UNEMPLOYMENT AND THE MENTAL HEALTH OF NEWFOUNDLAND WOMEN AFFECTED BY THE FISHERY CLOSURE

CYNTHIA LYNN MURRAY

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UNEMPLOYMENT AND THE MENTAL HEALTH OF NEWFOUNDLAND WOMEN AFFECTED BY THE FISHERY CLOSURE

by

Cynthia Lynn Murray, R.N., B.N.

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ABSTRACT

This study was part of a larger interdisciplinary Eco-Research program entitled "Sustainability in a Changing Cold-Ocean Coastal Environment", which assessed the impact of the fishery closure on various aspects of individuals and communities in coastal Newfoundland. The purpose of this study was to compare the level of mental distress experienced by unemployed and employed women, in two areas of Newfoundland that were affected by the northern cod moratorium. In addition, the relationships between women's mental distress and a number of variables, which included having a partner, age, level of education, number of children under 16 years of age, partner's employment status, and history and duration of unemployment, were explored. The sample consisted of women between the ages of 25 and 64, who were unemployed (n = 112) and employed (n = 112). Data were collected in the spring of 1995, three years after the moratorium began.

Demographic data were collected using the Eco-Research Health Survey (ERHS), which was used in the health component of the study to assess the health status of the participants. Mental distress was measured using the abbreviated 28 item General Health Questionnaire (GHQ28). The findings showed that the unemployed women reported significantly poorer mental well-being in the year prior to data collection as compared to their employed counterparts. At the time of the study, however, the stress levels of the

unemployed and employed women were similar, with both groups of women experiencing high levels of distress. The moratorium, financial problems, and feelings of uncertainty were identified as key stressors for all the women, but especially for those without work. It is proposed that although employment can be stressful for women, it may be protective of good mental health for a lot of women.

The results also revealed that none of the variables significantly correlated with the level of distress for the unemployed women. Among the working women, past experience with unemployment and level of education had significant correlations with their mental well-being. Recommendations for nursing practice, education, theory, and research were made.

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CHAPTER 1

INTRODUCTION

Unemployment is one of the major social problems of our time, affecting a high number of men and women. As work is important in our lives, an area of particular concern is the effect unemployment has on the physical and mental health of those who experience it (Canadian Public Health Association, 1996; Jin, Shah, & Svoboda. 1995). While a great deal of research has been conducted on the negative effects of unemployment on men's mental health, relatively few studies of this nature have focused exclusively on women. This study is an attempt to contribute to a greater understanding of women's experiences with unemployment and what impact it has on the mental health of women in the context of a large scale job loss.

Background

On July 2, 1992 the Canadian federal government responded to the collapse of the northern cod stocks by announcing a two year moratorium on the fishing of this stock, which was later extended indefinitely (Belec & Cleary, 1992; Smith, 1994). Due to the northern cod moratorium the existence of many fishing communities was threatened as 37,000 people in Newfoundland became unemployed, resulting in the largest single layoff in Canadian history (Storey & Smith, 1995). Although the moratorium may eventually be lifted, it is estimated that in the future the fishery will only support half of those who

worked in this industry before the moratorium (Cashin, 1993). The threat of massive chronic unemployment will become a reality unless alternative employment can be found for thousands of displaced workers. Finding employment for these individuals in small, single-sector fishing communities in the province with the highest unemployment rate in the country is a huge dilemma.

In many countries the unemployment rate is high. In 1994, 35 million people were unemployed in the countries belonging to the Organization for Economic Cooperation and Development (OECD) compared with 12.5 million in 1974 (Dooley, Fielding, & Levi, 1996; Hammarstrom, 1994). The number of individuals who were officially unemployed in Canada was just under 1.2 million in 1999 (Statistics Canada, 2000). The official unemployment rate does not include the "hidden unemployed" which comprises of individuals who (a) work part-time but would prefer to work full-time, or (b) want to work and are available to work but otherwise do not meet the unemployment criteria (Jin et al., 1995). Paradoxically, the official unemployment rate can fall during an economic downturn, if a lot of individuals give up looking for work (Dooley et al., 1996). Thus, the actual number of unemployed is often much higher than the official unemployment rate indicates. The official unemployment rate in Canada for March 1993 was 12.3% (Jin et al.). However, considering the hidden unemployed population, the "real" national unemployment rate at that time was close to 20% and in Newfoundland it was 42% (Jin et al.). With companies downsizing or relocating to less expensive labour environments and

with recent advances in technology, it is expected that unemployment rates will remain high in the future (Dew, Penkower, & Bromet, 1991; Shortt, 1996).

Problem Statement

Unemployment is considered to be one of the more stressful life events (Dirksen, 1994; Dohrenwend, Dohrenwend, Dodson, & Shrout, 1984; Ensminger & Celentano, 1988; Liem & Liem, 1988). It is generally accepted that psychological distress contributes to physiological illness and psychosocial problems. Unemployment has been associated with increased rates in mortality, cardiovascular disease, cancer, various infectious diseases, chronic respiratory diseases, gastrointestinal disorders, alcoholism, accidents, suicide, parasuicide, homicide, child abuse, and family violence (Brenner, 1971; Brenner & Mooney, 1983; Dirksen; Friedemann, 1987; Hamilton, Broman, Hoffman, & Renner, 1990; Jin et al., 1995; Svensson & Zollner, 1985). In terms of mental health, there is substantial support that unemployed men experience a prolonged increase in somatic and psychological distress levels, especially for depression and anxiety (Bolton & Oatley, 1987; Dew, Bromet, & Penkower, 1992; Finlay-Jones & Eckhardt, 1981; Hall & Johnson, 1988; Hobbs, Ballinger, McClure, Martin, & Greenwood, 1985; Jackson & Warr, 1984; Melville, Hope, Bennison, & Barraclough, 1985).

The effects of unemployment on the mental health of women have not been fully explored and the findings from the studies conducted in this area have some inconsistencies. For example some researchers, such as Rosen (1987) and Perrucci, Targ,

Perrucci, and Targ (1987), reported no mental health effects of unemployment for women, while other researchers, such as Dew et al. (1992) and Hall and Johnson (1988), reported detrimental effects. The mixed results may have been partly due to the use of samples with unemployed women and homemakers grouped together (Dew et al., 1992). This can happen when the reasons for non-employment are not specified by the researchers. It creates a problem because generally speaking the mental health effects of non-employment for unemployed women are likely to be different from that of homemakers (Dew et al., 1992). Studies, which exclude homemakers from samples of unemployed women, are therefore needed in order to further this area of research.

Rationale for Study

As community health nurses we need to have an improved understanding of population health and its determinants so that we may design effective health promotion programs. Employment status is one of the key social determinants of health (Federal, Provincial and Territorial Advisory Committee on Population Health, 1996). Employment not only helps individuals provide for the necessities of life, such as food and shelter, but is also a source of self-esteem and social interaction. Women benefit from these positive effects suggesting employment is an important health determinant for them.

We know that unemployment is a major life stressor. A major responsibility of community health nurses is to help individuals, families, and communities deal with stressful life events, such as unemployment (Clemen-Stone, McGuire, & Eigsti, 1998).

Community health nurses also have a role in reducing inequities in health that may result from a socioeconomic factor like high unemployment (Reutter, 1995). Information gained from this study may help community health nurses and other health care professionals to develop appropriate interventions to enhance the psychological well-being of unemployed women. For example, if research supports that unemployed women experience greater mental distress, then the importance of conducting a thorough mental health assessment of unemployed women can be stressed to health practitioners. Furthermore, there may be a number of moderating factors for women that affect their adjustment to unemployment. Illuminating any moderators through research may in turn be useful in determining efficacious interventions to promote the mental health of unemployed women.

Purpose and Research Questions

The purpose of this study is to compare the level of mental distress experienced by unemployed and employed women, in two areas of Newfoundland that were affected by the northern cod moratorium. In addition, the relationships between their mental health and several variables will be explored. Although significant mental health differences were found in the same study area between men and women ($p = .0001$. Gien & Solberg, 1996, 1998), and between unemployed and employed workers ($p = .01$, Gien, 2000), further analysis of the same variable between unemployed and employed women is needed. Homemakers were included with unemployed women in the original study. In

the present study, homemakers will be excluded from the sample of unemployed women.

This study will address the following research questions:

(1) Is there a difference in mental distress between unemployed and employed women?

(2) Is there a difference in mental distress between women with a partner and those without a partner for the unemployed and employed women?

(3) Is there a relationship between age and mental distress for unemployed and employed women?

(4) Is there a relationship between level of education and mental distress for unemployed and employed women?

(5) Is there a relationship between the number of children under the age of 16 and mental distress for unemployed and employed women?

(6) For unemployed and employed women, is there a difference in mental distress between women who have an unemployed partner and those who have an employed partner?

(7) Is there a relationship between history of unemployment and mental distress for unemployed and employed women?

(8) Is there a relationship between duration of unemployment and mental distress for the unemployed women?

(9) Is there a difference in uncertainty, mental health, and financial strain

between unemployed and employed women?

Conceptual Framework

The conceptual basis for this study is the stressful life event paradigm (Dohrenwend & Dohrenwend, 1981; Pearlin, Lieberman, Menaghan, & Mullan, 1981). In the life events-stress literature unemployment is seen as a major stressor, as it can precipitate other life events such as a change in family dynamics and financial strain (Ensminger & Celentano, 1988). However, within the theory it is acknowledged that certain factors may have a moderating effect on unemployed people's mental health. Based on the stressful life event paradigm and the published research literature, a tentative model (Figure 1) was developed as the guiding framework for this study. It has been well documented that unemployment is a highly stressful event which affects the physical and mental health of people (Jin et al., 1995). However, there are a number of factors that may moderate the effects of unemployment on the mental health of women, several of which are illustrated in the model. These factors will be discussed in succession. The studies referred to in this section are also covered in the literature review.

Moderating Variables

A number of researchers suggested that marital status may be one of the factors affecting the mental health of unemployed women (Cochrane & Stopes-Roe, 1980; Ensminger & Celentano, 1990; Hall & Johnson, 1988; Kessler, Turner, & House, 1987;

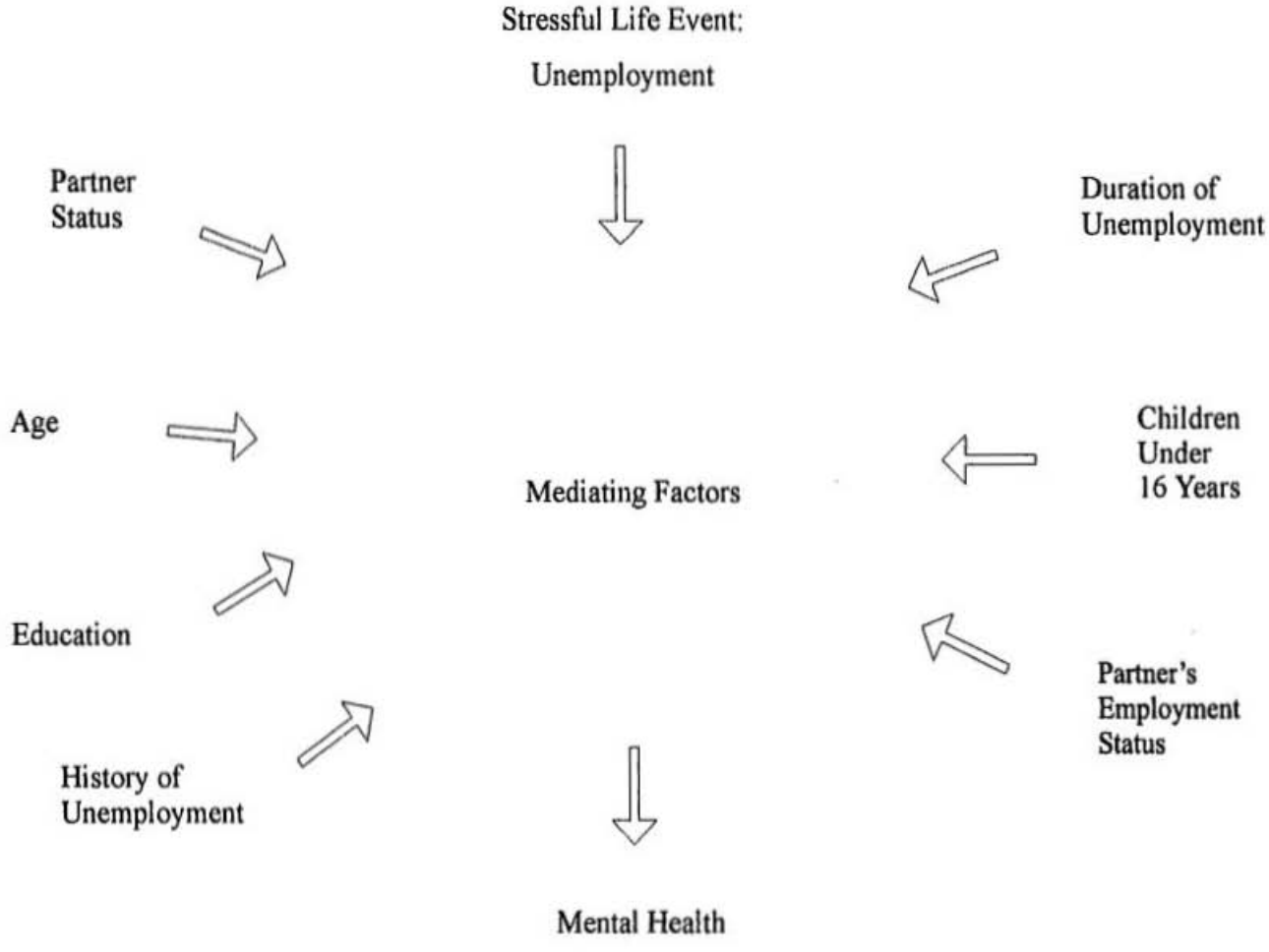

Figure 1. Factors that may moderate the impact of unemployment on the mental health of women.

Perrucci et al., 1987; Rodgers, 1991; Shamir, 1985; Wheaton, 1990). The literature on this topic, however, is inconsistent and may benefit from further investigation.

A handful of studies in the unemployment literature have looked at how age and education impact on the well-being of women. Findings showed that older female workers may bear the brunt of psychological ill-health amongst the different age groups (Kessler, Turner, et al., 1987; Studnicka et al., 1991). In addition, it is possible that women with various levels of education are affected by job loss in a similar fashion (Dew et al., 1992; Kessler, Turner, et al.).

The influence of children on the mental state of unemployed women is not clear and may be more complex than once thought. A couple of studies reported that unemployed women with children enjoyed better mental well-being than those who are childless (Kessler, House, & Turner, 1987; Leeflang, Klein-Hesselink, & Spruit. 1992), although marital status was a concomitant factor in one of the studies. Other studies suggested that the presence or absence of children is insignificant (Dew et al., 1992; Snyder & Nowak, 1984).

Research provides insight into how the employment status of a partner can counteract mental health problems for unemployed women. Women who may gain the most psychologically are married to employed husbands who are also the chief breadwinners of the families (Kessler, House, et al., 1987).

Features of the unemployment experience may also have modifying effects. History of unemployment is one example, with those experiencing unemployment for the first time being more susceptible to the harmful effects (Studnicka et al., 1991). Mental distress in unemployed women may be a function of how long they remain unemployed. For instance, most of the women who are unemployed for more than two years may no longer be at risk for distress (Arnetz et al., 1991; Brenner & Levi, 1987).

Finally, the literature review suggests that unemployment may have an impact on the mental health of women. Unemployed women may endure depressive thoughts, a loss of self-esteem, and elevated levels of distress (Dew et al., 1992). However, more research, with unemployed women separated from those who are homemakers, is needed to substantiate these findings and to further elucidate any moderating factors.

Definitions of Terms

Mental distress was operationalized as the score on the 28 item General Health Questionnaire. Scores that were (a) less than 5, (b) between and included 5 and 11, and (c) greater than 11 indicated low, medium, and high levels of distress respectively (Gage & Leidy, 1991).

Partner status denoted whether or not an individual was either married and living with her spouse or was in a common-law relationship.

Unemployment was defined as not presently having paid employment and

looking for a job at the present time.

CHAPTER 2

LITERATURE REVIEW

In a recent national Gallup Poll (1999), unemployment was cited as the most important problem facing the country today. Historically our society has placed a tremendous amount of importance on employment. Having employment is a highly valued sociocultural norm, which allows us to acquire food, shelter, security, status, a sense of purpose and identity, social interaction, time structure, and non-necessity items (Dirksen, 1994; Fryer & Payne, 1986). This chapter is divided into two main sections. The first section covers theoretical explanations of unemployment and mental health. The second section summarizes research on the psychological effects of unemployment.

Theoretical Explanations of Unemployment and Mental Health

As outlined by Fryer and Payne (1986), three main theoretical explanations in the literature on unemployment and mental health are (a) the stages model, (b) the functional or deprivation approach, and (c) the active approach. The **stages model** describes the phases a person goes through following job loss. For example, based on a review of over 100 studies accessible during the Great Depression, Eisenberg and Lazarsfeld (1938) described a three stage model. The phases included shock, distress, and adaptation. Fortin (1984) characterized unemployment as a process with five stages, which consisted of hope, anxiety, distress, discouragement, and resignation and apathy. These authors are

not alone in describing different phases. There is a lack of consistency in the number of stages and in the attributes of the different stages proposed by researchers who subscribe to this model. In addition, Fryer and Payne cite the lack of conceptual and empirical support behind the stages account.

According to Jahoda's (1982) **functional model**, employment supplies people with the opportunity to meet financial and other needs. In particular, employment imposes a time structure, demands activity, provides regular contact with others. links people to collective goals and purposes, and defines facets of personal status and identity. As such, unemployment is usually psychologically damaging because the opportunity to meet monetary and other needs is frequently lost. Jahoda goes on to explain that some people meet their needs through other means and therefore can escape harmful consequences of unemployment.

The functional model has been criticized by Fryer and Payne (1986) for being inherently irrefutable and for assuming that people are governed by their environment. The authors challenged the idea that individuals are dependent on external forces for enforcing activity, structuring the day, and providing goals and purposes. A tenet of Fryer and Payne's **active approach** is that most people choose their actions, and therefore play a role in shaping their social situation. Personal beliefs, intentions, and goals are important considerations. The active person is seen as experiencing distress due to frustration over a lack of resources and power, which in turn reduces striving

behaviour. Consequently, by obtaining more resources and power, striving behaviour can be instilled and distress may be ameliorated.

Psychological Effects of Unemployment

Considering the value of being employed, the psychological effects of unemployment have been of interest to researchers for a long time. It is a challenge for researchers to measure mental health in any context because it must be measured indirectly and the intervening variables are often numerous and multifaceted (Shea, Pelletier, Poster, Stuart, & Verhey, 1999). In addition, there is the problem with reverse causation. Mental health difficulties can contribute to the loss of a job, as well as the failure to find a new job (Jin et al., 1995). Researchers have frequently relied on questionnaires in their attempts to investigate or measure the mental health of unemployed people. Some researchers have used other methods such as unstructured interviews or participant observation. Such was the case with the classic Marienthal field study, conducted in 1933, in which the unemployed experienced apathy, isolation, loss of time structure, and a breakdown in family dynamics (Jahoda, Lazarsfeld, & Zeisel, 1971).

More recently researchers have turned their attention to investigating overlooked aspects of this field of study. For instance, researchers are trying to determine what effects unemployment has on women. The literature is presently inadequate to understand the mental health effects of unemployment for women, although a number of studies have been conducted in this area. One of the difficulties comes from not being

able to distinguish between unemployed women and those who are out of the labour force, either due to choice or discouragement in finding employment (Jin et al., 1995).

A vast amount of research has been completed on the physical and mental health impact of unemployment. This literature review will be limited to the work of researchers who assessed the mental health of unemployed women. Potential moderating variables in this area of research will also be presented. First, the literature on mental health for unemployed women will be discussed under the following headings (a) self-esteem, (b) psychological distress, (c) anxiety, and (d) depression.

Self-esteem

Self-esteem refers to a person's perception of oneself. Individuals with high self-esteem have more confidence in themselves and in their abilities (Leana & Feldman, 1992). Unemployment may have a damaging effect on a woman's self-esteem. While examining this very issue, Theodossiou (1998) found that for the unemployed women, the odds of reporting herself as a worthless person and as being less happy and less confident were 3.19, 2.40, and 1.72 times greater respectively compared with women in high-paid employment ($p < .05$). The data were analyzed on 3,483 men and 4,414 women who participated in the 1992 British Household Panel Study. With a sample of 641 women and 465 men, one team of researchers reported that involuntary job disruptions, such as being laid off, deteriorated self-esteem ($p < .01$, Pearlin et al., 1981). A limitation of the latter study was 51.9% of the original sample was lost through attrition.

Psychological Distress

Researchers have used a number of screening schedules to detect psychological distress or mild, undifferentiated psychopathology in various populations. These screening schedules, such as the General Health Questionnaire, can identify individuals who likely have a mental health problem, but further evaluation by a psychiatrist is necessary to confirm and diagnose the disorder (Casey, 1990).

The results of several studies provided some evidence that unemployed women do not fare well on measures of psychological distress. Using the Symptom Checklist 90 (SCL-90), Schaufeli and VanYperen (1992) as well as Kessler, Turner, et al. (1987) found that unemployed men and women were significantly more distressed than employed people ($p = .05$), although the former study only found this relationship among those who were unemployed for more than two years. Further analysis by Kessler, Turner, et al. revealed that controlling for financial strain, the unemployed individuals who never experienced another stressful life event in the past year had similar psychological distress levels as those with stable employment. It was noted, however, that the comparison group may have been experiencing distress themselves because of the uncertain job environment at the time of the investigation. Kessler, Turner, et al. used a random sample of 197 women and 295 men in Michigan, while Schaufeli and VanYperen followed 508 female and 614 male technical college graduates in the Netherlands. A limitation of Schaufeli and VanYperen's study was the response rates for sample 1 and sample 2 were

low at 42% and 41% respectively.

Using various versions of the General Health Questionnaire (GHQ), several researchers found that the unemployed men and women had more symptoms of psychological distress than the employed ($p < .001$, Arnetz et al., 1991; $p < .001$, Viinamaki, Kontula, Niskanen, & Koskela, 1995). Similar results were obtained for women in other studies ($p = .00$, Brenner & Levi, 1987; $p < .001$, Ensminger & Celentano, 1988, 1990; $p < .001$, Lahelma, 1992; $p < .05$, Thornley, Walton, Romans-Clarkson, Herbison, & Mullen, 1991). In addition, with a 12-item scale adapted from the GHQ and the Centre for Epidemiological Studies Depression Scale (CES-D), Wheaton (1990) found that only married women, who lost favorable jobs, were significantly distressed ($p < .05$). The percentages of women represented in the samples of the aforementioned studies ranged from 40% to 100%, excluding the study conducted by Lahelma as this information was not provided. A limitation of Arnetz et al.'s study was the attrition rate for the group of unemployed workers was high at 41%.

Reports using other scales demonstrated that compared to the employed, psychological distress was more pronounced among unemployed individuals ($p = .02$, Studnicka et al., 1991) and redundant female workers ($p < .05$, Cochrane & Stopes-Roe, 1981). The Symptom Rating Test (SRT) was used by Cochrane and Stopes-Roe with a random selection of 150 men and 109 women from large towns in England. According to Studnicka et al., the rating scale they used, consisting of five items from the Zerssen-scale

and four items from the Berkman-scale, is a reliable standardized measure of psychological well-being, even though reliability coefficients were not reported. Studnicka et al. interviewed 141 men and 31 women in Austria.

Several studies documented an association between unemployment and psychological distress, but only one study showed no such relationship for women. In this study, the researchers were interested in the mental state of 43 unemployed women, who were made redundant due to a factory closure, and 31 employed women. Employment was not significantly related to measurements of distress using a combination of the GHQ, Beck Depression Inventory (BDI), and Derogatis' Symptom Checklist (Viinamaki, Koskela, Niskanen, Arnkill, & Tikkanen, 1993).

Anxiety

Anxiety is a complex, multidimensional, and variable pattern of behaviour, which includes apprehension and tension and is associated with physiological arousal (Bernstein, Borkovec, & Coles, 1986). Inconsistent results have been obtained by researchers who investigated the impact of job loss on the anxiety levels of female workers. The unemployed women in Shamir's (1985) study were significantly more anxious than the reemployed women ($p < .01$). The scale constructed by Shamir to measure anxiety had an internal consistency of .67. Despite the sufficient sample size (ie., 191 men and 240 women), a limitation of Shamir's study was the response rate at time 1 was low at 38.5%. Unlike the results presented by Shamir, Dew et al. (1992) found that

unemployed women were no more anxious than working women. Dew and her colleagues used the Hopkins Symptom Checklist to measure anxiety in a cohort of 141 blue-collar women in Pennsylvania.

Neurosis or anxiety disorder is a group of mental health problems in which the person's overall behaviour corresponds with social norms and the person is in touch with reality, however, the person has an unacceptable, recurrent or ongoing mental problem, with no apparent organic cause (Stuart & Laraia, 1998). In a study by Rodgers (1991), the association between employment status and neurosis was researched with the use of a diagnostic schedule, the Present State Examination (PSE). Employment was associated with lower rates of neurosis for women ($p < .001$). Rodgers analyzed data on 1,640 men and 1,653 women, who were 36 years of age and were living in Scotland, England, or Wales.

Depression

Depression may be characterized by a dysphoric mood along with various behavioral and/or somatic symptoms. Behavioral symptoms may include frequent crying spells and psychomotor retardation or agitation, whereas somatic symptoms may include loss of appetite and sleep disturbance (Carson, 1986). In recent years there has been a proliferation of depression research with the realization that depression is the most prevalent major mental health problem and it has a devastating impact on its victims and our society at large (Carson).

The findings of several studies revealed that unemployed women may be at risk for depression. For instance, researchers have found that average depression scores were greater for the unemployed than the employed, as measured by the BDI ($p = .00$. Brenner & Levi, 1987; $p < .001$, Hall & Johnson, 1988). In addition, 41% of the unemployed, in Hall and Johnson's study, had a BDI score of 10 or more as compared to 13% of the employed ($p = .0005$). Hall and Johnson collected data two years after 96 women lost their jobs due to a plant closure in Sweden, while Brenner and Levi followed a sample of 400 Swedish adults, who were mainly women, for two years.

Diagnostic instruments, such as the Present State Examination (PSE) and the Diagnostic Interview Schedule (DIS), were developed to distinguish between different categories of psychiatric illness, for example depression and neurosis (Casey, 1990). The unemployed show more signs of depression on the DIS than the employed ($p < .05$, Dooley, Catalano, & Wilson, 1994), when analyzed separately for women ($p = .001$, Anthony & Petronis, 1991). In both studies, a random sample of men and women was selected from five sites in the United States. Dooley et al. and Anthony and Petronis had sample sizes of 8,278 and 5,969 respectively. Brown and Harris (1978) used the PSE and found that employment was associated with a lower risk of depression for a subgroup of the 458 women in the study. The subgroup of women included those who (a) recently experienced a severe life event or major social difficulty, (b) did not have a partner as a confidant, (c) lost their mother before the age of 11, and (d) had three or more children

under the age of 14 in the home. Among the women in the subgroup, 45% of the non-employed and 23% of the employed became depressed.

Research involving other instruments suggests that compared to the employed, the unemployed suffer more depressive symptoms, as measured by the Centre for Epidemiologic Studies Depression (CES-D) Scale ($p < .05$, Turner, 1995), the Depression Model ($p < .05$, Pearlin et al., 1981), the Hopkins Symptom Checklist ($p < .05$, Claussen, Bjorndal, & Hjort, 1993; $p < .05$, Dew et al., 1992), and the Periodical Functioning Scale ($p < .01$, Leeflang et al., 1992). The latter three groups of researchers completed the analysis for women only. Of the unemployed women ($n = 357$) in Leeflang et al.'s study, only one subgroup was significantly more depressed than the employed women ($n = 204$). This subgroup consisted of non-registered or hidden unemployed women ($n = 200$). Turner did not indicate the number of female participants, but the percentages of women represented in the rest of the studies ranged from 42% to 100%.

Dew et al.'s (1992) study was one of a kind and deserves further consideration. Unlike the rest of the studies on unemployed women's mental health, Dew et al. prospectively followed a cohort of 141 laid off women, starting well before the women even anticipated the dismissals. In other words, the prospective study design permitted the researchers to evaluate the mental health impact of job loss while taking pre-existing mental health into account. As a result, the inferences about the causal nature of the unemployment-mental health relationship are more reliable than those drawn from cross-

sectional studies (Dew et al.). Besides illustrating that the unemployed were experiencing a higher rate of depression following job loss, the study also demonstrated that reemployment failed to mitigate depression levels for the women who found a new job. The women were followed over a 12 month period.

Depression was also cited as a problem for some of the unemployed in a participatory action research project held after the moratorium in two other locations of Newfoundland (Canadian Mental Health Association, 1994). Open-ended, informal interviews were completed with 48 families and 51 community leaders. What were thought by the authors to be mild to severe cases of depression were reported in 7 of the 46 interviews. Suicidal thoughts were mentioned in two interviews. Most of the participants linked feelings of depression to the problems associated with unemployment, particularly idleness and boredom. As the study took place in the prime of the moratorium, it was remarked that the full effects of the fishery closure were probably not yet apparent. A limitation of the study was the participants were interviewed in groups and therefore some individuals may have been reluctant to share their thoughts and feelings.

Although several researchers have found that unemployed women may be at risk for depression, other researchers have found no significant relationship between employment status and depression for women (Perrucci et al., 1987; Shamir, 1985; Viinamaki et al., 1993). Similarly, Rosen (1987) and Snyder and Nowak (1984) found that

unemployed women were no more demoralized than employed women. The working women in Rosen's study just took a 12 to 19% wage reduction and may have been demoralized themselves. A variety of research instruments were used in the above studies, which included the Psychiatric Epidemiology Research Inventory (Rosen; Snyder & Nowak), the Depression Model (Perrucci et al.), the Beck Depression Inventory (Viinamaki et al., 1993), and the Depression Adjective Check List (Shamir). Women represented 22% to 100% of the participants. The response rates of some of these studies, namely Perrucci et al., Shamir, and Snyder and Nowak, were low at 48%, 38.5%, and 53% respectively.

Moderating Variables

In order to further clarify the unemployment-mental health relationship, research has focused on moderating variables, or those variables which play a role in how unemployment affects mental health. Factors such as social support and coping styles appear to be important determinants in how people react to unemployment (Arnetz et al., 1991; Dew et al., 1992). This literature review will discuss potential moderators under investigation in the present study.

In the general population, marital status is linked with the probability of developing a mental illness in addition to the likelihood of recovering from it (Coombs, 1991; Gallagher, 1995). A higher prevalence of mental illness and poorer prognoses are found among single people versus those who are married. Indeed, higher rates of mental

disorders occur among single, widowed, separated, and divorced persons than among their married counterparts.

Comparable to the findings on marital status and mental health in the general population, one might expect that the associations would hold true for those who are unemployed. However, the results in this area are inconsistent. While the single unemployed women in three studies experienced higher levels of psychological problems than the married women (Cochrane & Stopes-Roe, 1980; Rodgers, 1991; Shamir, 1985), a number of studies suggest that marital status is insignificant to the psychological health of unemployed women (Ensminger & Celentano, 1990; Hall & Johnson, 1988; Kessler, Turner, et al., 1987; Perrucci et al., 1987). In another study, Wheaton (1990) found that only married women, who lost favorable jobs, were significantly distressed ($p < .05$).

Based mainly on admission rates to hospitals for mental health services, there is a consensus among researchers about the relationship between mental illness and age. The age related pattern of admissions is reversed for males and females. Among the younger age groups males are more predominant, but as age increases females make up an ever increasing proportion of the population (Barnes & Maple, 1992; Cochrane, 1983). Most studies that do not differentiate between the sexes, report that the chances of mental disorder increase with age, perhaps due to the higher rates of mental illness among women (Gallagher, 1995).

Two studies were found which documented that with increasing age, the

association between unemployment and psychological ill-health or somatization became stronger (Kessler, Turner, et al., 1987; Studnicka et al., 1991). At least one team of researchers found no such relationship (Leeflang et al., 1992), conceivably because the percentage of women in the study (53.3%) approximated that of men (46.7%). The impact of age on mental health may be the opposite for males and females (Barnes & Maple, 1992; Cochrane, 1983).

Generally speaking, education interacts inversely with mental illness in that people with more education have lower rates of psychological impairment, despite the increased propensity for them to seek professional help (Gallagher, 1995). A search of the unemployment literature produced two studies which examined the relationship between education and mental health for women. Unexpectedly, the impact of unemployment did not vary across different levels of education (Dew et al., 1992; Kessler, Turner, et al., 1987).

According to the literature, as family size increases the mental health of mothers and fathers decreases (Gallagher, 1995). It has not been established whether the mental well-being of parents influences family size or whether the stress of raising a large number of children causes psychological disturbance in parents (Gallagher). In a landmark study by Brown and Harris (1978), the women with three or more children, under 14 years of age and living at home, were vulnerable to depression. Housing tenure and the presence of children were examined in Rodgers' study (1991), which found higher rates of neurosis

particularly among female tenants with children under the age of five. In spite of all of this, the mental health-unemployment literature is split on the effect children have on women. The results of two studies concur that children may be a protective factor against mental ill-health for unemployed women (Kessler, House, et al., 1987; Leeflang et al., 1992). A lack of dependent children was a risk factor for the hidden unemployed women in Leeflang et al.'s study. The marital status of the mother was important in Kessler, House, et al.'s study, who noted that unemployment did not seem to make a difference to the mental health of single mothers with young children. On the other hand, other studies lend support that children do not significantly influence depression, demoralization, or anxiety levels for unemployed women (Dew et al., 1992; Snyder & Nowak, 1984).

Research on unemployed men's self-esteem has shown that self-dissatisfaction due to unemployment was accentuated if their spouse was employed. The results may be due to the loss of breadwinner status and the change in roles within the family (Cochrane, 1983; Cohn, 1978). As for women, higher rates of depression and neurosis are observed among those with an unemployed husband (Cochrane & Stopes-Roe, 1981; Rodgers, 1991). Only one study was located in the literature which addressed this issue for unemployed women. In this study, job loss appeared not to increase psychological risks to health for those women who were married to men who were the main breadwinners (Kessler, House, et al., 1987).

It is possible that a previous history of unemployment may have an impact on the

mental health of unemployed women. Studnicka et al. (1991) found that the association between current unemployment and psychological ill-health was twice as strong among unemployed individuals who had no previous history of unemployment (Odds Ratio: 8.3; 95% CI: 3.4-20.1), as among individuals who had a previous history of unemployment (Odds Ratio: 4.1; 95% CI: 1.2-14.4).

Researchers also maintain that psychological well-being may be relative to how long the person has been unemployed. Arnetz et al. (1991) found that the unemployed experienced psychological stress during the anticipatory phase of unemployment and again at the one year mark of unemployment. Subsequently, mental stress subsided so that by the second year of unemployment the unemployed individuals and the comparison groups of employed individuals had similar levels of psychological stress. Similarly, Brenner and Levi (1987) found that the unemployed experienced severe psychological stress while facing job loss and again at six months following unemployment. However, after two years of unemployment, most of the unemployed had adapted to the conditions of unemployment. The samples recruited by Arnetz et al. and Brenner and Levi consisted mainly of women. In one study, the effects of long-term unemployment, which was defined as lasting longer than six months, was insignificant for women (Dew et al., 1992).

The context in which unemployment occurs appears to be vital in other ways. For example, researchers have reported that high levels of unemployment were linked with

increased rates of mental hospital admissions, with the exception of those with less education for which the opposite was true (Brenner 1973, 1976; Catalano, Dooley. & Jackson, 1981). The combined effects of the local unemployment rate and opportunities for reemployment was examined by Cohn (1978). The researcher found that dissatisfaction with self was high when the rate of unemployment was low and job availability was high.

Summary

The results of the studies reviewed suggest that compared to working women. psychological problems may be more salient among unemployed women. Self-esteem may be damaged by the experience of job loss. As well, unemployed women may suffer more symptoms of psychological distress and depression than employed women. Findings from studies examining the impact of job loss on anxiety levels in females have been inconsistent.

While education may not be significant, research supports that age, partner's employment status, and history and duration of unemployment may be moderators in the unemployment-mental health relationship for women. The results on the role of marital status and children are equivocal.

Definitive statements cannot be made about the impact of unemployment on the mental well-being of women. A part of the problem is that some researchers have not analysed separately the mental health effects of unemployment for men and women. The

fact that researchers rarely distinguish between women who are unemployed and those who are out of the labour market has been problematic (Warr & Parry, 1982a). Further research would be helpful in order to clarify the relationship between unemployment for women and mental health. In the present study women who were employed were compared with only those who were unemployed in order to look at the mental health effects of unemployment, thus addressing a weakness of some of the previous studies in the area.

CHAPTER 3

METHODS

The method chapter will be described under the following headings (a) research design, (b) sample, (c) sampling, (d) setting, (e) ethical considerations, (f) research questionnaires, (g) data collection, and (h) data analyses.

Research Design

This study is part of a funded larger interdisciplinary Eco-Research program entitled "Sustainability in a Changing Cold-Ocean Coastal Environment", which assessed the impact of the fishery closure on various aspects of individuals and communities in coastal Newfoundland. The health section of the larger Eco-Research program assessed the impact of the fishery collapse on the health of the people living in the affected areas. This study was a retrospective comparative design. The results of this study are based on the secondary analysis of data collected for the health section of the Eco-Research program. Using the abbreviated General Health Questionnaire 28 (GHQ28), mental distress of unemployed women was compared with that of employed women.

Sample

The sample for the larger study was randomly selected from communities on the Bonavista headland and the isthmus of the Avalon Peninsula in Newfoundland (see Appendix A for a map of the study area). In order to be eligible for the main study the

subjects must have:

(1) been 16 years of age or older;

(2) had a listed, residential telephone number;

(3) had the cognitive ability to understand the interview process and:

(4) had the ability to understand and speak English.

From the sample used in the main study, unemployed and employed women, between the ages of 25 and 64, were extracted for this study. In keeping with the research literature, which distinguishes between adult and youth unemployment, individuals under the age of 25 were excluded from the sample as they generally have unique problems with unemployment (Ashton, Maguire, & Spilsbury, 1990; Betcherman & Morisette, 1994; West & Sweeting, 1996).

Sampling

The telephone directories for the Bonavista headland and the isthmus of the Avalon Peninsula were used as the sampling frame for the Eco-Research Health Survey. Systematic sampling, which is one method of probability sampling, was used to obtain 382 household telephone numbers from the sampling frame. All individuals aged 16 and over, in the households that were contacted, were asked to participate. The household response rate was 56.77%. Within the participating households there were 1,006 people who were eligible for the study. A total of 881 individuals, including 200 men and women from the isthmus of the Avalon Peninsula and 681 men and women from the Bonavista

headland, took part in the primary study, which yielded an individual response rate of 87.58%. From the 881 individuals only those women who met the selection criteria were included. This gave a sample for this secondary analysis consisting of 112 unemployed and 112 employed women.

Setting

Women from communities on the Bonavista headland and the isthmus of the Avalon Peninsula were the focus of this study. Residents of these areas of Newfoundland have historically depended on the fishery for their livelihood and were affected by the northern cod moratorium. In recent years, however, parts of the isthmus have developed into industrial sectors due to mega project developments which have occurred in Come By Chance and Bull Arm. Since there are more short term jobs on the isthmus, it also has a more transient population. In the social survey part of the Eco-Research program, it was identified that 61.7% of the respondents on the isthmus were born in the area, compared to 81.1% of respondents on the Bonavista headland (Ommer, 1998). The two study areas differed in another respect. At the time of this study, Arnold's Cove which is situated on the isthmus was a growth centre and its fish plant remained open by processing fish landed by foreign fishing vessels (S. M. Solberg, personal communication, August 6, 2000).

Population figures taken in the early years of the moratorium portray different circumstances for the two areas of Newfoundland. The population of the communities

under study on the isthmus slightly increased from 2,024 to 2,036 between the 1991 and the 1996 census dates. During the same time period, an opposite trend was observed for the Bonavista headland, for which the population dropped from 10,689 to 9,940 (Statistics Canada, 1997).

Newfoundland has a history of high unemployment, especially in rural coastal areas. Census data compiled before and after the moratorium illustrate this as well as the effects of the moratorium on local unemployment rates. In 1991, before the moratorium the unemployment rate in the Bonavista region was 40.8% and in the Avalon region. which encompasses the isthmus, was 21.9% (Statistics Canada, 1999). Following the moratorium in 1995, the rates fell to 21.3% for the Bonavista region and to 15.3% for the Avalon region (Statistics Canada, 1996). As job availability in the two areas was generally low and a number of displaced fishery workers were receiving financial compensation. the unemployment rates likely dropped due to a decrease in the number of people looking for work.

Ethical Considerations

Following the approval of the Human Investigation Committee at Memorial University of Newfoundland, trained local interviewers contacted potential participants by telephone to explain the study and to determine if the person was willing to take part. The purpose of the study, the means of data collection, measures to protect confidentiality and anonymity, the anticipated amount of time required, and the right to withdraw from the

study were explained to the potential participants. Also, individuals were told that, except for a remuneration of 10 dollars, they would not benefit directly from taking part in the study. In fact, although some individuals may welcome the opportunity to express their concerns and feelings, others may find it upsetting to talk about their feelings and experiences. If a participant became upset, the participant had the option of continuing with the interview, stopping the interview, or refusing to answer any question. Interviews were conducted in the home of those who gave written, informed consent to participate in the study (see Appendix B for the release form). The questionnaires did not include the identity of the respondents and were locked in a room accessible only to the researchers working on the primary study.

Research Questionnaires

The Eco-Research Health Survey (ERHS) was developed to assess the health status of the participants. It was designed by a team of researchers with expertise in nursing and community health. Before piloting the questionnaire in a Newfoundland community with similar characteristics to that of the studied areas, it was reviewed and critiqued by a larger team of researchers working on the Eco-Research project in order to establish content validity. Based on the results of the pilot study, minor changes were made to the ERHS. The data obtained from questions on the ERHS (see Appendix C for relevant sections) concerning the following variables were analyzed for this study: children under 16 years of age (1C), age (2), partner status (3), employment status (4A),

partner's employment status (5A), mental health in the past year (8B), history of unemployment (36B), duration of unemployment (45), uncertainty about one's future (47A), uncertainty about the community's future (47B), level of education (51), and financial strain (52).

Mental distress at the time of data collection was measured in this study by the General Health Questionnaire 28 (GHQ28). The GHQ is a self-administered questionnaire which screens for nonpsychotic psychiatric disorders in individuals from the general population (Goldberg & Williams, 1988). Psychiatric disorders detected by the GHQ would have to be verified and diagnosed by a psychiatrist (McDowell & Newell, 1987). The GHQ28 has four subscales with seven items on each subscale for a total of 28 items. The items refer to feelings or behaviors and have a four-point scale demonstrating the extent of the feeling or behavior (Kline, 1993). Higher scores on the GHQ indicate more psychological distress. Likert scoring of the GHQ was used.

Reliability and Validity of the GHQ28

Support can be found for the reliability of the GHQ28. Test-retest reliability was measured by Robinson and Price (1982) to be as high as .90 after approximately two months. Internal consistency has been demonstrated for the GHQ. The correlation coefficient, using split-half item analysis is high at 0.95 and coefficient alpha estimations range from .82 to .93 (Goldberg & Williams, 1988).

There is some support for concurrent and construct validity for the GHQ28. The

test scores on the GHQ28 are significantly correlated (.76) with psychiatric interview assessments. Also, after several Varimax orthogonal analyses of the GHQ60, which is the original version of the GHQ, four seven-item factors emerged to produce the GHQ28 (Kline, 1993). The factors are somatic symptoms, anxiety and insomnia, social dysfunction, and depression. In addition, using sensitivity and specificity indices the GHQ28 appears to be valid. The GHQ does not have predictive validity, however, because the GHQ was only developed to measure an individual's current psychiatric state (Goldberg & Williams, 1988; Kline).

The GHQ28 has been criticized for lacking clear evidence to support the validity of the subscales and for only measuring states which have a relatively short duration (Kline, 1993). Although the GHQ28 has limitations, the GHQ28 is an appropriate measurement of mental distress for this study. It has been used in many studies on unemployment in various countries. In addition, before its use in the main study, the GHQ was pilot tested with the local population and no problems were encountered. Since the GHQ measures current and recent (i.e., past few weeks) distress levels, question 8B on the ERHS was used to explore the sample's mental health status in the past 12 months before the interview.

Data Collection

Six individuals were hired as interviewers for the primary study. A training session was provided for all of the interviewers, even though some of these individuals

had prior interviewing experience in the social survey part of the Eco-Research project. The interviewers were given a list of randomly generated telephone numbers to call and instructions to follow when contacting the potential participants by telephone (Appendix B). Questionnaires were in most instances completed by the interviewers. However, in some select instances participants were permitted to self-administer the questionnaire. Data were collected in the spring of 1995, almost three years into the cod moratorium.

Data Analyses

After coding and cleaning the data, they were analyzed with the Statistical Package for the Social Sciences 9.0 (SPSS). Mean scores and frequencies of the demographic data were calculated to describe the population. Chi-square was used to test whether or not the two groups of women differed significantly on the demographic characteristics as well as their financial situation. Since the frequency distributions of the scores for the whole General Health Questionnaire (GHQ) and the four subscales were positively skewed, the non-parametric Mann-Whitney U and Spearman's Rank Order Correlation Coefficient tests were used to answer the research questions in this study (Munro & Page, 1997). A significance level of 0.05, two tailed, was used. The correlation coefficients between the women's GHQ28 scores and their age, level of education, number of children under the age of 16, and history and duration of unemployment were determined.

The Mann-Whitney U test was used to test for differences in scores, on the GHQ28 as a whole and on its subscales, between the unemployed and the employed, the

women who have a partner and those who do not have a partner, and the women who have an unemployed partner and those with a working partner. The Mann-Whitney U test was also used to test for differences in scores on measures of uncertainty and mental health during the 12 month period before the interview.

CHAPTER 4

FINDINGS

The findings of this study will be presented under the following headings (a) characteristics of the participants, (b) mental distress of the unemployed and employed women, (c) partner status and mental distress, (d) age and mental distress, (e) level of education and mental distress, (f) number of children and mental distress, (g) partner's employment status and mental distress, (h) history of unemployment and mental distress, (i) duration of unemployment and mental distress, and (j) uncertainty, mental health, and financial strain for unemployed and employed women.

Characteristics of the Participants

Table 1 presents the demographic characteristics of the unemployed women (n=112) and the employed group (n=112). The unemployed women were slightly older and less educated than those who were employed. In fact, the Chi-Square test indicated that the employed women were significantly more educated than those unemployed ($p < .001$). In addition, there were more unemployed partners among the unemployed women than among the employed women ($p = .001$).

The women also differed significantly in terms of their history of unemployment. A large majority of the unemployed women (90.2%) had experienced at least one other

Table 1
Sample Characteristics by Employment Status

Variable	Unemployed Women (n=112)		Employed Women (n=112)		Chi-Square	
	Mean	S.D.	Mean	S.D.		
Age	40.13	8.417	39.00	8.567		
	n	%	n	%	x^2	p
Education						
High School or Less	92	82.1	58	51.8	23.33	0.000**
Post Secondary	20	17.9	54	48.2		
Children (< 16 years)						
One or More	27	24.1	31	27.7	.00	0.950
None	85	75.9	81	72.3		
HU[1] (last 5 years)						
Yes	101	90.2	59	52.7	40.42	0.000**
No	9	8.0	51	45.5		
Partner Status						
With Partner	92	82.1	93	83.0	.03	0.860
No Partner	20	17.9	19	17.0		
PES[2]						
Employed	29	25.9	52	46.4	12.10	0.001*
Unemployed	59	52.7	36	32.1		

Note. [1]HU = History of Unemployment (excluding missing data for the unemployed [n=2] and employed [n=2]); [2]PES = Partner's Employment Status (excluding retired husbands for the unemployed [n=4] and employed [n=5]).

* p = .001
** p < .001

episode of unemployment in the previous five years, compared to just over one half (52.7%) of the employed women ($p < .001$). In fact, unemployment was a recurrent experience for many of the unemployed women in this study. For instance, over one half of the unemployed women (n=60, 54.5%) had experienced three other episodes of unemployment in the last five years and 33.6% of the unemployed women (n=37) were unemployed five other times in the previous five years. Only nine of the unemployed women (8.0%) had no other episode of unemployment in the previous five years.

The occupations for the women, based on the Standard Occupational Classification system (Statistics Canada, 1994), are summarized in Table 2. The majority of the unemployed participants (n=64, 57.1%) were fish plant workers, which indicates the significant impact of the fishery closure on the employment status of these women. The largest group of employed participants (n=34, 30.4%) were in the clerical and sales occupations. The employed group of women consisted of 76 full time workers and 36 part time workers.

Mental Distress in the Unemployed and Employed Women

Research question 1: Is there a difference in mental distress between unemployed and employed women?

Table 3 summarizes the standard Z scores between the unemployed and employed women on the GHQ28 and its four subscales. Although the unemployed women had higher GHQ28 scores in general and in all of the four subscales than the employed

Table 2
Occupation of Participants by Employment Status

Occupation	Unemployed Women n=112		Employed Women n=112	
	n	%	n	%
Professional/technical	1	0.9	26	23.2
Clerical and sales	6	5.4	34	30.4
Service	12	10.7	25	22.3
Fishers	7	6.3	2	1.8
Fish plant workers	64	57.1	18	16.1
Other blue collar	4	3.6	5	4.5
Other/not specified	18	16.1	2	1.8

women, the differences were not significant. Therefore, the unemployed and the employed women in this sample did not differ significantly in their levels of mental distress.

The frequency and percentage of women in each group who had GHQ scores consistent with low (scores <5), medium (scores 5-11), and high (scores >11) levels of

Table 3
Mean Scores of Mental Distress for Unemployed and Employed Women as Measured by the GHQ28

Mental Distress (GHQ28)		Mean Scores		Mann-Whitney U Test	
		Unemployed Women n=112	Employed Women n=112		
				Z	p
Total GHQ28		17.87	16.79	-0.98	.33
Subscale					
(A)	Somatic Symptoms	4.30	3.79	-0.76	.45
(B)	Anxiety/Insomnia	4.74	4.49	-0.41	.68
(C)	Social Dysfunction	7.29	7.10	-1.13	.26
(D)	Depression	1.54	1.47	-0.41	.68

Z = Standard score for the Mann-Whitney U Test

distress are provided in table 4 (Gage & Leidy, 1991). The majority of both groups of women had high scores on the GHQ. Therefore, both groups of women were experiencing a high degree of psychological distress.

Table 4
Range of GHQ28 Scores for the Unemployed and Employed Women

Mental Distress (GHQ28)	Range of Scores					
	Low		Medium		High	
	Unemployed Women (n = 112)					
	n	%	n	%	n	%
Total GHQ28	1	0.9	44	39.3	67	59.8
	Employed Women (n = 112)					
	n	%	n	%	n	%
Total GHQ28	0	0	52	46.4	59	52.7

Partner Status and Mental Distress

Research question 2: Is there a difference in mental distress between women with a partner and those without a partner for the unemployed and employed women?

The Mann-Whitney U test was used to answer research question 2. Table 5 summarizes the standard Z scores between the two subgroups of women on the General Health Questionnaire (GHQ) and the four GHQ subscales. There were no significant differences between the two subgroups of women. Hence, the women with a partner and those without a partner did not differ significantly with respect to their levels of mental distress.

Age and Mental Distress

Research question 3: Is there a relationship between age and mental distress for unemployed and employed women?

Table 6 summarizes the correlation coefficients between age and scores on the GHQ and the four subscales for both groups of women. No significant correlations were found. Therefore, in this study, there was no significant relationship between age and levels of mental distress for neither group of women.

Table 5
Mental Distress of Women with a Partner and Those without a Partner by Employment Status

Mental Distress (GHQ28)	Mean Scores for Unemployed Women				Mean Scores for Employed Women			
	With Partner n=92	No Partner n=20			With Partner n=93	No Partner n=19		
			Z	p			Z	p
Total GHQ28	17.55	19.30	-0.11	.91	16.07	20.32	-0.62	.54
Subscale								
(A) Somatic Symptoms	4.25	4.55	-0.33	.74	3.62	4.63	-0.92	.36
(B) Anxiety/Insomnia	4.65	5.15	-0.41	.68	4.15	6.16	-1.21	.23
(C) Social Dysfunction	7.33	7.15	-0.53	.60	7.08	7.21	-0.60	.55
(D) Depression	1.34	2.45	-1.08	.28	1.29	2.32	-1.59	.11

Z = Standard score for the Mann-Whitney U Test

Table 6
Relationships Between Age and General Health Questionnaire Scores by Employment Status

Mental Distress (GHQ28)	Age of the Unemployed Women (n=112)		Age of the Employed Women (n=112)	
	r_s	p	r_s	p
Total GHQ28	-0.12	.21	-0.09	.37
Subscale				
(A) Somatic Symptoms	-0.10	.30	-0.11	.26
(B) Anxiety/Insomnia	-0.13	.18	-0.13	.17
(C) Social Dysfunction	0.03	.79	0.03	.76
(D) Depression	-0.10	.30	0.04	.69

r_s = Spearman's Rank Order Correlation Coefficient

Level of Education and Mental Distress

Research question 4: Is there a relationship between level of education and mental distress for unemployed and employed women?

The Spearman's Rank Order Correlation Coefficient was used to address research question 4. Table 7 summarizes the correlation coefficients between level of education and scores on the General Health Questionnaire (GHQ) and the four GHQ subscales for both groups of women. Level of education was positively correlated with mental distress for the unemployed women, although no significant correlations were detected for this group. The unemployed with higher levels of education bordered on having significantly more symptoms of somatization and social dysfunction. On the contrary, significant, negative correlations were found on the total GHQ score ($p < .05$) and on the anxiety/insomnia and depression subscales ($p \leq .05$) for the employed women. Therefore, as education increased among the employed women, symptoms of depression, anxiety/insomnia, and psychological distress decreased.

Number of Children and Mental Distress

Research question 5: Is there a relationship between the number of children under the age of 16 and mental distress for unemployed and employed women?

The Spearman's Rank Order Correlation Coefficient was used to address research question 5. Table 8 summarizes the correlation coefficients between the number of

Table 7
Relationships Between Level of Education and General Health Questionnaire Scores by Employment Status

Mental Distress (GHQ28)	Level of Education for the Unemployed Women (n=112)		Level of Education for the Employed Women (n=112)	
	r_s	p	r_s	p
Total GHQ28	0.14	.13	-0.20	.04*
Subscale				
(A) Somatic Symptoms	0.17	.07	-0.15	.11
(B) Anxiety/Insomnia	0.14	.13	-0.19	.05*
(C) Social Dysfunction	0.18	.07	-0.07	.46
(D) Depression	0.03	.72	-0.21	.03*

r_s = Spearman's Rank Order Correlation Coefficient
* $p \leq .05$

Table 8
Relationships Between Number of Children Under the Age of 16 and General Health Questionnaire Scores by Employment Status

Mental Distress (GHQ28)	Number of Children (< 16 years)			
	Unemployed Women (n=112)		Employed Women (n=112)	
	r_s	p	r_s	p
Total GHQ28	0.15	.33	-0.05	.72
Subscale				
(A) Somatic Symptoms	0.12	.45	-0.02	.90
(B) Anxiety/Insomnia	0.11	.49	-0.09	.51
(C) Social Dysfunction	0.08	.62	0.01	.91
(D) Depression	-0.08	.62	-0.01	.92

r_s = Spearman's Rank Order Correlation Coefficient

children and scores on the General Health Questionnaire (GHQ) and its four subscales for both groups of women. Although the correlations were generally positive for the unemployed and negative for the employed, they were not statistically significant.

Partner's Employment Status and Mental Distress

Research question 6: For unemployed and employed women, is there a difference in mental distress between women who have an unemployed partner and those who have an employed partner? The Mann-Whitney U test was used to answer research question 6. Table 9 summarizes the standard Z scores between the two subgroups of women on the General Health Questionnaire (GHQ) and the four GHQ subscales. The findings showed no significant differences.

History of Unemployment and Mental Distress

Research question 7: Is there a relationship between history of unemployment and mental distress for unemployed and employed women?

Table 10 summarizes the correlation coefficients between history of unemployment, or more specifically the number of times unemployed in the last five years, and scores on the GHQ and the four subscales for both groups of women. A significant, positive correlation was found on the anxiety/insomnia subscale ($p = .05$) for the employed women. Therefore, as the number of experiences with unemployment increased among the working women, symptoms of anxiety/insomnia also increased.

Table 9
Mental Distress of Women with an Unemployed Partner and Those with an Employed Partner by Employment Status

Mental Distress (GHQ28)	Mean Scores for Unemployed Women				Mean Scores for Employed Women			
	UP n=59	EP n=29			UP n=36	EP n=51		
			Z	p			Z	p
Total GHQ28	18.08	16.90	-0.19	.85	15.81	16.27	-0.74	.46
Subscale								
(A) Somatic Symptoms	4.44	4.14	-0.19	.85	3.39	3.83	-1.33	.18
(B) Anxiety/Insomnia	4.80	4.59	-0.03	.98	4.08	4.12	-0.21	.83
(C) Social Dysfunction	7.44	7.10	-0.60	.55	6.83	7.21	-1.00	.32
(D) Depression	1.42	1.07	-0.08	.93	1.50	1.25	-0.54	.59

Note. UP = Unemployed Partner; EP = Employed Partner; Z = Standard score for the Mann-Whitney U Test.

Table 10
Relationships Between Number of Times Unemployed in the Last Five Years and General Health Questionnaire Scores by Employment Status

Mental Distress (GHQ28)	Number of Times Unemployed in the Last Five Years			
	Unemployed Women (n=112)		Employed Women (n=112)	
	r_s	p	r_s	p
Total GHQ28	0.11	.24	0.15	.12
Subscale				
(A) Somatic Symptoms	0.09	.33	0.17	.07
(B) Anxiety/Insomnia	0.08	.40	0.18	.05*
(C) Social Dysfunction	0.04	.71	0.12	.20
(D) Depression	0.12	.20	0.05	.60

r_s = Spearman's Rank Order Correlation Coefficient
* p = .05

Duration of Unemployment and Mental Distress

Research question 8: Is there a relationship between duration of unemployment and mental distress for the unemployed women?

Table 11 summarizes the correlation coefficients between duration of unemployment, or in other words the number of weeks currently unemployed, and scores on the GHQ and the four subscales. The results were not statistically significant.

Uncertainty, Mental Health, and Financial Strain for Unemployed and Employed Women

Research question 9: Is there a difference in uncertainty, mental health, and financial strain between unemployed and employed women?

Table 12 summarizes the standard Z scores or the chi-square statistic between the two groups of women on measures of uncertainty, mental health, and financial strain. The unemployed women were significantly more uncertain about their own future ($p = .000$). When asked how healthy they felt mentally in the past 12 months, the unemployed reported a higher incidence of poor mental health ($p < .05$). The majority (64.3%, $p = .001$) of the unemployed stated that financially they were worse off than before the moratorium. On the other hand, the majority (54.5%) of the employed indicated that their financial situation did not change.

Table 11
Relationships Between Number of Weeks Currently Unemployed and General Health Questionnaire Scores

Mental Distress (GHQ28)	Number of Weeks Currently Unemployed for the Unemployed Women (n=112)	
	r_s	p
Total GHQ28	0.07	.50
Subscale		
(A) Somatic Symptoms	0.06	.54
(B) Anxiety/Insomnia	0.04	.65
(C) Social Dysfunction	0.04	.71
(D) Depression	0.04	.69

r_s = Spearman's Rank Order Correlation Coefficient

Table 12
Comparison of Uncertainty, Mental Health, and Financial Strain Between the Unemployed and Employed Women

Variable	Unemployed Women (n=112)		Employed Women (n=112)		Mann-Whitney U		Chi-Square	
	Mean		Mean		Z	p		
Uncertainty about:								
one's future	5.57		4.48		-3.97	.000***		
community's future	5.47		5.23		-1.05	.29		
Mental Health (past year)	5.54		5.96		-2.10	.035*		
	n	%	n	%			x^2	p
Financial Situation								
Better Now	5	4.5	5	4.5			16.27	0.001**
Same as Before	32	28.6	61	54.5				
Worse than Before	72	64.3	45	40.2				
Don't Know	3	2.7	1	0.9				

* $p < .05$; ** $p = .001$; *** $p < .001$

Summary

The results showed that the unemployed women had higher GHQ28 scores in general and in all of the four subscales than the employed women, although the differences were not significant. According to the results of the GHQ28, the majority of the employed and unemployed women were highly distressed.

The results also revealed that there was no significant relationship between the following variables and mental distress for the women in this study (a) partner status, (b) age, (c) number of children under the age of 16, (d) partner's employment status, and (e) duration of unemployment.

The analysis also produced some significant findings. For the employed group, level of education significantly negatively correlated with psychological distress, anxiety/insomnia, and depression. History of unemployment was significantly positively correlated with anxiety/insomnia for the working women. In addition, the unemployed women were significantly more uncertain about their own future. Finally, significantly more unemployed women described themselves as being less healthy mentally in the last year and indicated that their financial situation deteriorated since the moratorium.

CHAPTER 5

DISCUSSION

The purpose of this study was to compare the level of mental distress experienced by unemployed and employed women, in two areas of Newfoundland that were affected by the northern cod moratorium. In addition, the relationships between several variables and the level of mental distress in women were explored. Based on the stressful life event paradigm and the published research literature, a tentative model (see Figure 1, p. 8) was developed as the guiding framework for this study. In the model seven factors were depicted as influencing the impact of unemployment on the mental health of women.

The results of this study will be discussed, with respect to the purpose of the study and the conceptual framework, under the following headings (a) mental distress in the unemployed and employed women, and (b) potential moderating factors for the unemployed and employed women.

Mental Distress in the Unemployed and Employed Women

According to the results using the GHQ, the unemployed women in this study had higher distress scores than the employed women, although it was not statistically significant. Both groups of women were actually highly distressed on the GHQ. Similar findings are reported in the research literature. Viinamaki et al. (1993) found that employment was not significantly associated with mental distress for women.

Different findings are also reported in the literature. Researchers, such as Brenner and Levi (1987), Ensminger and Celentano (1988, 1990), and Lahelma (1992) have found that unemployed women report significantly more symptoms of psychological distress than employed women.

Although the higher GHQ scores for the unemployed women were not significantly different from that of the employed, on another measure the unemployed women reported significantly poorer mental health in the last year. This may have occurred because, unlike the Likert scale used to measure self-perceived mental health over the previous year, the GHQ only measures an individual's current and recent (ie., past few weeks) psychiatric state, which can be short in duration (Kline, 1993). Therefore, it may be inferred that the unemployed women were significantly more distressed than the working women in the last year, but not at the time of the interview. The reliability of the single measure on mental health has not been established.

There are a number of reasons why both groups of women were experiencing distress in this study. First of all, it is not surprising that both groups of women were distressed in the present study given the consensus in the literature that for women financial difficulties exacerbate symptoms of depression, somatization, demoralization, neurosis, and distress (Dew et al., 1992; Ensminger & Celentano, 1990; Leeflang et al., 1992; Pearlin et al., 1981; Rodgers, 1991; Snyder & Nowak, 1984; Vinokur & Price, 1996). Since many of the women in this study primarily those unemployed reported that their

financial situation deteriorated after the cod moratorium, financial problems may have been common especially for those without work. It is certainly known that a lot of women who were displaced by the fishery had problems qualifying for financial aid, despite their importance to the industry through paid and unpaid work (Provincial Advisory Council on the Status of Women, Newfoundland and Labrador, 1994; Williams, 1996).

The findings of the Canadian Mental Health Association's (1994) study, which looked at the impact of the fishery closure on people's lives in Newfoundland, provide evidence that financial strain was an important stressor for some families and communities. Many of the participants reported a reduction in income (57%) and spoke of making sacrifices and lifestyle changes in order to maintain their households (42%). In addition, the study also found that the compensation package paid to fishery workers created a rift and tension in some communities between those who received compensation and those who did not. Workers such as tradespeople and storeowners, who were indirectly affected by the moratorium were seen as haven "fallen through the cracks" as they lost business but did not receive any monetary compensation (p. 22).

A good case can be made that feelings of uncertainty contributed to the distress levels felt by the women in this study. Lack of certainty about the future has been linked to a higher rate of mental disorder for women (Viinamaki et al., 1995). The unemployed women in this study would be notably at risk for mental ill-health as they were

significantly more overwhelmed with uncertainty over their own future than the employed. In the Canadian Mental Health Association's (1994) study, the participants also voiced deep feelings of uncertainty, which were thought to be precursors for stress and tension.

The fact that both groups of women were having problems related to social dysfunction (i.e., difficulty with keeping busy and enjoying normal activities) provides some clues as to why they were distressed. First of all, the finding that the unemployed women were experiencing social dysfunction as well as poor mental health is compatible with a report by Underlid (1996). The author found a connection between a high level of activity and positive mental health. Underlid is of the opinion that poor mental condition may prevent the unemployed from engaging in various activities, but that the effects are probably reciprocal. The unemployed women who participated in this study were having problems performing day-to-day activities, which was very likely related to their poor mental state. According to one source, problems with boredom and having little to do were pervasive in communities under the cod moratorium (Canadian Mental Health Association, 1994).

The fact that the employed women in this study had social dysfunction problems provides evidence that they may have been experiencing multiple role strain. Women who are overloaded with multiple roles and have difficulty in fulfilling one role because of the demands of another role are said to be under multiple role strain (Repetti, Matthews,

& Waldron, 1989; Verbrugge, 1986). The working women were having difficulty carrying out normal day to day activities in a satisfactory manner, which by definition is an indicator of multiple role strain.

The women in this study were probably distressed due to the economic insecurity brought on by the cod moratorium. It is likely that all of the residents, especially those on the Bonavista headland, were affected either directly or indirectly by the moratorium. At the time the public feared that their livelihood was at stake and possibly gone forever (Jackson, 1995; Walsh, 1995). As the local economies particularly on the Bonavista headland were based on the fishery, the fabric of these communities was threatened and whole communities were at risk for extinction. It is known that economic insecurity has the ability to destroy the cohesiveness of entire communities (Gallagher, 1995; Perrucci & Perrucci, 1990).

Given their circumstances all of the women may have considered the possibility of relocating in the future for work. Although there were retraining programs, the women faced barriers in accessing them and there were no jobs available upon completing them (Provincial Advisory Council on the Status of Women, Newfoundland and Labrador, 1994; Women's Committee, Fishermen, Food and Allied Workers Union, 1994). Opportunities for reemployment, especially on the Bonavista headland, were scarce. Competition for any available jobs would have been intense and there may have been pressure to give these jobs to men, which was observed in other areas of Newfoundland

under similar economic conditions (Andy Rowe Consulting Economists, 1991). Outmigration for work has long been an unfortunate solution for many in outport Newfoundland (Sullivan, 2000). As noted by several authors, people are reluctant to relocate due to the moratorium. Not only must they uproot their families and lose their investments in their homes, but they must also break close family and community ties (Andy Rowe Consulting Economists, 1991; Williams, 1996; Women's Committee, Fishermen, Food and Allied Workers Union, 1994). Evidence in the literature suggests that moving under circumstances beyond your control and the change associated with the move is a mental health hazard (Gallagher, 1995).

The women may have been troubled due to the high unemployment rate. In 1995 when the data were collected for this study, the unemployment rate in Newfoundland was high at 18.3% (Statistics Canada, 1996). The work of Brenner (1973, 1976) indicates that unfavorable economic conditions such as a high unemployment rate is not conducive to mental health. This was especially true for those with more education, as was the case with the employed women in this study.

More recently, Brenner and Starrin (1988) put forth the position that high unemployment can create distress at a social level. The infrastructure of communities affected by unemployment is believed to be altered. This generates stress and in turn contributes to social and health problems. Vulnerable communities are thought to include those with limited control, residents who are unable to influence developments, and

power resting with external decision makers. As the cod moratorium was beyond the control of the people and was imposed by the federal government, the communities particularly on the Bonavista headland would have been vulnerable to widespread distress. Similar sentiments were actually echoed by those who participated in the Canadian Mental Health Association's (1994) study. The people described feeling powerless and therefore stressed, while governments and scientists decided their fate. A need to take part in decision-making was also expressed by community members.

The working members of these communities were faced with unstable conditions and their jobs may have become suddenly insecure. Research supports that job insecurity is stressful due to anticipation of the problems associated with job loss. ambiguity over one's future, and uncertainty about how to adapt (Heaney, Israel. & House, 1994; Joelson & Wahlquist, 1987). Deleterious health effects including anxiety. distress, depression, and somatization have been attributed to job insecurity, with the most vulnerable employees being those who do not expect to find a comparable position should they lose their current job (Heaney et al.; Israel, House, Schurman, Heaney. & Mero, 1989). As the employed women in this study were feeling uncertain about what the future held for their communities, they probably contemplated problems in obtaining similar employment in the area if they lost their present job.

There are other possible reasons why the employed women were highly distressed in this study. In their review of the literature on employment and women's health.

Repetti et al. (1989) and Killien (1999) concluded that on average employment did not jeopardize the health of women. As a matter of fact, working appeared to improve the health of unmarried women and married women with positive work attitudes. However, aspects of some working environments did present risks for the women exposed to them. For example, studies identify that sexual harassment is a source of stress for many women, as one half of all female employees are estimated to be harassed at one time or another while working (Fitzgerald, 1993; National Association of Working Women, 1984).

Workplace stress in general also appears to be common for women. Investigators have proposed that stress in the workplace is associated with reduced mental well-being and increased acute morbidity, cardiovascular disease, absenteeism, and chronic health problems (Frankenhaeuser, Lundberg, & Chesney, 1991; Killien, 1999; Sorensen & Verbrugge, 1987; Waldron, 1991). Studies report that female employees sustain more stress-related disorders than their male counterparts and perceive workplace stress as their number one problem (Dear, 1995; Killien; Lusk, 1997). Health risks for women are thought to be intensified by the stress of dual responsibilities at home and work (Hock, 1992; Killien; McBride, 1990).

The employed women in this study were indeed distressed as a group. This result is also consistent with that of other studies. The National Association of Working Women (1984) found that after managers, clerical and sales workers ranked second in

reporting the highest rates of workplace stress. In the present study, the largest group of employees were in the clerical and sales occupations.

Finally, the majority of the employed women were working full-time in this study. One might hypothesize that full-time work would be more stressful than part-time. Thus, it may be a contributing factor accounting for some of the stress experienced by the women in this study. However, this is not reflected in published literature. In two longitudinal studies, part-time employment was shown to have no noticeable health benefits over full-time employment for women, even among mothers (Herold & Waldron, 1985; Waldron & Jacobs, 1989a, 1989b).

Potential Moderating Factors for the Unemployed and Employed Women

The potential moderating effects of several variables were investigated in this study. Of all of the variables considered, only level of education negatively correlated with psychological distress, anxiety/insomnia, and depression among the working women, while history of unemployment positively correlated with anxiety/insomnia among the same group. The potential moderating variables will be discussed separately for the two groups of women.

Unemployed Women

For the unemployed women the present study showed no significant relationship between age, history or duration of unemployment and mental distress. Similar findings were also found by other researchers with respect to age (Leeflang et al., 1992) and

duration of unemployment (Dew et al., 1992). This would suggest that employment was just as important to women from all of the age groups represented in this study. As well, the amount of experience the women had with unemployment was irrelevant. Perhaps two forces were at work here. The women with no prior exposure to unemployment may have been distressed due to uncertainty over the event. On the other hand, women with plenty of experience may have known all too well some of the negative consequences of unemployment firsthand.

The finding that education did not significantly correlate with mental distress is in agreement with that of other authors. Dew et al. (1992) and Kessler, Turner, et al. (1987) also found that level of education did not significantly modify the impact of unemployment. Nevertheless, job loss may be less stressful for less educated women. This may be explained by the effects of employment commitment. Individuals who have more personal investment in their work for nonfinancial reasons are said to have more employment commitment. Investigators have found that among unemployed people those who have more employment commitment experience higher distress levels than those who perceive their jobs as only a source of income (Rodgers, 1991; Turner, 1995; Warr & Parry, 1982b). The less educated unemployed women in this study may have had low employment commitment which is in line with the literature. Studies suggest that professionals and upper-white-collar workers are more likely to have high employment commitment than lower status workers with presumably less education (Kahn, 1981;

Turner, 1995). In any event, the finding that women with more education may be hit harder by unemployment is consistent with arguments in the unemployment literature for men which state that "the higher the climb, the harder the fall" (Bakke, 1940, p. 323).

A number of researchers have proposed that number of children and marital or partner status of unemployed women have no bearing on their mental health (Dew et al., 1992; Ensminger & Celentano, 1990; Hall & Johnson, 1988; Kessler, Turner, et al., 1987; Perrucci et al., 1987; Snyder & Nowak, 1984). This study provides more evidence for this assertion, despite inconsistences in the general literature on unemployment. It may be inferred that unemployment was just as distressing for those with and those without children or a partner.

The finding that partner's employment status was statistically insignificant for the unemployed women was unexpected in view of the literature. However, in this study a tendency for lower mental well-being was observed for women in households in which both the woman and her spouse were not working. This was anticipated considering the implications of three Canadian studies, which suggest that physical abuse, stress, as well as marital and family dissatisfaction may be consequences for women with an unemployed partner (D'Arcy & Siddique, 1985; Grayson, 1985; Ratner, 1983). Furthermore, women in general who have unemployed husbands are more prone to depression and neurosis (Cochrane & Stopes-Roe, 1981; Rodgers, 1991). Yet, unemployed women with an employed spouse were also distressed. An obvious

possibility is that although the men were employed they may have been holding unstable jobs due to the economic insecurity in the area. This would have applied more to those on the Bonavista headland. This may have inflated the distress levels of the unemployed women with employed husbands and may account for the insignificant results.

Employed Women

The finding that the mental condition of the more educated working women was significantly better than those less educated is congruent with reports in the mental health literature and some in the employment literature (Sogaard, Kritz-Silverstein, & Wingard, 1994). It is possible that, even though the women with more education may have been experiencing job insecurity, these women were more resilient because they could foresee better chances of reemployment. There is strong evidence in published research that higher education and lower unemployment rates are highly correlated (Federal, Provincial & Territorial Advisory Committee on Population Health, 1996; Jin et al., 1995).

The role of partner status for the employed women was found to be similar to that described in the mental health literature. Studies in the employment literature maintain that only married women in favor of working benefit emotionally by working (Repetti et al., 1989). This may have been the situation for the working women in the present study, but it was not investigated.

For the employed women, the findings concerning the roles of the other variables examined in this study, conflict with results in the literature. First of all, there was no

evidence to support the popular viewpoint that age is related to ratings of job stress. According to an extensive study by the National Association of Working Women (1984). working women in their 30s find life more stressful than those in other age groups. This was found to be especially pertinent for those over 35 who are referred to as the sandwich generation given their caregiving responsibilities for the young and old. However. workplace policies may have improved work-home stress situations in the 16 years since that study was completed.

The fact that children did not make the lives of the working women in this investigation more stressful contradicts the literature. When parenthood is combined with other roles it is considered to be particularly stressful (Killien, 1999; Woods, 1985). Moreover clerical and sales workers with children, the largest group of employees in the present study, are regarded as a high risk population for physical and mental health problems (Killien; Repetti et al., 1989). The level of support to working mothers may be higher than in previous studies.

An unexpected result was that among the employed women, the mental health of those with an employed spouse tended to be worse than those with an unemployed spouse. This directly contradicts what is thought to be well established in the literature. Having an unemployed husband or father is judged to be a risk factor for women and children (Jin et al., 1995). A possible explanation for this may have to do with multiple role strain, which is deemed to be greatest for mothers of young children, full-time

employees and married women whose spouses contribute little to housework and childcare. In this study, perhaps the working women with unemployed partners had less demands at home, which would relieve some of the burdens associated with multiple role strain.

Finally, the significant finding that the working women with a more extensive history of unemployment were more distressed is not consistent with the results of another study. Seniority, which indirectly may indicate the amount of experience one has with unemployment, was found to be insignificant to the mental health of workers experiencing job insecurity (Broman, Hamilton, Hoffman, & Mavaddat, 1995; Hamilton et al., 1990). Conversely seniority may measure a long job tenure. In the present study, the jobs held by the women may have also been insecure. When faced with the possibility of job loss, the employed women with a greater history of unemployment may have been distressed by recalling past episodes of unemployment.

Findings and the Conceptual Framework

The findings showed that compared to the employed women, the unemployed women reported significantly poorer mental health in the year prior to the study. This lends some support to the conceptual framework used in this study. However, in terms of the moderating factors for the unemployed women, no support for the conceptual framework was found.

Summary

In this study the unemployed women were disadvantaged by significantly poorer mental health in the preceding year as compared to the employed women. This provides some support for the conceptual framework. However, almost three years into the cod moratorium, the lives of the two groups of women were equally stressful. In all likelihood the moratorium itself was a major stressor for the women. In addition, financial difficulties and feelings of uncertainty afflicted the women, especially those unemployed, and very likely impaired their mental well-being. The employed women may have also experienced unique stressors. Multiple role strain, job insecurity, and workplace stress probably taxed the mental health of these women.

The present study extends previous research on the potential moderating effects of several variables. None of the variables significantly affected the high level of distress experienced by the unemployed women. Therefore, there was no support for the conceptual framework used in this study, in terms of the moderating factors. Contrary to reports in the literature, in this study employment may have been just as important for unemployed women of all ages and for those who were married or mothers. Also, unemployment appeared to be as much of a stressor for those with lots of prior experience with job loss as for those with little or no experience.

When each of the factors were considered for the employed women, only history of unemployment and level of education significantly correlated with their mental well-

being. In the midst of a stressful environment, the working women with more education and/or little unemployment experience displayed more resilience to distress, while those with less education and/or a long history of unemployment were more susceptible. No evidence was found to support the popular contention that working is more stressful for women in their 30s or for mothers.

CHAPTER 6

SUMMARY, LIMITATIONS, AND IMPLICATIONS

Summary of the Study

Due to the northern cod moratorium announced in 1992, approximately 37,000 people in Newfoundland became unemployed (Storey & Smith, 1995). The purpose of this study was to compare the level of mental distress experienced by unemployed and employed women within the context of this moratorium. The distress levels of 112 unemployed women, as measured by the GHQ28, was contrasted with that of 112 employed women. The relationships between their GHQ scores and a number of variables were also explored. Data were collected in the spring of 1995, three years after the moratorium began and while it was thought of as a finite time period (i.e., five years).

The results showed that compared to the employed women, the unemployed women reported significantly poorer mental health in the year prior to being interviewed. However, at the time of the study, both groups of women were leading equally stressful lives. The moratorium likely generated a lot of stress for the women, as it left them with financial problems and feelings of uncertainty, especially among those unemployed. The employed women may have also felt pressures due to multiple role strain, job insecurity, and workplace stress. None of the potential moderating variables significantly affected the distress level of the unemployed women. Only history of unemployment and level of

education significantly correlated with the mental well-being of working women. Specifically, the employed women with less education and/or a long history of unemployment were more susceptible to distress.

Limitations

While interpreting the results, some study limitations should be noted. Although every effort was taken to ensure the accuracy of responses from the participants. some limitations of this study may be as follows:

1. Differential effects of the fishery moratorium were experienced in the province. Some areas had more serious economic repercussions than others especially where diversification of fishing was less likely. As the participants were only from two locations in Newfoundland, generalization of the results beyond the study sample may not be possible;
2. Although the interviewers were trained to help ensure consistency in data collection, the data may have been affected by variability in interviewer approach. Some interviewers administered the questionnaire as directed while others permitted self-administration;
3. The interviews were done at one point in time. Therefore, the information expressed may represent the participant's perception at that time only and does not reflect changes over time;
4. The household response rate was low at 56.77%;

5. Moderating variables may interact with each other in influencing mental health. It may be too simplistic to look at each factor as an isolated variable affecting women's mental health;
6. Although a well tested instrument with high levels of validity and reliability was used to measure mental distress, it is cognizant that mental health is a subjective, abstract feeling which can not be measured with absolute accuracy using a concrete number.
7. The reliability of single measure items is not known.

Despite the limitations cited above, the use of a large random sample would have minimized error and improved the validity of the findings.

Implications

The results of this study have some implications for nursing practice, education, and research.

Nursing Practice and Education

This study adds to a body of knowledge which suggests that while employment can be stressful for women, it may be protective of good mental health for a lot of women. In light of this, the following implications are identified for nursing practice. Nurses or other health professionals need to:

1. Conduct a thorough mental health assessment of women and refer to mental health care services if necessary;

2. Provide individualized care which builds on the person's strengths and self-concept;

3. Given the high level of distress for all of the women in the study, promote the mental well-being of unemployed and employed women. Initiatives should aim at enabling individuals to lead a health-promoting lifestyle and enhancing coping skills (Killien, 1999). Strategies could include engaging in self-actualization activities, exercising, eating nutritiously, taking advantage of interpersonal supports, and stress management (Killien, 1999; Walker, Sechrist, & Pender. 1987);

4. Empower women to help make changes in their socioeconomic and political environments;

5. Encourage the formation of a network between the Public Health Department and the Canadian Mental Health Association in order to conduct need assessments for the unemployed and employed female populations. Members of the network could arrange inservices for Human Resources Development Canada staff. who deal with unemployed individuals, on the mental health effects of unemployment. As well, health promotion programs could be provided for unemployed and employed women. In addition, the network could increase awareness in the general public and promote strategies which will diminish the stigma attached to unemployment and mental illnesses such as depression;

6. Nursing groups, such as the Canadian Nurses Association, should work with health policy makers to find solutions which may ameliorate distress in the unemployed and employed populations.

For nursing education, the following actions should be taken to improve knowledge on the interaction of employment status and health and to promote the mental health of women:

1. Educate nurses and nursing students on the potential effects of unemployment and employment on women's health, including the roles of economic insecurity, financial problems, uncertainty, multiple role strain, job insecurity, and workplace stress;
2. Incorporate subjects such as the political process, social action, and the development of health policy into nursing curriculum so that nurses can advocate for marginalised groups (LeFort, 1993).

Theory and Research

The results of this study generated the following recommendations for future research:

1. Continue to investigate potential moderating factors, while using larger samples of women;
2. As the factors influencing women's mental health may be very complex, explore

the interaction of these variables through research;

3. Conduct intervention studies which consider moderating variables, in order to determine which interventions benefit the mental well-being of women;
4. Conduct qualitative research in order to generate theories or hypotheses and improve our understanding in this area.

Conclusion

This study has been an attempt to examine the mental health of unemployed women. The study findings revealed that the unemployed women suffered from significantly poorer mental health in the 12 month period prior to the study, as compared to the employed women. At the time of the study the stress levels of the unemployed and employed women were more balanced, with both groups of women experiencing high levels of distress. The moratorium, financial problems, and feelings of uncertainty were identified as key stressors for the women, especially for those without work. It was proposed that although employment can be stressful for women, it may be protective of good mental health for a lot of women.

The present study extended previous research on the relationships between several variables and the mental health of employed and unemployed women. While none of the variables significantly affected the high level of distress experienced by the unemployed women, history of unemployment and level of education significantly modified the mental well-being of working women. The results of this study have important

implications for nursing practice, education, and research.

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APPENDIX A

MAP OF THE STUDY AREA

APPENDIX B

THE ECO-RESEARCH HEALTH SURVEY RELEASE FORM

THE HEALTH SURVEY: RESPONDENT RELEASE FORM

Please read the following carefully before deciding whether or not to proceed. This survey is part of a research program at Memorial University and is funded by Canada's three academic research councils. We are doing this survey to find out how people have been coping with the recent economic changes in the region, whether they have any effect on your health and your community. We would like to ask you some questions on these topics, which should take about one hour.

Everyone knows that many studies have been done, but we think this one is different and necessary. For the first time, we are bringing together people who study many different aspects of social life and the physical environment to get a full picture of the situation. And we are concerned with what local people think about the issues we study. So this survey is in fact part of a much larger project that aims to improve general knowledge of places such as this and to identify those areas where change would be consistent with the interests of local people. Results of the survey will be made available to the public of the area. There are no direct benefits, however, beyond the $10 which we offer in recognition of the time you are taking to help us.

Your participation is voluntary and you may end the interview at any time. Moreover, you may refuse to answer any particular question if you please. All information you provide will be combined with information from about 900 other people in such a way that you cannot be identified. Your name will not appear on any page of the questionnaire. After the study has been completed, the questionnaire will be destroyed. The information you provide will be stored on computer and used in academic talks and publications, but it will be impossible to identify you or any other respondent. When the project is over, the data will be placed in the archives of the Centre for Newfoundland Studies at Memorial University. It is our hope that these assurances of privacy will allow you to provide honest answers that are as complete as possible. Please feel free to ask the interviewer any questions about the provision of privacy. If you have any concerns that cannot be answered by the interviewer, you may contact Ms. Marianne Lamb, Director of the School of Nursing, Memorial University, St. John's, A1C 5S7 (tel. 737-6972).

Thank you in advance for your assistance in this project.

Sincerely,

Rosemary E. Ommer
Project Manager

APPENDIX C

RELEVANT SECTIONS OF THE

ECO-RESEARCH HEALTH SURVEY (ERHS)

First of all I would like to ask you some information about your household.

1. a. Including yourself how many persons, in total, presently live in your household?_____

   b. How many are 16 years and older? _____

   c. How many are under 16 years? _____

   d. How many left your household in the past 3 years to look for work or take a job elsewhere? (excluding a summer job). number of people _____
   (if 'zero', GO TO 2) (if 1 or more, GO TO 1.e)

   e. Tell me the age, sex, total years of formal schooling and usual occupation of person(s) who left in the past 3 years to look for work or take a job elsewhere:

	AGE	SEX	# OF YRS OF FORMAL SCHOOLING (excluding courses less than 1 yr)	USUAL OCCUPATION
#1				
#2				
#3				

(If more than 3 members list on reverse side)

2. Starting with yourself, I would like to list the members of your household, their relationship to you, their age, sex and their usual occupation, i.e., what they usually do **(Names are not necessary)**:

RELATIONSHIP	AGE	SEX	USUAL OCCUPATION
#1. Respondent			
#2.			
#3.			
#4.			
#5.			
#6.			
#7.			
#8.			

(If more than eight members list on reverse side)

3. What is your current marital status? **(READ)**

now married and living with spouse 1
common-law relationship/live-in partner 2
divorced 3
separated 4
widowed 5
never married (single) 6

4. a. At the present time, are you mainly: **(READ)**

employed full-time, i.e., work 30 hours
or more a week? . . . . . 1 **(GO TO b)**
employed part-time? . . . . . 2 **(GO TO b)**
unemployed? (looking for a job) . . . . . 3 **(GO TO 5)**
retired? . . . . . 4 **(GO TO 5)**
keeping house . . . . . 5 **(GO TO 5)**
a student . . . . . 6 **(GO TO 5)**
retraining . . . . . 7 **(GO TO 5)**

b. Is this employment **(READ):**

permanent 1
seasonal 2
contractual 3

5. a. **(If person has a spouse or partner-if not GO TO 6)** Presently, is your spouse/partner **(READ):**

employed full-time, i.e., work
30 hours or more a week? . . . . . 1 **(GO TO b)**
employed part-time? . . . . . 2 **(GO TO b)**
unemployed? (looking for job) . . . . . 3 **(GO TO 6)**
retired? . . . . . 4 **(GO TO 6)**
keeping house . . . . . 5 **(GO TO 6)**
a student . . . . . 6 **(GO TO 6)**
retraining . . . . . 7 **(GO TO 6)**

THE NEXT FEW QUESTIONS ARE ABOUT YOUR HEALTH AND WELL-BEING.

7. In general, compared with other people your age, would you say your health is (READ):

Excellent	1
Very good	2
Good	3
Fair	4
Poor	5

8. (Please turn to page 2 of the answer booklet)

Now using a 7 point scale where "1" indicates "Very Unhealthy" and "7" indicates "Very Healthy" you can choose any number between "1" and "7"), please tell me:

a. How healthy have you felt physically in the past 12 months?

Very Unhealthy						Very Healthy	DK
1	2	3	4	5	6	7	8

b. How healthy have you felt mentally (emotionally) in the past 12 months?

Very Unhealthy						Very Healthy	DK
1	2	3	4	5	6	7	8

9. Are you limited in the kind or amount of activity you can do because of a long term illness, phy condition or health problem? **(By long term I mean a condition that has lasted or is expected to more than 6 months).**

yes	1 **(GO TO 10)**
no	2 **(GO TO 11)**

10. (Please turn to page 3 of the answer booklet). Using a 7 point scale where "1" is No pro at all and "7" is a very great problem and you can choose any number between "1" and "7", tell me has your illness, physical condition or health problem interfered with:

		no problem at all						very great problem	DK	N/A
a.	your ability to work/look for a job? **(underline which one)**	1	2	3	4	5	6	7	8	9
b.	your ability to retrain/go to school? **(underline which one)**	1	2	3	4	5	6	7	8	9
c.	your ability to carry out family responsibilities?	1	2	3	4	5	6	7	8	9
d.	your relationship with your family?	1	2	3	4	5	6	7	8	9

B. Have any of the above problems become worse in the past **two** years?

No . . . . . 1 **(GO TO 35)**
Yes, please list problem(s) that . . . . . 2 **(GO TO C)**
have become worse in past 2 years

_____

_____

C. What do you think are the reason(s) the problems have become worse?

_____

35. a. What health or social services that are **NOT** now in your community need to be put in place to meet the needs of the community?

_____

_____

b. What health or social services that <u>are now available</u> in your community need to be improved to meet the needs of the community?

_____

_____

THE NEXT QUESTIONS ARE ABOUT YOUR PAID EMPLOYMENT

36. a. In total how many years have you had paid employment? (including contractual work) _____

b. In the last 5 years, how many times have you been unemployed (i.e., receiving UIC and looking for work)? _____

c. In the last 5 years, how many times have you had to leave your job for maternity leave, care of your family, an injury or disability, or any other leave other than unemployment?

_____

37. a. Have you ever had a work related illness or injury?

yes . . . . . 1 **(GO TO b)**
no . . . . . 2 **(GO TO 38)**

b. Briefly describe the illness(es) or injury(ies).

_____

_____

38. a. Have you had paid employment <u>at any time</u> during the past 12 months?

yes . . . . . 1 **(GO TO 38.b)**
. . . . . 2 **(GO TO 41)**

44. During the past three years, have you (or your family) had to make cutbacks in spending in any of the following items: **(READ)**

	Yes	No	N.A.
a. household expenses	1	2	3
b. clothing/personal expenses	1	2	3
c. entertainment	1	2	3
d. vacations	1	2	3
e. eating out	1	2	3
f. religious/charitable donations	1	2	3
g. financial aid to relatives	1	2	3
h. transportation	1	2	3
i. use of medical services (ie. dental care, eye care, buying medications)	1	2	3
j. groceries	1	2	3
k. other_____	1	2	3

THE NEXT QUESTIONS ARE FOR THOSE WHO ARE CURRENTLY UNEMPLOYED

45. How long have you been without a job and looking for one? _____ weeks

46. A. What was the main reason you left your last job? **(READ)**:

a. your employer went out of business 1
b. the business moved 2
c. the fishery closed 3
d. a reduction in staff 4
e. shortage of work 5
f. your job was eliminated 6
g. other_____ 7

B. What do you do to fill your time while unemployed?_____

_____

THE NEXT QUESTIONS ARE ABOUT HOW YOU SEE THE FUTURE AND WHAT AFFECTS THESE FEELINGS

47. (Please turn to page 6 of the answer booklet) For each of following items, please respond on a scale of "1" to " 7" where "1" is Strongly Disagree and "7" is Strongly Agree how you feel about the following:

	Strongly Disagree						Strongly Agree	DK
a. I feel uncertain about my future	1	2	3	4	5	6	7	8
b. I feel uncertain about the future of my community	1	2	3	4	5	6	7	8
c. I feel uncertain about the future of the province	1	2	3	4	5	6	7	8
d. I have confidence in the federal government in solving the economic problems in NF	1	2	3	4	5	6	7	8
e. I have confidence in the provincial government in solving the economic problems in NF	1	2	3	4	5	6	7	8
f. I have confidence in the health care system (in general)	1	2	3	4	5	6	7	8
g. I have confidence in educational institutions (schools, college, universities) to prepare people in Newfoundland for future jobs.	1	2	3	4	5	6	7	8
h. I have confidence in unions	1	2	3	4	5	6	7	8
i. I have confidence in the recovery of the fishery	1	2	3	4	5	6	7	8

48. Do you believe any of the following would help you to improve your health and well-being? **(READ)**

	Yes	No	DK	NA
a. a more secure income	1	2	3	4
b. moving to another community/province	1	2	3	4
c. job/change in job	1	2	3	4
d. spending more time with family	1	2	3	4
e. spending more time with close friends	1	2	3	4
f. learning to relax more and worry less	1	2	3	4
g. being more physically active	1	2	3	4
h. loosing weight	1	2	3	4
i. cutting down on drinking	1	2	3	4
j. cutting down or stopping smoking	1	2	3	4
k. having better service in the community	1	2	3	4
(specify_____)				

51. In total, how many years of schooling do you have? This includes the total of grade school, high school, vocational, technical, and university.

_____YEARS

52. Would you say that you (and your family) are better off or worse off or just the same financially than you were before the fishery closure?

better now 1
same 2
worse 3
don't know 8

53. Now looking ahead - do you think that in a year from now you (and your family), will be better off financially, or worse off, or just about the same as now?

will be better off 1
same 2
will be worse off 3
don't know 8

54. To enhance the well-being/prosperity of your community, in your view, what should be done by the following:

a. the federal government _____

b. the provinical government _____

b. the community organizations _____

c. individuals/people in the community _____

_____

55. a. What is the total income of <u>all the members of your household</u> for this past year before taxes and deductions?

_____

b. What is your own total individual income for this past year before taxes and deductions?

_____

56. a. What is your <u>main source</u> of income? _____