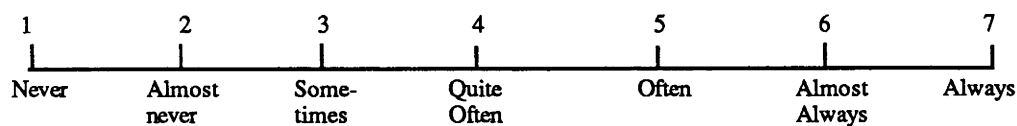
1. If looking for another job now, when applying would you:

- | | |
|---|------------------------|
| | <i>(Please circle)</i> |
| i) confine the applications to your area of interest/training | 1 |
| ii) apply for jobs somewhat related to your area of interest/training | 2 |
| iii) apply for every job possible | 3 |

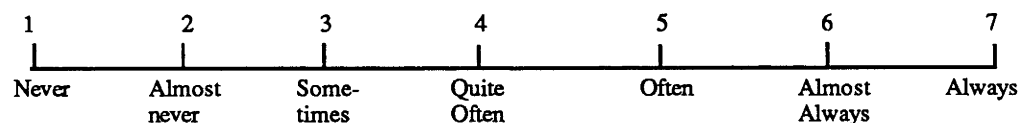
2. When you think about being unemployed now, how does it make you feel? (Not all people feel the same about being unemployed). (Circle the appropriate number)



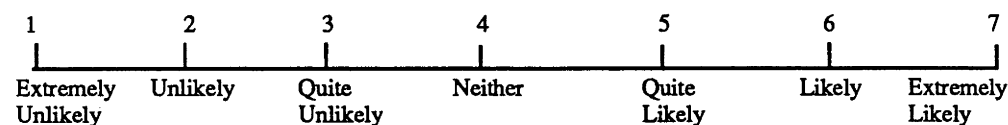
3. How often would you feel angry with yourself if you didn't have a job?



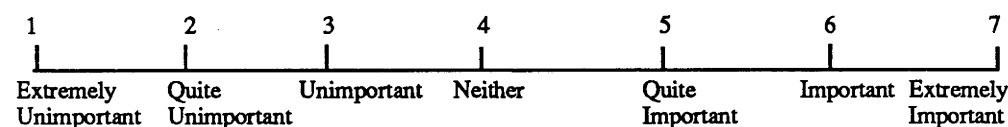
4. How often would you feel angry with society (the world around you) if you didn't have a job?



5. What do you think is the likelihood that your future job seeking efforts would get you employment?



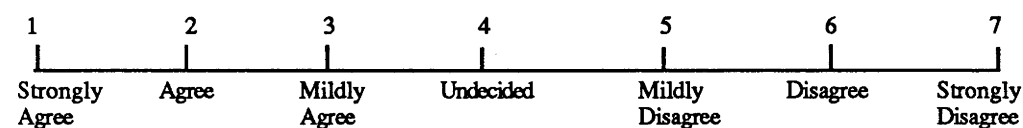
6. Having a job is more important for some than others. How important is having a job to you?



The following questions relate to your expectations of getting a job in the future. Read each item, and circle the number which best describes your response.

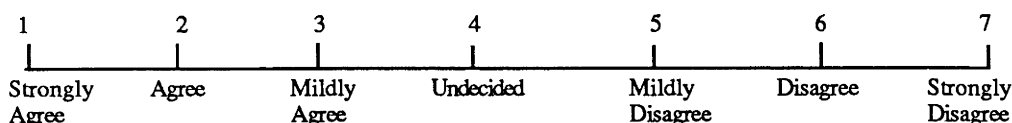
1. I look forward to my future in the workforce with hope and enthusiasm.

Do you:



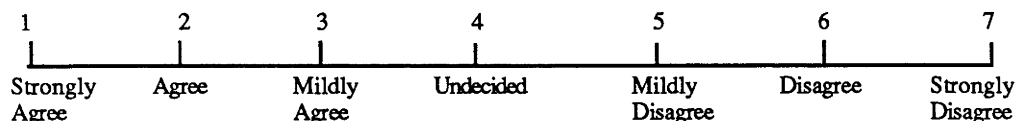
2. Because of the difficulty involved in trying to get a job, I sometimes feel like giving up.

Do you:



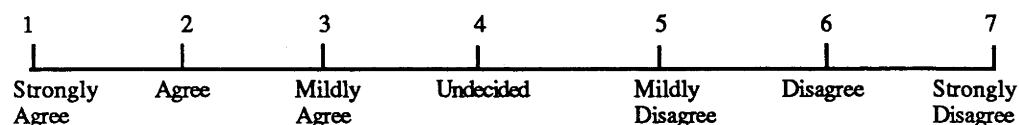
3. When I don't get a job, I would be helped by knowing that things would get better.

Do you:



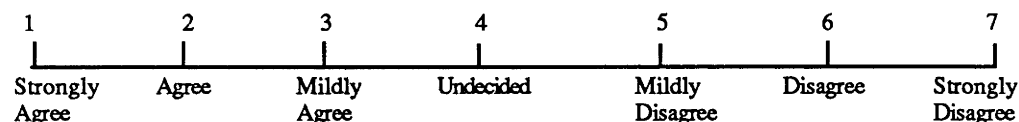
4. I can't imagine being jobless in 10 years time.

Do you:



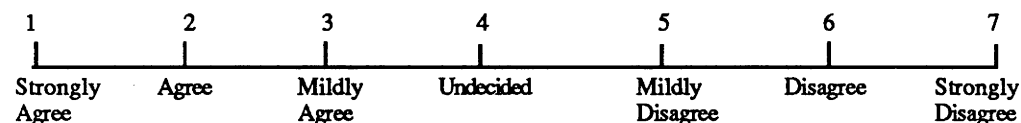
5. My job prospects seem dark to me.

Do you:



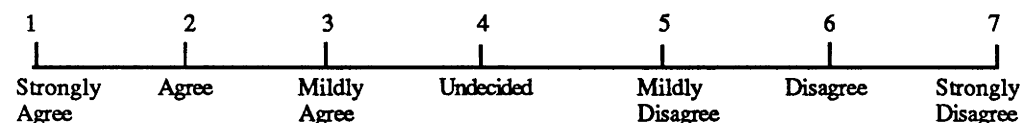
6. I expect to have more opportunities to get a job than the average person.

Do you:



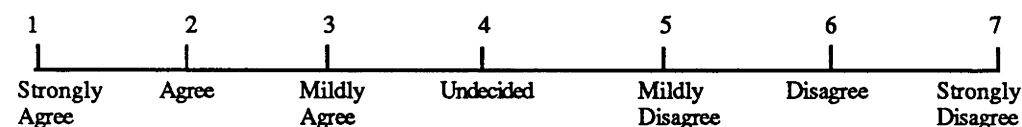
7. I just don't get the breaks when I apply for jobs, and there's no reason to believe that I will in the future.

Do you:



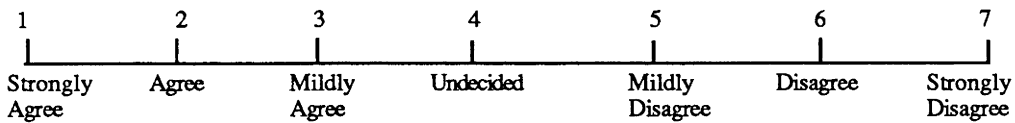
8. In terms of future employment, all I can see ahead of me is unpleasantness rather than pleasantness.

Do you:



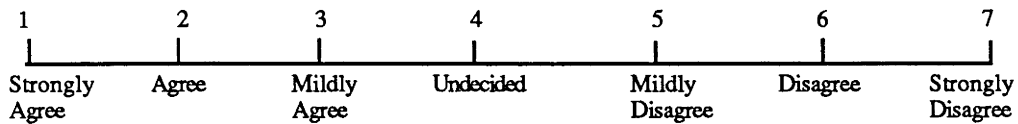
9. When I look ahead to the future, I expect to have a good job.

Do you:



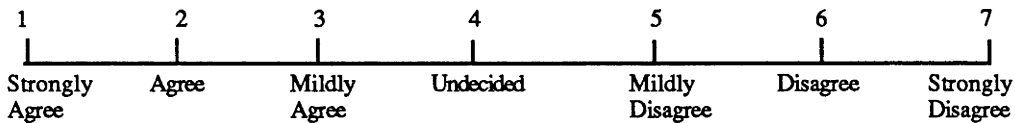
10. When I apply for a job in the future, things won't work out the way I want them to.

Do you:



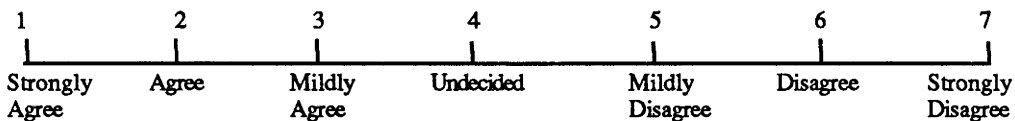
11. I have great faith in my prospects of getting another job.

Do you:



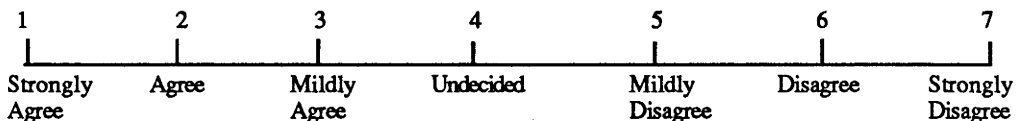
12. My future in the workforce seems vague and uncertain to me.

Do you:



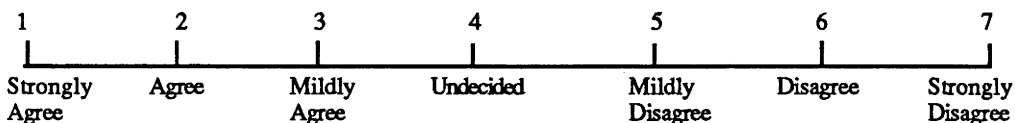
13. I can look forward to positive consideration by potential employers.

Do you:



14. There's no use in really trying to get another job because I probably won't get it.

Do you:



What is the single, most important, cause of you getting a job?

Could you in your own words and in a few sentences, outline how this cause enabled you to get a job.

If registered for unemployment benefits again, what do you think would be the single, most important cause of your unemployment?

Could you in your own words and in a few sentences, provide an example of how this cause would hinder your application for work.

THE END
THANK YOU VERY MUCH FOR YOUR COOPERATION
IN COMPLETING THIS QUESTIONNAIRE.
IT'S MUCH APPRECIATED.

DON'T FORGET TO MAIL THIS RIGHT AWAY!!

Appendix E

VAX/VMS Command Procedure to Modify SPSS^x Data into a Format Suitable for LISREL Input

```

$ set noverify
$ !
$ ! *****
$ !
$ !   The following command procedure modifies SPSSx raw-data
$ !   output files into a format suitable for LISREL raw-data input.
$ !
$ !                               Robert Lynd-Stevenson
$ !                               20-9-89
$ ! *****
$ !
$ write sys$output ""
$ inquire familiar "Are you familiar with the procedure [Y] or [N]?"
$ if familiar .eqs. "N" then goto message
$ if familiar .eqs. "Y" then goto action
$ message:
$ say := write sys$output
$ say " "
$ say "*****"
$ say " The following procedure modifies SPSSx raw-data output files to "
$ say "a format suitable for LISREL raw-data input. The procedure makes a "
$ say "number of (unfortunately rigid) assumptions regarding the SPSSx "
$ say "command file generating the raw-data: "
$ say " "
$ say " 1. PRINT command as outlined in the SPSSx User's guide (1988, "
$ say " pages 170-174) is used to format data. "
$ say " 2. TABLE option describing variable format is assumed. "
$ say " 3. all SPSSx missing values are set to SYSMIS values (i.e. a dot)."
$ say " 4. all SPSSx variable column widths set to (F11.4). "
$ say " 5. width of SPSSx raw-data file no greater than 80 columns. "
$ say " "
$ say " The procedure automatically includes a variable name list and "
$ say "substitutes 99.9999 for all SYSMIS values nominated in the SPSSx "
$ say "command file. The LISREL command file must therefore be set-up to "
$ say "accept variable labels and a missing value of 99.9999 from the data "
$ say "file. Because the command procedure relies on the standard SPSSx "
$ say "TABLE file and data file format, information regarding the number of "
$ say "subjects, variables and data provided by the procedure needs to be "
$ say "closely monitored. "
$ say "*****"
$ say " "
$ inquire proceed "Do you wish to proceed [Y] or [N]?"
$ if proceed .eqs. "N" then goto goodbye
$ if proceed .eqs. "Y" then goto action
$ action:
$ !
$ ! Find out SPSSx TABLE, SPSSx raw-data and LISREL raw-data input file names
$ !
$ write sys$output ""
$ inquire WHATTFILE "Name of SPSSx TABLE file "
$ inquire WHATIFILE "Name of SPSSx raw-data file "
$ inquire WHATOFILE "Name of LISREL raw-data input file "
$ open/read TABFILE 'WHATTFILE'
$ open/read INFILE 'WHATIFILE'
$ open/write OUTFILE 'WHATOFILE'
$ !

```

```

$ ! *****
$ ! The first procedure examines the SPSSx TABLE file, extracts the variable
$ ! names and stores them in the raw-data LISREL input file.
$ ! *****
$ ! Count number of variables placed in LISREL input file
$ COUNT = 0
$ first_read_loop:
$ read/end_of_file = finish TABFILE RECORD_A
$ if f$locate("Variable Rec Start",RECORD_A).eq. f$length(RECORD_A) -
then goto first_read_loop
$ if f$locate("Variable Rec Start",RECORD_A).ne. f$length(RECORD_A) -
then goto second_read_loop
$ second_read_loop:
$ read/end_of_file = finish TABFILE RECORD_B
$ if RECORD_B .eqs. "" then goto second_read_loop
$ if f$locate("F11.4",RECORD_B).eq. f$length(RECORD_B) -
then goto second_read_loop
$ HOLT = f$extract(7,7,RECORD_B)
$ if f$locate("Execute",HOLT).ne. f$length(HOLT) -
then goto finish
$ STRING = f$extract(1,8,RECORD_B)
$ write OUTFILE "",STRING,""
$ COUNT = COUNT + 1
$ REC = f$extract(13,3,RECORD_B)
$ goto second_read_loop
$ finish:
$ write SYS$OUTPUT ""
$ write SYS$OUTPUT "There were ''REC'' lines per subject in the" + -
" SPSSx raw-data input file"
$ write SYS$OUTPUT "There were ''COUNT'' variables per subject" + -
" in the SPSSx raw-data input file"
$ !
$ ! *****
$ ! The second procedure pads out the data file, counts the number of lines
$ ! and places the output in a temporary file.
$ ! *****
$ !
$ open/write TEMPFILE robs1_tempfile.tmp
$ LINES = 0
$ read_loop:
$ read/end_of_file = endit INFILE num
$ char_string = f$fao("!80AS", f$extract(0,80,num))
$ write TEMPFILE char_string
$ LINES = LINES + 1
$ goto read_loop
$ endit:
$ close TEMPFILE
$ write sys$output "There were ''LINES'' lines of data in the" + -
" SPSSx raw-data input file"
$ NSUBS = LINES/REC
$ write sys$output "There were ''NSUBS'' subjects listed in the" + -
" SPSSx raw-data input file"
$ write sys$output ""
$ !
$ ! *****
$ ! The third procedure modifies the SPSSx system missing values in the
$ ! temporary file and places the output in OUTFILE.
$ ! *****

```

```
$!  
$ define sys$output robs2_tempfile.tmp  
$ edit robs1_tempfile.tmp  
  sub/ . /99.9999/whole/notype  
  exit  
$ deassign sys$output  
$ delete/nolog robs2_tempfile.tmp;*  
$ purge/nolog robs1_tempfile.tmp  
$ open/read TEMPFILE robs1_tempfile.tmp  
$ another_read_loop:  
$  read/end_of_file = thats_it TEMPFILE REC_IN_TEMPFILE  
$  another_char = f$faof("!80AS", f$extract(0,80,REC_IN_TEMPFILE))  
$  write OUTFILE another_char  
$  goto another_read_loop  
$ thats_it:  
$ close TEMPFILE  
$ delete/nolog robs1_tempfile.tmp;*  
$ close TABFILE  
$ close INFILE  
$ close OUTFILE  
$ write sys$output "LISREL raw-data input file is ready..."  
$ write sys$output ""  
$ goodbye:  
$ exit
```


Appendix F

LISREL Commands used to Test Causal Models

Specification for the final models in the LISREL iterative analyses are provided below. Along with the correlation matrices reported in the text, the causal analysis conducted during the study can be repeated to reproduce the structural coefficients cited in the text. Details of the iterative approach used to develop the final models is outlined in Chapter II.

Causal Model I for Learned-Helplessness Theory (refer Figure 3.1)

DA NI=23 NO=200
 LA UN=8
 RA UN=8 XM=99.9999 MV=2
 MO NY=8 NX=15 NE=8 FIXEDX BE=FU,FI GA=FU,FI PS=SY,FI TE=DI,FI
 VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4) LY(5,5) LY(6,6) LY(7,7) LY(8,8)
 FR BE(4,2) BE(5,3) BE(6,5) BE(7,1) BE(7,4) BE(8,1) BE(8,6)
 FR PS(1,1) PS(2,2) PS(3,3) PS(4,4) PS(5,5) PS(6,6) PS(7,7) PS(8,8)
 OU TV MI SE RS ND=4 TM=90

Causal Model II for Learned-Helplessness Theory (refer Figure 3.2)

DA NI=20 NO=200
 LA UN=8
 RA UN=8 XM=99.9999 MV=2
 MO NY=5 NX=15 NE=5 FIXEDX BE=FU,FI GA=FU,FI PS=SY,FI TE=DI,FI
 VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4) LY(5,5)
 FR BE(3,2) BE(4,3) BE(5,1) BE(5,4)
 FR PS(1,1) PS(2,2) PS(3,3) PS(4,4) PS(5,5)
 FR GA(1,2) GA(1,4) GA(1,13)
 FR GA(3,2) GA(3,14)
 FR GA(4,1) GA(4,3) GA(4,6) GA(4,7) GA(4,15)
 FR GA(5,2) GA(5,3) GA(5,14)
 OU TV MI SE RS ND=4 TM=90

Causal Model III for Learned-Helplessness Theory (refer Figure 3.3)

DA NI=12 NO=200
 LA UN=8
 RA UN=8 XM=99.9999 MV=2
 MO NY=4 NX=8 NE=4 FIXEDX BE=FU,FI GA=FU,FI PS=SY,FI TE=DI,FI
 VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4)
 FR BE(3,1) BE(3,2) BE(4,3)
 FR PS(1,1) PS(2,2) PS(3,3) PS(4,4)
 FR GA(1,1) GA(1,3) GA(1,7)
 FR GA(3,2) GA(3,5) GA(3,6) GA(3,8)
 FR GA(4,1) GA(4,2) GA(4,3) GA(4,4) GA(4,7)
 OU TV MI SE RS ND=4 TM=90

Causal Model I for Frustrated-Motivation Theory (refer Figure 3.5)

DA NI=14 NO=200
 LA UN=8
 RA UN=8 XM=99.9999 MV=2
 MO NY=5 NX=9 NE=5 FIXEDX BE=FU,FI GA=FU,FI PS=SY,FI TE=DI,FI
 VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4) LY(5,5)
 FR BE(4,1) BE(4,2) BE(5,3) BE(5,4)
 FR PS(1,1) PS(2,2) PS(3,3) PS(4,4) PS(5,5)
 FR GA(1,2) GA(1,4) GA(1,7)
 FR GA(2,1) GA(2,3) GA(2,5) GA(2,6) GA(2,9)
 FR GA(3,2) GA(3,4) GA(3,9)
 FR GA(4,5) GA(4,8) GA(4,9)
 FR GA(5,2) GA(5,4) GA(5,9)
 OU TV SE MI RS ND=4 TM=90

Causal Model II for Frustrated-Motivation Theory (refer Figure 3.6)

DA NI=13 NO=200
 LA UN=8
 RA UN=8 XM=99.9999 MV=2
 MO NY=5 NX=8 NE=5 FIXEDX BE=FU,FI GA=FU,FI PS=SY,FI TE=DI,FI
 VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4) LY(5,5)
 FR BE(2,1) BE(4,1) BE(4,2) BE(5,3) BE(5,4)
 FR PS(1,1) PS(2,2) PS(3,3) PS(4,4) PS(5,5)
 FR GA(1,2) GA(1,4) GA(1,7)
 FR GA(2,1) GA(2,3) GA(2,5) GA(2,6) GA(2,8)
 FR GA(3,5)
 FR GA(4,2) GA(4,4) GA(4,8)
 FR GA(5,2) GA(5,4) GA(5,8)
 OU TV SE MI RS ND=4 TM=90

Causal Model for Learned-Helplessness Theory (refer Figure 6.1)

DA NI=4 NO=43
 LA UN=8
 RA UN=8 XM=99.9999 MV=2
 MO NY=4 NE=4 BE=FU,FI PS=FU,FI TE=DI,FI
 VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4)
 FR BE(3,1) BE(3,2) BE(4,1) BE(4,3)
 FR PS(1,1) PS(2,2) PS(3,3) PS(4,4)
 OU TV MI SE RS ND=4 TM=90

Causal Model for Frustrated-Motivation Theory (refer Figure 6.3)

DA NI=5 NO=43
 LA UN=8
 RA UN=8 XM=99.9999 MV=2
 MO NY=5 NE=5 BE=FU,FI PS=FU,FI TE=DI,FI
 VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4) LY(5,5)
 FR BE(4,1) BE(4,2) BE(5,1) BE(5,3) BE(5,4)
 FR PS(1,1) PS(2,2) PS(3,3) PS(4,4) PS(5,5)
 OU TV MI SE RS ND=4 TM=90

Causal Model for Learned-Helplessness Theory (refer Figure 6.5)**DA NI=5 NO=143****LA UN=8****RA UN=8 XM=99.9999 MV=2****MO NY=4 NX=1 NE=4 FIXEDX BE=FU,FI GA=FU,FI PS=SY,FI TE=DI,FI****VA 1.0 LY(1,1) LY(2,2) LY(3,3) LY(4,4)****FR BE(3,1) BE(3,2) BE(4,3)****FR GA(1,1) GA(2,1) GA(3,1)****FR PS(1,1) PS(2,2) PS(3,3) PS(4,4)****OU TV SE MI RS ND=4 TM=90**